Presented at the 2026 IPA World Conference in Christchurch, New Zealand



The Child's Right to Play

IPA USA 2026 White Paper





USA IPA

American Association for the Child's Right to Play

A Critical Moment for Childhood

The child's right to play stands at a critical crossroads.

October 28, 2026

The IPA USA Board of Directors presents the 2026 White Paper

Across the United States and around the world, children are growing up in environments that increasingly prioritize performance, productivity, and measurable outcomes over the experiences that support healthy development. Academic pressures, overscheduled childhoods, increased screen use, heightened safety concerns, and diminishing opportunities for independent exploration have steadily eroded time, space, and freedom for play.

Yet the evidence has never been clearer: play is not a luxury, a reward, or a break from learning. Play is how children learn, develop, and thrive. Through play, children build social competence, emotional strength, creativity, decision-making skills, self-regulation, and the habits necessary for lifelong learning and well-being. Research spanning developmental psychology, education, neuroscience, public health, and child development consistently shows that play is a biological and developmental necessity.

Despite this growing body of evidence, many educational, community, and policy settings still undervalue play. Too often, decisions affecting children are driven by short-term outcomes rather than a long-term understanding of what children need to flourish. As a result, childhood itself is increasingly at risk.

The International Play Association USA (IPA USA) proudly presents the 2026 White Paper as a call to action for educators, policymakers, researchers, families, and advocates. Building on decades of scholarship and advocacy, this collection of 66 papers, written by 95 authors from six continents, 14 countries, and Hong Kong (Special Administrative Region of China), spanning 11 categories, brings together leading voices committed to protecting and advancing every child's right to play.

Within these pages, readers will find research-based insights, practical recommendations, and powerful examples that show why play matters and how to support it across homes, schools, communities, and public policy. More importantly, this White Paper serves as an advocacy resource, equipping readers with the evidence and tools needed to champion play in their local contexts.

The future of childhood depends on the choices we make today. By recognizing play as a fundamental right and an essential component of healthy development, we can create environments where all children have the opportunity to learn, grow, belong, and thrive.

IPA USA thanks the 95 authors for their time and commitment to advancing the Child's Right to Play. We invite you to read, share, and use this White Paper to strengthen your advocacy efforts and join us in safeguarding every child's right to play.

Deb Lawrence, Co-President, IPA USA

Brian Stone, Co-President, IPA US

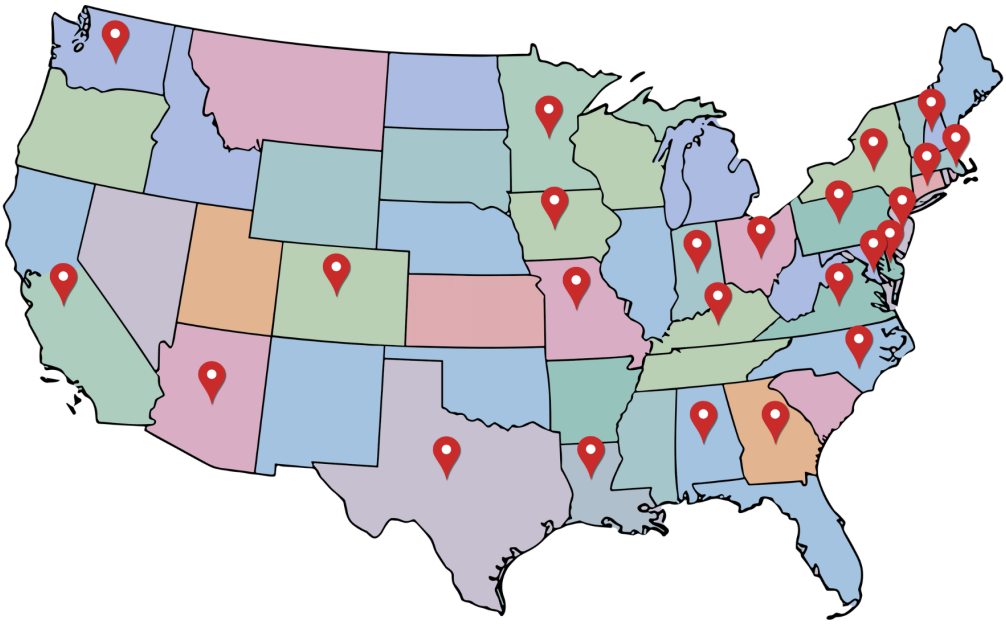
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Fun Facts: A Visual Representation of the 2026 White Paper

Continents and Countries Represented



United States Represented



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Michele Pullen – Ready for Me
Sam T. Sanders – Media
Elaine Zweig – State Chapters

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How to Navigate This Document

This document has been formatted to include live links within the Table of Contents, and with anchors in other areas to assist with cross-referencing authors, essays, resources, etc..

With this formatting, our readers will more easily be able to revisit and share certain key topics, authors, or resources without needing to scroll through the entirety of the document.

To jump to a section listed in the Table of Contents, click on the item.

To jump to a particular executive summary or white paper, first navigate to the category it is listed under, then click on the executive summary or white paper title.

To return to the table of contents, click "**Return to Table of Contents**. This can be found in the bottom right corner of each page..

While we appreciate the size of this document and want our readers to be able to navigate it easily, we similarly hope that our readers will recognize the time, scope, effort, and passion for the subject matter that went into composing this white paper.

Please take the time to read it in its entirety before utilizing the navigation features to skip areas.

We hope you enjoy reading, and encourage you to share!

Questions? Contact us at info@ipausa.org.

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About IPA USA

The American Association of the Child's Right to Play (DBA) IPA USA

Authors

Debra Lawrence, PhD, MA
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Debra Lawrence: is the Co-President of IPA USA and International IPA WORLD Council Member. Past Vice President and Secretary of IPA USA. Porch Play Chat facilitator, Quarterly Play Blast content writer.

Marcy Priess Guddemi: Past President of IPA/USA and International IPA WORLD Representative, Past Secretary of IPA WORLD, Past Treasurer IPA USA, Past Secretary of IPA USA, Past Newsletter Editor of IPA USA

Special thanks to Dr. Joe Frost (1933-2020), the First elected President of IPA USA and International Representative, Play and Playground Expert, author of numerous playbooks and articles, and mentor to many for his contributions to this document.

Our Vision

A world where all children can play

Our Mission

The purpose of IPA USA is to protect, preserve, and promote the child's right to play.

In 1973, the American Association for the Child's Right to Play was founded as a recognized branch/affiliate of the International Play Association (IPA WORLD). IPA USA is a not-for-profit organization holding a 501C3 with the IRS.

The American Association for the Child's Right to Play (DBAIPA USA) will celebrated its 50th Anniversary in 2023 at the Annual Conference in Greenville, SC.

IPA USA has identified a list of 12 fundamental, guiding principles that provide the direction for our organization, services, resources, and communications.

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What is Play?

- Play is the work of childhood. Play is biologically driven. There are many types of play. The highest, purest form of play is spontaneous, freely chosen, intrinsically motivated, pleasurable, purposeless, and free from conflicts. For younger children, it also contains symbolism and elements of pretend (Gray, 2013).

Guiding Principles

- Play, along with the basic needs of nutrition, health, shelter, and education, is **vital for the development of all children from** birth to 18 years.
- Play is **integral and necessary** for social, emotional, cognitive, language, and physical development.
- Play **facilitates brain growth**, especially in the frontal cortex, where essential cognitive functions reside, including attention, self-regulation, working memory, and cognitive flexibility, all known as executive functions.
- Many foundational skills can only be developed **through play** and thus justify the essential need for recess for younger children and breaks for older children.
- Play opportunities are **needed for children both indoors and outdoors.**
- Play needs differ **among the age groups**: birth to age 2, pre-k, early elementary, upper elementary, middle school, and high school.
- Schools, especially pre-K and elementary schools, **need help understanding** that young children learn best through play.
- Schools need help and support in providing meaningful and appropriate play opportunities, such as experiential, inquiry, integrated, and emergent approaches to curriculum.
- **Families need help** recognizing that play is necessary for healthy development, and that family play also bonds the family and helps build happy childhoods.
- **Community services and regulators**, such as parks and recreation, city planning, playground inspectors, and housing developments, need help

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understanding why opportunities for risky play should be included in their planning.

- All types of play are essential (e.g., physical play, such as running, climbing, swinging, etc.; block and construction play; play within art and music; games with rules; rough and tumble play; risky play; nature play; role-playing; etc.), but **child-directed, spontaneous play** is the most important type of play during the early years of birth through age eight.
- Children have the right to play as guaranteed by the 1989 United Nations Convention on the Rights of the Child.

Affirmation

IPA USA is determined to sustain the momentum created by the International Year of the Child in 1979 to influence world opinion for the improvement of the lives of children; and:

AFFIRMS its belief in the United Nations' Declaration of the Rights of the Child, which in Article 7 states, "The child shall have full opportunity to play and recreation, which should be directed to the same purposes as education; society and the public authorities shall endeavor to promote the enjoyment of this right;" and endorses its belief in Article 31 of the Convention on the Rights of the Child.

RECOGNIZES that the population of children in developing countries is three-quarters of the world's total child population and that efforts directed at the promotion of education and literacy, and the stopping of environmental deprivation would improve the capacities of the poorest.

AFFIRMS its commitment to working with other national and international organizations to ensure basic conditions of survival for all children in order that they may fully develop as human beings.

ACKNOWLEDGES that each country is responsible for preparing its own courses of public and political action in the light of its culture, climate and social, political and economic structure;

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RECOGNIZES that the full participation of the community is essential in planning and developing programs and services to meet the needs, wishes, and aspirations of children;

ASSURES its cooperation with UN agencies and other international and national organizations involved with children;

APPEALS to all countries and organizations to take action to counteract the alarming trends which jeopardize children's healthy development and to give high priority to long term programs designed to ensure for all time…

IPA-USA carries forth the mission of its parent organization, IPA World.

To accomplish the Vision, Mission, and Guiding Principles, IPA-USA does the following:

- Advocates for the ratification by the USA of the Convention of the Rights of the Child
- Acts as a resource for other national and international organizations and UN agencies by providing consultations, speakers, and serving on committees
- Increases awareness of the importance of play across the lifespan, infant, toddler, preschool, primary, middle, secondary, post-secondary, and adult play
- Produces Porch Play Chats, Podcasts/videos, which are conversations with people who are passionate about play. Porch Play Chats are available for free on the IPA USA YouTube Channel, IPA USA Facebook page, and Spotify.
- Published the Children in Crisis document In conjunction with the UNICEF Emergency Task Force; this document provides activities that support those working with children during a crisis.
- Promote Trees over Screens by selling T-shirts to support limiting screen time
- Hosts Virtual Town Hall Presentations –Conferences- Porch Play Chats- Children in Crisis Initiative – Ready for Me Campaign- Screen free Week-National Day of Play – Celebrates International Day of Play – Engages IPA Members in States to become a Chapter of IPA USA- Publishes a Quarterly Play Blast Newsletter - Provides mini grants to IPA USA members to sponsor Community Play Days

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Discussing Hot Topics and providing strategies and resources to promote child-initiated play.

Benefits of IPA USA

- Publishes an e-journal- Practical idea to promote play in all settings
- Publishes a Quarterly Play Blast Newsletter
- Recruits IPA Members to form Regional or State Chapters (Ex IPA USA California)
- Provides Mini Grants for National Day of Play, International Day of Play, Community Play Days, and trainings that promote child-initiated play.
- Recognizes individuals who have dedicated their professional careers to advocating for play by awarding Doctor of Play Awards at annual conferences.
- Recognizes individuals who have demonstrated their advocacy in promoting the child's right to play by awarding the Child's Right to Play Advocacy Award at annual conferences.
- Provides Policy Briefs to members on a variety of topics.
- Discounts for IPA USA Conferences
- Opportunities to serve as a committee chair or run for the IPA USA Board

IPA USA aims to protect, preserve, and promote play as a fundamental right for all humans. Membership is open to any individual, group, or organization that endorses the right of children to play, as stated in the United Nations Declaration of the Rights of the Child (1959), Article 7, paragraph 3: "The child shall have full opportunity for play and recreation which should be directed to the same purposes as education; society and the public authorities shall endeavor to promote the enjoyment of the right..." and in the Convention on the Rights of the Child (1989), Article 31:

1. States Parties recognize the right of the child to rest and leisure, to engage in play and recreational activities appropriate to the age of the child, and to participate freely in cultural life and the arts.

2. States Parties shall respect and promote the right of the child to participate fully in cultural and artistic life. They shall encourage the provision of appropriate and equal opportunities for cultural, artistic, recreational, and leisure activities.

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IPA USA Conferences

IPA USA held triennial conferences from 1981 to 2013 and now holds them more frequently.

- 1981 University of Minnesota
- 1983 University of Minnesota
- 1983 Austin, TX
- 1985 Washington, DC
- 1986 Cincinnati, OH
- 1989 Cincinnati, OH
- 1992 Denton, TX
- 1995 Birmingham, AL
- 1997 Longmont, CO
- 2001 Hofstra University, NY
- 2003 Baltimore, MD
- 2007 Rochester, NY with TASP2010 Atlanta, GA with TASP
- 2013 University of Delaware
- 2014 Clemson, SC
- 2015 Clemson, SC
- 2017 New Brunswick, NJ Rutgers
- 2019 Harrisonburg, VA
- 2020 Speakers Series – Covid (online)
- 2022 San Antonio, TX
- 2024 Greenville, SC
- 2025 Louisville, Kentucky

Past Presidents of IPA USA

Paul Hogan*
Joe Frost
Tom Jambor
Marcy Guddemi
Ann Obar
Audrey Skrupskelis
Rhonda Clements
Olga Jarrett
Tom Reed
Dorothy Sluss
LaDonna Atkins
Deb Lawrence
Current: Deb Lawrence – Co-President
Current: Brian Stone – Co- President

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IPA USA becomes an affiliate of IPA World

The American Association for the Child's Right to Play (IPA USA) was formed in Philadelphia in 1973 as the USA affiliate of IPA WORLD. IPA USA began by playground creator and author Paul Hogan's (1928-2021) 1967 trip to Europe. Hogan was checking out adventure playgrounds in London with Lady Allen of Hurtwood (founder of OMEP) when he first learned about IPA WORLD and began attending their meetings. The United States had IPA WORLD members before Hogan formed the affiliate. Mrs. Thomas Hess of Greenwich, Connecticut, was the first American member, and Pacific Oaks College and Children's School in Pasadena, California, was the first American organization member, having joined in 1969.

In the early 1970s, IPA USA membership had grown to the point that a national representative was selected to be sent to the next IPA WORLD Council meeting; at that time, the meetings of the IPA WORLD Council were held at the triennial IPA WORLD Conferences. The first USA representative was Paul Hogan, attended the 1975 Milan meeting two years after IPA USA was formed. The first president of IPA USA was not " elected." While attending that 1975 conference, Hogan met Muriel Otter (Canadian), the IPA WORLD secretary. She "cornered him and made him president of IPA USA." He consequently started *PlayPlans* magazine and began to secure subscribers and more members for IPA USA.

Elaine Ostroff followed Paul as USA Representative to the 1978 International IPA WORLD meeting in Ottawa. Donna Seline also attended the Ottawa IPA WORLD conference in 1978 and was appointed USA national representative by IPA WORLD President Polly Hill of Canada. Seline organized a regional IPA USA conference in 1980 at the University of Minnesota with keynote speakers Polly Hill and Brian Sutton-Smith. In 1981, Seline was the USA Representative in Rotterdam. A subsequent national IPA USA conference was held in 1983 at the University of Minnesota with keynote speakers Janet McLean and Joe Frost.

Later, in June 1983, The International Conference on Play and Play Environments, sponsored by IPA USA and twelve other state, national, and international organizations, was held at the University of Texas at Austin. This was reputed to be the largest

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gathering of play scholars ever convened, with more than 500 participants, and included representatives from twelve nations. At this conference, plans were initiated for a more formal organization of IPA USA and for the 1986 national conference in Cincinnati. After representing IPA USA in Ljubljana in 1984, Donna Seline submitted her resignation as national representative in July 1985, effective April 1986.

In February 1986, Donna Seline initiated calls for nominations for a formal Board of Directors for IPA/USA, and a mail election was held. Joe Frost (President and U.S. Representative to IPA WORLD World), Sue Wortham (Treasurer and Membership Coordinator), Marcy Guddemi (Newsletter Editor), and Board members Jay Beckwith, Harris Forusz, Roger Hart, Robin Moore, and Barbara Sampson were elected for three-year terms.

The 1986 IPA USA national conference was organized by Harris Forusz and was hosted by Adventure Playgrounds, Inc. and the University of Cincinnati. Formal resolutions were agreed upon, including a pronouncement of support for the IPA WORLD 1977 Declaration of the Child's Right to Play, adopted at the Malta conference in 1977 and revised at the Vienna conference in 1982. Additional details on modifying incorporation and bylaws documents were also addressed at this conference. Robin Moore and Joe Frost participated in the 1986 IPA WORLD Council meeting and special International Year of Peace seminar in Birmingham, UK. During this period, several adventure playgrounds were developed in the U.S. By 1987, IPA WORLD included members from fifty countries.

Thirty-five Americans attended the 1987 World Congress in Stockholm. By 1988 IPA USA membership had grown to 165. Later that year, a national conference was held in Washington, D. C., and it was organized by Barbara Sampson, Robin Moore, and Donna Seline. In 1988, Tom Jambor was elected president by mail vote. The 1988 IPA /USA Board members were Tom Jambor (President), Helge Stapel (Treasurer), Marcy Guddemi (Newsletter Editor), and Board Members Duraid Da'was, Robin Epstein, Harris Forusz, Paul Hogan, Lulu King, Mary Lillie, Ruth Morrison, Jack Pentes, Frank Rudloff, Donna Seline, Randy Smith, and William Weisz. In January 1989, this expanded Board met in Cincinnati and made plans for expanding revenue, newsletter,

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and membership and creating a clearinghouse on information. At the Tokyo conference in 1990, Robin Moore of IPAUSA, already an IPA WORLD international officer, was the first American to be elected IPA WORLD president.

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About IPA World

The International Play Association: Promoting the Child's Right to Play (DBA) IPA WORLD and the American Association of the Child's Right to Play (DBA) IPA USA

The International Play Association (IPA World)

In 1961, the International Play Association (IPA WORLD) was established. IPA WORLD is a non-governmental, charitable organization with members in 60 countries. Countries with ten active members can be recognized as country branches/affiliates, with representation on the IPA WORLD Council. When you join IPA World, you also become a member of an IPA Branch.

IPA WORLD Branch/Affiliate Countries are Listed Below.

- Australia
- Brazil
- Canada
- England
- Germany
- Hong Kong – Special Administrative Region of China
- India
- Ireland
- Japan
- New Zealand
- Nigeria
- North Ireland
- Portugal
- Scotland
- Sweden
- Taiwan
- Thailand
- Ukraine
- USA
- Wales

IPA WORLD History

- IPA WORLD is a charitable international non-governmental organization (NGO) founded in 1961.
- It provides a forum for exchange and action across disciplines and across sectors.
- IPA WORLD"s purpose is to protect, preserve, and promote the child's right to play as a fundamental human right.

In 1923, Save the Children (1919) founder Eglantyne Jebb, a British social reformer, drafted the Declaration of the Rights of the Child.1 Jebb believed that children's rights

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should be especially protected and enforced. These ideas were adopted by the International Save the Children Union in Geneva on February 23, 1923, and endorsed by the League of Nations General Assembly on November 26, 1924, as the World Child Welfare Charter.

During the 1930s and 40s, there was growing interest in providing quality play opportunities, mainly due to the work of Lady Marjory Allen of Hurtwood (1897-1976), a British landscape architect who made playgrounds out of the waste materials of WWI bombed war sites. These playgrounds became known as adventure playgrounds. This seminar on playgrounds was held in Europe.

The need for international action was becoming more evident since the proclamations of 1923 were not enforceable by international law but rather only guidelines for countries to follow. Thus, with all this interest in play and playgrounds and unenforceable rights for the child, on November 20, 1959, the United Nations General Assembly adopted a much-expanded version as its own Declaration of the Rights of the Child, adding five more to make ten principles in place of the original five. Principle Nine of the 1959 Declaration of Rights addresses the child's right to "full opportunity to play and recreation..." In addition, November 20th was also adopted as the Universal Children's Day as the ongoing celebration of that event.

After the signing of the Declaration of the Rights of the Children, IPA WORLD was born in Scandinavia in 1961 as the International Playground Association and held its first conference in Copenhagen that year.

IPA WORLD has held 22 Triennial International Conferences thus far:

1961– **Copenhagen**
1964 – **Zurich**
1967 – **London/Liverpool**: Recreation and Play
1969 – **Paris**: Creative Play
1972 – **Vienna**: Play and Creativity
1975 – **Milan**: Adventure Playgrounds and Children's Creativity
1978 – **Ottawa**: Play in Human Settlements
1981 – **Rotterdam**: Growing up in an Adult World – Beyond Play & Recreation

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1984 – **Ljubljana**: Innovation – Action
1987 – **Stockholm**: Creativity through Play
1990 – **Tokyo**: Play and Education
1993 – **Melbourne**: World Play Summit
1996 – **Espoo**: Dimensions of Play
1999 – **Lisbon**: The Community of Play
2002 – **Sao Paulo**: Culture and Play in Urban Spaces
2005 – **Berlin**: Play: Learning for Life
2008 – **Hong Kong**: Play in a Changing World
2011 – **Cardiff (Wales):** Playing into the Future – Surviving and Thriving
2014 – **Istanbul, Turkey** (19th Tri-Annual Conference)
2017 **– Calgary, Alberta, Canada** (20th Tri-Annual Conference)
2020 -- **Jaipur, India** (Cancelled due to Covid pandemic)
2023 – **Glasgow, Scotland** (Play: Rights and Responsibilities)
2026 - **Christchurch, New Zealand** (Innovating for Play**)**

Presidents of IPA WORLD

- C.T. Sorensen, Denmark
- Jens Sigsgaard, Denmark
- Valia Tanon, France
- Arvid Bengstsson, Sweden
- Polly Hill, Canada
- Nic Nilsson, Sweden
- Robin Moore, USA
- Jan van Gils, Belgium
- Michael Paris, Germany
- Theresa Casey, Scotland
- Robyn Monro-Miller, Australia

In 1979, The United Nations International Year of the Child injected IPA WORLD with new energy. Though IPA WORLD began its life with an emphasis on adventure playgrounds, it gradually changed its focus to play itself and to the child's right to play.

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In 1989, the UN General Assembly Convention adopted the Convention on the Rights of the Child, which strengthened the Declaration of Rights of 1959. On September 2, 1990, it became international law with one notable exception: the USA signed the Charter but has yet to ratify it.2 The Convention consists of 54 articles that address the basic human rights of children, to which all children everywhere are entitled. IPA WORLD was instrumental in adding to Article 31, specifically the words "the child's right play." Shortly thereafter, IPA WORLD changed its name to International Play Association: Promoting the Child's Right to Play.

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Meet the Authors

Refereed White Paper: The 2026 IPA USA White Paper went through a formal evaluation process by subject-matter experts before publication. Each paper was reviewed by two reviewers.



Kim Adams, MA, Leadership Play Advocate and Consultant

Category: Leading for Play
Title: Press Play: A Story of Play, Inquiry, and Systems Change



Stephanie Adams, DHSc, OTR/L, OTA

Category: Play as a Biological Necessity
Title: The Role of Purposeful Play in Promoting Neurocognitive Development



Akosua Obuo Addo, PhD

Category: Play Across the Lifespan
Title: Playful Pedagogies and Preservice Teachers' Mindsets

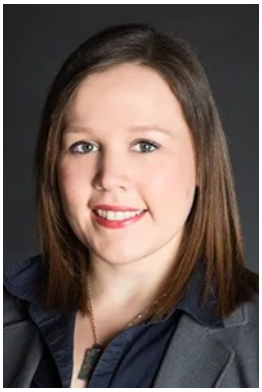


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Title: Play as a Vessel for Justice and Belonging

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Category: Advocating for Play with Parents and Caregivers
Title: Press Start. Activating Family Voices to Advance Playful Solutions



Anna Beresin, PhD

Category: Play and Culture
Title: Hiding in Plain Sight: Play and Culture



Jennifer L. Berube, PhD

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Title: Play IS Readiness: Rethinking What Prepares Children for Kindergarten



Preston Blackburn, BA

Category: Play as a Biological Necessity
Title: The Missing Link: How Physical Play Solves Today's Classroom Behavior Crisis and Prepares Children to Learn

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Kimberly Blitch, PhD, The University of Alabama, Alabama Infant Toddler Specialist Network

Category: Play Across the Lifespan
Title: From the Womb to the Tomb: Play Across the Lifespan



Charlene Woodham Brickman, PhD

Category: It's a Child's Right
Title: Recess and the Value of Choice in the School Environment



Daniel Burton, BEd

Category: It's a Child's Right
Title: Adolescents Need Adventure Too: Making Room for Play in Year 7 Educated by Nature



Elsie Shih-Hua Chang

Category: Play and Climate Change
Title: The Taiwan Children's Play Declaration and Protocol for Replication

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Susan Chlebowski, UK-trained Playworker and Forest School Leader

Category: Playwork
Title: Cultivating a Playwork Movement Part 1: Our National Play Deficit

Category: Playwork
Title: Cultivating a Playwork Movement Part 2: The Task Before Us



Tony Christopher, MBA
National Institute for Play

Category: Play as a Biological Necessity
Title: Why Play Is a Public Health Necessity



Cindy Chung, Play Taiwan

Category: Leading for Play
Title: Restoring Time and Space for Play in Taiwan



Marjorie Cole, MEd
President, IPA – Canada

Category: The Method, Strategies, and Principles of Play
Title: Reading for Resilience: Using Children's Literature to Support Early Childhood Mental Health

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Tabitha Dell'Angelo, PhD

Category: Play Across the Lifespan
Title: Playful Pedagogies and Preservice Teachers' Mindsets



Cynthia DiCarlo, PhD
Louisiana State University

Category: The Method, Strategies, and Principles of Play
Title: How Reggio-Inspired Teachers Enact Playful Learning: Characteristics of the Reggio Emilia Philosophy in Practice

Category: The Method, Strategies, and Principles of Play
Title: Unlocking Potential: The Transformative Power of Loose Parts Play in Early Childhood Education



Mina Dilip, MA, Play Therapist

Category: The Method, Strategies, and Principles of Play
Title: Play is a Powerful Therapeutic Tool



Chima Abimbola Eden, MSc

Category: Play in the Age of Algorithms
Title: How Our Brains Develop Through Play, and What Happens When Screens Get Involved

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Category: Nature is Essential
Title: Fostering Young Children's Empathy through Nature Play



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Title: Playful Pedagogies and Preservice Teachers' Mindsets



Jackson R. Ham, PhD

Category: Play as a Biological Necessity
Title: Lessons from the Laboratory: Not All Rats Benefit from Play and Why That Matters for Children



Myae Han, PhD

Category: Advocating for Play with Parents and Caregivers
Title: Imaginary Companions as a Window into Pretend Play and Child Development

Category: Leading for Play
Title: Reimagining Readiness: The Transformative Power of Play in Language and Literacy



Callie Hendricks, BS

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Title: Nature and Place-based Environmental Education: A Primary Grade Teacher Focused Group Case Study in Wilmington, NC

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Celia Hogan,
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Title: Screens, Play, and the Developing Brain: Restoring Balance in Modern Childhood



Danielle Hunter, EdD

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Title: Reframing Early Art Experiences: How Process Art Supports Real Learning



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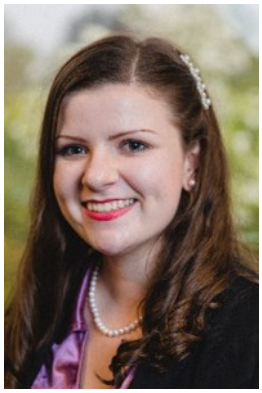
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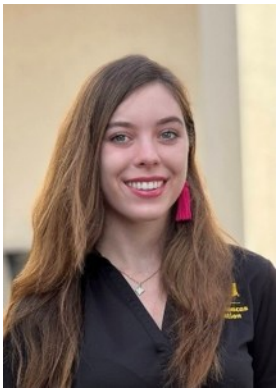
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With Sincere Gratitude



We extend our heartfelt thanks to all the contributors who dedicated their time and expertise to championing the right to play.

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Category Descriptions

Advocating for Play with Parents and Caregivers

Parents and caregivers are among the most important advocates for children's right to play. The choices adults make, the environments they create, and the support they provide can profoundly influence children's opportunities for exploration, imagination, learning, and joy. The articles in this category highlight the essential role families play in protecting and promoting play in everyday life. From supporting pretend play and fostering meaningful family interactions through games to empowering parents as advocates for playful childhoods, these authors explore the many ways adults can nurture children's development through play. They also challenge caregivers to step back, recognizing that much of the richest learning happens when children have the freedom to direct their own play. Together, these articles provide research, practical strategies, and advocacy tools to help families create play-rich environments that support healthy development, strong relationships, and joyful childhoods.

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It's a Child's Right

Play is not a privilege to be earned or a reward for good behavior. It is every child's fundamental right. The articles in this category explore how families, schools, communities, and organizations can help ensure that all children have meaningful opportunities to play, regardless of age, ability, or circumstance. From protecting recess and expanding opportunities for adventure and outdoor play to advancing inclusion, accessibility, and the voices of disabled and neurodivergent children, these authors highlight many ways to support and strengthen the right to play. They also offer practical advocacy strategies to help parents, educators, and community leaders create environments where joy, choice, belonging, and play are recognized as essential elements of childhood.

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Leading for Play

Children need more than opportunities to play. They need adults willing to protect, champion, and advocate for play in schools, communities, and public policy. This category of articles explores how educators, families, researchers, administrators, and community leaders are working to create the conditions necessary for play to flourish. From rethinking school readiness and early intervention to strengthening relationships, promoting justice and equity, and restoring time and space for play, these authors challenge long-held assumptions about learning and development. Together, they demonstrate that meaningful systems change is possible when children's rights, needs, and voices are placed at the center of decision-making. The authors provide research, advocacy tools, and practical strategies to help readers lead the movement to protect childhood and advance every child's right to play.

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Nature is Essential

Children are biologically connected to the natural world, yet opportunities to play, learn, and explore in nature continue to decline. Experiences in natural environments support children's physical, social, emotional, and cognitive development while fostering curiosity, empathy, environmental awareness, and a sense of belonging. The articles in this category examine how nature-based play and place-based education create meaningful opportunities for children to connect with their communities and the world around them. Drawing on perspectives from diverse cultural and geographic contexts, these authors highlight innovative approaches that support children's development while strengthening relationships with the natural environment. The research, frameworks, and practical strategies in these articles give readers tools to advocate for and create more meaningful opportunities for nature-based play and learning.

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Play Across the Lifespan

Play is a lifelong human need that contributes to learning, well-being, creativity, connection, and personal growth from infancy through older adulthood. While play is often associated with childhood, its benefits extend across every stage of life, supporting curiosity, resilience, relationships, and a sense of vitality. The articles in this category explore how playful experiences enrich educational settings, shape professional preparation, and foster engagement in adulthood. From the college classroom to broader reflections on play across the human lifespan, these authors challenge readers to reconsider play as something to be protected, encouraged, and celebrated at every age. Through research, reflection, and practical examples, they show that play is not something we outgrow, but a fundamental part of what it means to be fully alive, connected, and continually learning.

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Play as a Biological Necessity

Play is not simply a leisure activity or a break from learning. It is a biological necessity that supports healthy development, well-being, and lifelong learning. Across species and cultures, play serves as a powerful mechanism through which young individuals develop the cognitive, physical, social, and emotional capacities needed to thrive. The articles in this category explore the growing body of research demonstrating the essential role of play in neurocognitive development, physical health, self-regulation, social competence, and school success. They also examine key questions about equity, access, and the quality of children's play experiences across diverse contexts. From laboratory research and public health perspectives to classroom practice and international examples, these authors provide evidence, insights, and practical recommendations that reinforce a simple but powerful message: when children are denied opportunities to play, healthy development is compromised. These articles offer readers the research and advocacy tools needed to support and defend play as a fundamental biological necessity for all children.

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Play and Climate Change

Climate change is reshaping the environments in which children live, learn, and play. Rising temperatures, extreme weather events, urbanization, environmental degradation, and the loss of natural play spaces increasingly affect children's opportunities for outdoor play and connection with nature. At the same time, communities worldwide are developing innovative approaches to create sustainable, accessible, and resilient play environments. The articles in this category explore the relationship between climate change and children's play experiences while highlighting practical solutions that support both environmental sustainability and the child's right to play. From using recycled and upcycled materials to community advocacy and policy initiatives, these authors offer research, examples, and strategies to help readers protect children's opportunities for play while contributing to a healthier, more sustainable future for all.

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Play and Culture

Play does not occur in a vacuum. Children's play is shaped by the cultures, communities, traditions, values, and social experiences that surround them. At the same time, play serves as a powerful way for children to express identity, build relationships, make meaning of their experiences, and develop a sense of belonging. The articles in this category explore the dynamic relationship between play and culture, examining how play reflects, challenges, and transforms the social worlds children live in. Through discussions of justice, belonging, identity, and lived experience, these authors highlight the ways play can foster inclusion, amplify diverse perspectives, and create opportunities for connection across differences. The research and insights presented in these articles encourage readers to view play not only as an individual developmental process, but also as a cultural practice that helps children understand themselves, their communities, and their place in the world.

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Play in the Age of Algorithms

Children today are growing up in a world increasingly shaped by screens, algorithms, artificial intelligence, and digital technologies that compete for their attention, influence their choices, and mediate their experiences. While technology offers new opportunities for connection, learning, and entertainment, it also raises important questions about children's development, well-being, relationships, and opportunities for authentic play. The articles in this category explore how digital technologies affect children's brains, behavior, learning, and family life, and what may be lost when screen-based experiences replace child-initiated play. From the influence of algorithms and artificial intelligence to the role of parents in restoring balance, these authors provide research, practical strategies, and critical perspectives that help readers navigate the challenges of modern childhood. Together, they reinforce a powerful message: as technology becomes increasingly integrated into daily life, protecting time, space, and opportunities for rich, meaningful play is more important than ever for healthy development and human flourishing.

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Playwork

Play is a fundamental human need, but meaningful opportunities for child-directed play are increasingly under threat. As children's freedom, time, space, and access to play continue to diminish, the role of Playwork has never been more important. Rooted in the belief that children are experts in their own play, Playwork seeks to create and protect environments where children can freely choose, direct, and determine their play experiences.

The articles in this category introduce readers to the growing Playwork movement and examine the challenges posed by our modern play deficit. They explore why Playwork matters, how it supports children's healthy development and well-being, and what actions are needed to expand Playwork practices and advocacy efforts within communities. These authors offer a compelling vision for restoring play to its rightful place in children's lives, along with insights, strategies, and calls to action that can help readers become champions for child-led play. Through their collective work, they

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remind us that protecting play requires both individual commitment and systemic change.

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The Method, Strategies, and Principles of Play

Play is a powerful vehicle for learning, development, well-being, and human flourishing. Yet supporting meaningful play requires an understanding of the principles, environments, relationships, and pedagogical approaches that help children thrive. The articles in this category explore a wide range of play-based methods and strategies that support children's cognitive, social, emotional, creative, spiritual, and physical development. From loose parts, process art, storytelling, literacy, and outdoor learning to therapeutic play, social-emotional learning, risk-taking, and Reggio-inspired practices, these authors demonstrate the many pathways through which play fosters resilience, belonging, curiosity, and growth. Grounded in research and practical application, the articles provide educators, families, researchers, and practitioners with insights, tools, and approaches for creating environments where play can fulfill its transformative potential and support every child's right to learn, develop, and flourish through play.

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Advocating for Play with Parents and Caregivers

Parents and caregivers are among the most important advocates for children's right to play. The choices adults make, the environments they create, and the support they provide can profoundly influence children's opportunities for exploration, imagination, learning, and joy. The articles in this category highlight the essential role families play in protecting and promoting play in everyday life. From supporting pretend play and fostering meaningful family interactions through games to empowering parents as advocates for playful childhoods, these authors explore the many ways adults can nurture children's development through play. They also challenge caregivers to step back, recognizing that much of the richest learning happens when children have the freedom to direct their own play. Together, these articles provide research, practical strategies, and advocacy tools to help families create play-rich environments that support healthy development, strong relationships, and joyful childhoods.

Authors

Press Start. Activating Family Voices to Advance Playful Solutions

Jenn Beideman, MPA

Get-out-of-the-Way of Play: A Call-to-Action to Educate Parents About Their Role in Play

Gennie Gorback, MEd & Kate Allen Fox, MPP

Indoor Play: Board and Card Games and Their Role in Parent-Supported Play

Abby Loebenberg, PhD

How Parents Can Support Play

Bengi Sullu, PhD

Imaginary Companions as a Window into Pretend Play and Child Development

Rebecca Wax, BA & Myae Han, PhD

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Press Start. Activating Family Voices to Advance Playful Solutions

Jenn Beideman, MPA

Introduction

Play is fundamental for children's health, development, and overall well-being. Despite its many proven benefits, far too many children across the country still lack quality, safe, and accessible opportunities in their neighborhood (Gordon-Larsen et al., 2006). At a time of rising mental health challenges, social disconnection, and widening inequities, play is becoming increasingly critical for supporting children's overall health and well-being (Rigolon et al., 2021; Tonkin & Whitaker, 2021; International Play Association, 2020). Parents, residents, and youth living in their neighborhood know it best. Often, families know what they want to see in their neighborhood but lack the understanding to navigate complex government institutions.

Conclusion

Local change requires coordinated action and consistent advocacy. When families align around a shared vision for play, municipalities adjust policies, redirect resources, and formalize support for child-centered infrastructure. Families can get involved to make change in their neighborhood by: getting to know neighborhood administrators and public servants; letting your voice be heard at public meetings; getting to know your elected officials; recruiting your friends and neighbors; and getting involved with organizations that invest in the power of play. Progress does not occur by chance. It follows organized demand, credible data, and sustained public pressure. Parents, caregivers, and youth who mobilize effectively and consistently to transform their neighborhoods to support safe, inclusive play for everyone.

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Get-out-of-the-Way of Play: A Call-to-Action to Educate Parents About Their Role in Play

Gennie Gorback, MEd & Kate Allen Fox, MPP

Introduction

Many parents value play for their children but misunderstand their role in creating a playful environment and how best to support play. Tired, busy parents may also overlook the value of child-directed play because of perceived safety issues, concerns about mess, and misunderstandings about its inherent developmental value. Parents may feel pressured to ensure their children advance academically and equate learning with structured activities rather than child-driven play (Fisher, 2008).

While many play-focused messages target parents, most parents still feel unsure about their role in building a playful environment and creating a culture of play at home. The good news is that overall messaging about the value of play for children is increasing. Parents are hearing about the value of play from sources such as children's entertainment, their kids' teachers, and social media. Medical professionals and other stakeholders are receiving more training on play and its relationship to overall well-being, with the American Academy of Pediatrics recommending that pediatricians write "prescriptions for play" at checkups for young children (Yogman et al., 2018). While pediatricians, classroom educators, governmental agencies, and nonprofit organizations can all help increase parents' awareness of their role in play, no one sector has claimed responsibility and ownership of the issue, and parents still seem uninformed on the nuances of creating an environment for child-directed play.

A multisectoral approach is, therefore, needed to educate parents and influence cultural norms around play. Play-related sectors and play professionals should develop succinct parental education messages to communicate that the most meaningful play often occurs when parents are involved as little as possible. This white paper serves as a call-to-action for communication and coordination across sectors around play independence.

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Conclusion/ Recommendations

It is no overstatement to suggest that play is *the* most important activity in a child's life. As professionals interested in promoting true play—that is, play free from adults' over-interference—we must change cultural norms around play. Many parents who value play also misunderstand it, perhaps thinking that their active participation is required for meaningful play. Others fear judgment if they allow more free play or worry that their children will fall behind academically. To counteract these broader cultural norms that inhibit true play, we must work together and coordinate across sectors to reach parents with clear messages about how and why parents need to get out of the way of play. While some cultural norms work against play, interest in play is also increasing, making now an ideal time to increase public messaging to parents. Play professionals can and should capitalize on this moment, seeing it as a "call-to-action" for coordination in order to support and amplify each other's efforts.

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Indoor Play: Board and Card Games and Their Role in Parent-Supported Play

Abby Loebenberg, PhD

Introduction

Board and card games are a way to play across one's lifespan. For children and adults alike, the philosopher Gadamer (2004) argued that the back and forth of play or "to-and-fro" nature of games is a key part of their structure. For young children, this might manifest itself in something as simple as learning skills like patience while taking turns, but for adults, as Boghain et al. (2019) suggest, this evokes the "ludic nature of the human being" (p. 51). From a social and cultural anthropological perspective, all societies utilize games as part of their social development. Shifts in the types of games played may mark social transitions (such as to adulthood) or gender (such as traditional games gendered for boys or girls). In any event, it is often key to the core social connections in the family that children are taught to play games and learn to engage in social gaming. However, this may take many forms in contemporary Western society, ranging from traditional card and board games to shared interests with parents in video games.

This paper suggests that parents and caregivers, such as grandparents, who wish to participate in children's development should not overlook the positive value of traditional analog board and card games, and makes several concrete suggestions as to how these games work as learning tools that appropriately match the developmental level of children at various stages of early and middle childhood. Drawing on my own work as an anthropologist of play, and interdisciplinary perspectives from core educational theories, this paper offers concrete suggestions of appropriate games for different age groups. Furthermore, it links these games to developing skills that parents can support when playing them with their children.

Conclusion

In conclusion, board and card games at home are a net positive for various age groups. By choosing, or adapting, appropriate games for various ages and skill levels,

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parents and caregivers can support children's learning, social and behavioral skills and cognitive development in their home environment. Games for very young children (three plus) should highlight skills like turn taking, co-operation, dice-rolling, moving pieces, matching skills and dexterity. Slightly older children (four to five years old) can focus on more complex memory games, dexterity challenges and deductive reasoning before moving on to tile placement, abstract games, set collection and construction around age eight. The oldest children, aged twelve and above, can take on the most complex family games that include trading mechanics, worker placement, economic engine building and logic programming. Lastly, one should not overlook the importance of inter-generational skill building and the benefits of play across a lifetime that come from a family that plays games together on a regular basis. In caring for our youngest, we often care for our oldest as well.

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How Parents Can Support Play

Bengi Sullu, PhD

Introduction

In my conversations with parents who are from a variety of socio-economic and cultural backgrounds about their childhood memories, I hear that they used to play *all the time*. Locations, activities, and people vary: at the lake, in the forest, in the streets with children from the neighborhood, in a hallway inside the apartment with a sibling, with the cassettes under the TV, or all alone all day. What remains across these accounts is that they played frequently. Play is universal, and in the past, it was abundant, informing the fond childhood memories of many. While almost all the parents I have spoken with lament that children do not get to play as often as they did in the past, they also frequently acknowledge that they have a role in play taking a backseat to other concerns about children (Lester & Russell, 2010). In the modern age, play has diminished due to a variety of pressures, academic demands, screen time, safety concerns, and other barriers.

Conclusion

Parents can support play by staying mindful of the transformative power of small, consistent interactions. Even when one cannot change everything about how they plan their days or where they send their children, being intentional about choosing opportunities that emphasize free play still matters. Allowing unstructured time, resisting the urge to overdirect, or simply making space can open up meaningful possibilities for play.

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Imaginary Companions as a Window into Pretend Play and Child Development

Rebecca Wax, BA & Myae Han, PhD

Introduction

Among the many forms of play, imaginary companions - invisible characters created through a child's imagination - are often an overlooked component of pretend play. Defined as a construct of a child's imagination that others cannot see or physically interact with (Armah & Landers-Potts, 2021), these imaginary companions offer a unique contribution to the cognitive, social-emotional development of young children. Pretend play is a subset of play that involves an "as-if" stance where a player intentionally projects a mentally represented alternative into a current situation of play (Garvey 1990; Lillard 1993). Developmental theorists have long recognized the value of pretend play, including play with imaginary companions. Theorists such as Vygotsky (1978) believe the pretense of pretend play is a crucial developmental goal because of its ability to help children understand how to separate actions from reality and develop abstract thoughts. Piaget (1962) also acknowledges the significance of pretend play and considers it an indicator of developmental progress. For him, pretend play around 18 months indicates the development of the semiotic function, which separates an idea from its meaning and allows one to entertain mental content separate from the physical, present reality. Research also shows that children who engage in complex forms of socio-dramatic play exhibit greater language skills than nonplayers, better social skills, increased empathy, enhanced imagination, and a more nuanced understanding of others' intentions (Miller & Almon, 2009). They also exhibit less aggression and display high levels of critical thinking. Children often practice socio-dramatic play with their imaginary companions. In all, pretend play begins a child's training in social behaviors. Children who grow up with this type of play and enjoy expressing their playfulness are likely to be more sophisticated in their social lives and more adept in their everyday social relations (Sutton-Smith, 2008, pp. 80-123). Young children's imaginary companions are not merely whimsical fantasies; they are developmentally appropriate and an important form of pretend play that supports children's cognitive, social-emotional growth. Therefore, in this white paper, we argue that adults should recognize

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the importance of children's imaginary companions and support their engagement in such play.

Conclusion

In summary, adults need a thorough understanding of play and must recognize when and how to facilitate it properly. Otherwise, they risk disrupting or even harming children's play. By providing clear links between imaginary companions and developmental strengths, we can help parents see the important role this type of play has in their child's growth. By validating and supporting a child's imaginary companion and pretend play tendencies, parents can foster children who are emotionally balanced, creative, and more socially skilled. Further research is necessary to determine how, if at all, parents' perceptions of their children's pretend play, including imaginary companions, change or evolve as their children move through preschool (Gleason, 2005). More research is also needed to understand better the connection between language skills and imaginary companions, as well as the relationship between neurodivergent children and their use of imaginary companions (Armah & Landers-Potts, 2021; Lillard & Kavanaugh, 2014).

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It's a Child's Right

Play is not a privilege to be earned or a reward for good behavior. It is every child's fundamental right. The articles in this category explore how families, schools, communities, and organizations can help ensure that all children have meaningful opportunities to play, regardless of age, ability, or circumstance. From protecting recess and expanding opportunities for adventure and outdoor play to advancing inclusion, accessibility, and the voices of disabled and neurodivergent children, these authors highlight many ways to support and strengthen the right to play. They also offer practical advocacy strategies to help parents, educators, and community leaders create environments where joy, choice, belonging, and play are recognized as essential elements of childhood.

Authors

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Recess and the Value of Choice in the School Environment

Charlene Woodham Brickman, PhD

Introduction

Today's Kindergarten through Grade 5 environment is not as "elementary" as one might think. In the current culture of high-stakes assessment, the buzzwords of the day are rigor and academic expectations. These expectations are often explicitly stated, highly scripted, and generally not developmentally aligned for their intended audience. To achieve these lofty academic goals, behavioral expectations are often out of step with students' chronological and developmental ages, creating an unrealistic bar and an ultra-serious atmosphere for children who should be participating in recess, collaborating with peers, learning through play, and experiencing joy in learning.

Conclusion

Our children need more than silence in the hallways and multiple-choice assessments. Our children are preparing for challenges that will require more than compliance. Students can acquire literacy and numeracy without losing their personhood. In the 21st Century, collaboration and creativity, initiative, problem-solving, critical thinking, and communication skills are needed for success in life and the workplace. It is time to recognize that the current schoolification has never been the solution. Change is needed; educators and parents should no longer passively comply with the harmful practices children are experiencing in primary classrooms.

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Adolescents Need Adventure Too: Making Room for Play in Year 7

Educated by Nature

Daniel Burton, BEd & Jonny Neen, PhD Candidate

Executive Summary

At Guildford Grammar School in Western Australia, Year 7 students step into a space of reclaimed timber, pallets, rope, paint, tools and natural features. They build and rebuild, create social worlds, take things apart, test ideas, rest together and leave traces of themselves in the landscape. The Year 7 Self Build Play Space offers a window into a form of childhood that can become difficult to see once students enter secondary school.

This paper explores the continuing right to play through adolescence. Article 31 of the United Nations Convention on the Rights of the Child applies to every child under 18. The Committee's guidance recognises that older children increasingly seek peer connection, independence, challenge, risk, identity and belonging through play and recreation. Recent guidance from the American Academy of Pediatrics also calls for daily, quality recess across kindergarten to Grade 12.

The Guildford experience suggests that time is one part of a wider picture. Adolescents also need spaces they can influence, materials that respond to their ideas, acceptance of age-appropriate play, and adults who can observe before acting. Published research on risky play offers a useful lens for understanding challenge and self-assessment, while its strong focus on younger children asks us to apply it to adolescence with care.

The paper recommends that secondary schools protect regular break time, involve young people in shaping play provision, create varied and adaptable environments, use risk-benefit thinking, review practical barriers, and prepare adults to hold play with attention, proximity and trust.

Conclusion and Recommendations

The Guildford Grammar School experience has helped us see adolescence as a continuation of childhood with its own forms of play. Year 7 students may carry greater

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physical capacity, sharper social awareness and a strong desire for independence. They also continue to imagine, make, test, retreat, laugh, take risks and build worlds together.

Their right to play is lived through relationships. It is shaped by the time schools protect, the places they make available, the types of materials they value and provide, the clothing students wear, the way adults interpret behaviour and the degree to which young people can influence decisions. A well-held play space combines freedom and care. Adults remain responsible, while young people experience real agency.

Secondary schools can begin with the following actions:

1. **Recognise adolescents as children with a continuing right to play.** Include Article 31 in whole-school conversations about wellbeing, break time, student voice and the design of the school day.
2. **Protect regular and meaningful break time.** Offer time free from academic demands, with opportunities for rest, friendship, movement, imagination and self-directed activity.
3. **Create varied and adaptable places.** Provide spaces for active, social, constructive, sensory, imaginative and quiet play, including materials young people can move and transform.
4. **Listen to young people and share ownership.** Invite students to shape the uses, agreements, materials and future development of their play spaces, and give their views genuine weight.
5. **Use risk-benefit thinking.** Remove unreasonable hazards while preserving age-appropriate challenge, uncertainty and opportunities to practise judgement.
6. **Prepare adults to notice before responding.** Build shared language around play, behaviour, energy, risk, proximity and care so staff can step closer or further away with intention.
7. **Review practical barriers to participation.** Consider uniform, footwear, storage, mess, maintenance, accessibility, gender and cultural safety as part of play provision.

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8. **Make play part of the culture.** Repeated access allows relationships, confidence, skills, shared memory and belonging to grow.

Adolescents need adventure too. Our hope is that secondary schools will remain curious about what play looks like as children grow, and willing to create conditions where it can remain visible, accepted and alive.

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Unheard Voices, Unseen Play: Addressing the Research Silence Around Disabled and Neurodivergent Children's Perspectives on Play

Sarah Jayne Meyer, MSc

Introduction

Disabled and neurodivergent children have a fundamental right to play and to participate in decisions that shape their lives, as set out in the United Nations Convention on the Rights of the Child (UNCRC). Despite legal commitments, including Scotland's incorporation of the UNCRC, these rights are not consistently upheld. Many disabled and neurodivergent children continue to encounter significant barriers to free, outdoor, and adventurous play, and their perspectives remain largely absent from the research that informs policy and practice.

A growing body of evidence highlights a persistent gap between rights and lived experience. Research demonstrates the developmental importance of play, yet structural and attitudinal barriers continue to restrict disabled and neurodivergent children's access to meaningful play opportunities. At the same time, methodological limitations within research frequently silence their voices, relying instead on adult proxies or approaches that fail to accommodate diverse communication needs. Inclusive, adaptive, and child-centred research methods are essential for capturing the authentic experiences of disabled and neurodivergent children and for ensuring that their insights shape the environments and policies that affect them.

Strengthening children's rights requires coordinated action from researchers, educators, policymakers, and organisations. Ensuring that disabled and neurodivergent children are heard, directly, respectfully, and on their own terms, is both a legal obligation and a necessary step toward creating equitable, inclusive spaces for play and participation.

Play is a universal and essential part of childhood. It supports physical, cognitive, emotional, and social development, and it is recognised as a fundamental right under the United Nations Convention on the Rights of the Child UNCRC (UNICEF, 1989). Three articles are particularly relevant when considering disabled and neurodivergent

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children's participation in play research. Article 31 recognises the right of every child to rest, leisure, and play appropriate to their age. Article 23 affirms that a child with a disability has the right to live a full and decent life with dignity, independence, and active participation in their community. Article 12 states that every child has the right to express their views, feelings, and wishes in all matters affecting them, and to have those views taken seriously.

Despite these protections, disabled and neurodivergent children often experience restricted access to play and limited opportunities to participate in research about their own lives.

Recommendations and Conclusions

Ensuring that disabled and neurodivergent children are meaningfully included in play research requires a coordinated commitment across research, education, and policy. The evidence presented demonstrates that exclusion is rarely the result of children's abilities and far more often a consequence of structural, methodological, and attitudinal barriers. Addressing these barriers demands a shift toward research practices that are flexible, reflexive, and grounded in children's rights.

Researchers must adopt approaches that recognise the diversity of children's communication styles and lived experiences. This includes developing multi-modal, child-centred methodologies that allow children to express themselves in ways that feel natural and accessible to them. A robust methodological "toolbox" should incorporate visual, sensory and alternative communication systems, ensuring that participation is not limited to those who can engage verbally or in writing. Researchers also need to cultivate a reflexive stance, one that acknowledges the power dynamics inherent in research and remains open to following children's priorities, even when they diverge from initial research plans. Silence, hesitation, and non-verbal communication must be treated as meaningful data rather than absence, and researchers should be prepared to invest the time and interpretive care required to understand these forms of expression.

Schools and educators also play a critical role in ensuring that all children, not only those who are compliant, confident, or easy to engage, are offered opportunities to participate in research. This includes actively challenging cultures that reward "good

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behaviour" with participation and inadvertently silence children who are dysregulated, anxious, or misunderstood.

Policymakers, too, have a responsibility to embed all children's voices within the systems that shape their lives. This involves funding accessible play spaces, supporting inclusive research initiatives, and ensuring that policy development processes actively seek out and respond to the perspectives of disabled and neurodivergent children. Compliance with UNCRC Articles 12, 23, and 31 must be monitored and applied in practice, not simply acknowledged in principle.

Ultimately, the inclusion of disabled and neurodivergent children in play research is not a methodological preference but a rights-based imperative. When children's voices are excluded, whether through inaccessible methods, adult assumptions, or structural barriers, the resulting policies and practices fail to reflect their lived realities. By committing to inclusive, adaptive, and ethically grounded research practices, we can begin to close the gap between rights and reality. Listening to disabled and neurodivergent children directly, respectfully, and on their own terms is essential for creating environments in which every child can play, participate, and thrive.

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The Power of Outdoor Play Partnerships for Inclusion and Accessibility

Angela Rekers, PhD

Introduction

Playing outdoors across a variety of terrains has been shown to contribute to children's cognitive, emotional, social, and physical development and well-being (Fyfe-Johnson et al., 2021; Schutte et al., 2017). While research clearly shows the benefits of outdoor play across a variety of terrains, children also have fewer opportunities for outdoor physical activity (WHO, 2019). This trend is wide-ranging, affecting children of all ages and abilities across all demographics.

Contributing to these trends are increasingly sedentary lifestyles and adults' concerns about safety that are limiting opportunities for outdoor play (Gray et al., 2015); even in educational settings, children and young people (CYP) are afforded fewer opportunities to move, play, and explore (Jerebine et al., 2022). Affordances for independent and/or risky play are likely to be especially constrained for young people and children with additional needs (Gately et. al., 2023). Given the well-documented research on the multiple holistic benefits of such play, these constraints may contribute to developmental challenges across physical, cognitive, social, and emotional domains.

This paper argues that collaboration and partnership among families, communities, not-for-profit organizations, playworkers, forest school leaders, schools, specialist therapists, and others can create intentional opportunities to promote and support outdoor play for children and young people, especially those with traditionally limited access. Specialist services typically include health-sciences therapists, such as occupational therapists. Introducing outdoor play specialists could benefit everyone. An outdoor play collaboration in Wales, United Kingdom (UK), is used here to demonstrate the benefits of a forest school program for youth with disabilities.

Conclusion

For children and young people with diverse abilities in particular, an interdisciplinary approach to outdoor play provision can provide multiple benefits, including an enhanced sense of competence and ability. Chawla and Heft (2002) argue

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that the physical and social affordances available to children contribute to their development of competencies. Because over 22 percent of occupational therapists (OTs) in the United States work in early intervention centers or schools (AOTA, 2023), multidisciplinary partnerships and collaborations are commonplace indoors. Expanding this provision outdoors may provide additional benefits for adults, children, and young people. Adding nature therapists, play workers, or forest school leaders would ensure that children and young people with additional needs who may not be able to access play opportunities without added support can engage with a wider range of outdoor affordances.

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How Parents Can Advocate for a Playful Childhood that Prioritize Joy

Linnea Westerlind, MSocSc

Introduction

Parents and caregivers, we are raising kids in a challenging era. With rapidly changing, addictive technologies competing for our children's time—and let's be honest, our own time, too—it's never been harder to ensure kids get enough physical activity and time outdoors.

The good news is that, despite modern challenges, kids are still wired to play because play is biological and instinctive. As parents and caregivers, we have opportunities in nearly all areas of our children's lives to influence their access to play.

We know play is essential to a healthy and happy childhood. By sharing strategies and ideas for cultivating a culture of play within our families and communities, we can advocate for a playful childhood that prioritizes joy.

Conclusion

Parents across the U.S. are advocating for systemic change in recess policies, youth sports oversight, and physical activity legislation. More than 20 U.S. states now have physical activity and recess laws in place, in many cases, thanks to advocacy from parents (*U.W. Sports Institute | Youth sports and physical activity legislation tracker*, n.d.). You can start at the local level by getting involved with your school's PTA and participating in its legislative advocacy committee. Find organizations in your region that are doing systems change work and get involved. Contact your state legislators and ask for a meeting; talk about what matters to you regarding play, even if you do not know the policy solution.

Parents *can* and *do* make a difference in bolstering play in their own child's life—and in creating societal changes that benefit all kids.

Recommended Reading for Parents and Caregivers

Crouse, K. (2018). *Norwich: One tiny Vermont town's secret to happiness and excellence*. Simon & Schuster.

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Hanscom, A. J. (2016). *Balanced and barefoot: How unrestricted outdoor play makes for strong, confident, and capable children*. New Harbinger Publications.

Hoffmeister, P. B. (2013). *Let them be eaten by bears: A Fearless Guide to Taking Our Kids Into the Great Outdoors*. Penguin.

Louv, R. (2016). *Vitamin N: The essential guide to a nature-rich life*. Atlantic Books.

McGurk, L. Å. (2017). *There's no such thing as bad weather: A Scandinavian mom's secrets for raising healthy, resilient, and confident kids (from friluftsliv to hygge)*. Simon and Schuster.

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Leading for Play

Children need more than opportunities to play. They need adults willing to protect, champion, and advocate for play in schools, communities, and public policy. This category of articles explores how educators, families, researchers, administrators, and community leaders are working to create the conditions necessary for play to flourish. From rethinking school readiness and early intervention to strengthening relationships, promoting justice and equity, and restoring time and space for play, these authors challenge long-held assumptions about learning and development. Together, they demonstrate that meaningful systems change is possible when children's rights, needs, and voices are placed at the center of decision-making. The authors provide research, advocacy tools, and practical strategies to help readers lead the movement to protect childhood and advance every child's right to play.

Authors

Press Play: A Story of Play, Inquiry, and Systems Change

Kim Adams, MA, Leadership, Play Advocate and Consultant

Play IS Readiness: Rethinking What Prepares Children for Kindergarten

Jennifer L. Berube, PhD

Reimagining Readiness: The Transformative Power of Play in Language and Literacy

Tori K. Flint, PhD & Myae Han, PhD

Kids Deserve More Than Just Change — They Deserve Justice

Mark Jackson, BS, Criminal Justice

Time, Space, and Permission: Critical Ingredients for Integrating Play in Public Schools

Denisha Jones, PhD, JD

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Celebrating Play in Early Intervention: Every Child Deserves a Playful Journey

Lucinda Jones, Early Interventionist and Key Worker

Realising the Right to Play through Pedagogy: A Scottish Perspective on Systemic Change in Education "Embedding Play in National Education Systems"

Fiona Kirkland, MEd, Play Scotland

The Power of Play: Why Unstructured Time Matters in Primary School

Anne Lamont, MEdSt & Sara Scott, BEd

Ready or Not, Here I Come: Redefining Kindergarten Readiness to Meet Children Where They Are Upon Arrival

Kyler P. Leiter, PhD, Equity, Inclusion, and Trauma-Informed Committee Chair

Reimagining the Educational Ecosystem: Modeling Play, Choice, and Community Partnership for Holistic Development

Angie Nastovska, PhD, iLEAD California

Strengthening Child, Teacher, and Parent Relationships Through Play

Chris Navarro, MA, Director of School & Community Programs; Richard A. Kissel, PhD, Chief Program Officer; & Tivy Whitlock, PhD, Community Programs Educator
The DoSeum

Ready for Me: A DEY Campaign to Change the Narrative About Going to Kindergarten

Michele Hemenway Pullen, university degrees in **Psychology and Counseling,** as well as **Learning and Behavior Disorders**. **Specialized Pedagogy:** background training in **Waldorf Education** and **Early Childhood Education;** Denisha Jones, PhD, JD; Hans Petersen, MSE; & Sierra Roussos, MAE

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Play as a Biological Necessity The Importance of Attractive and Playable Outdoor Play Spaces for the Healthy Development of All Children

Suzanne Quinn, PhD, KOMPAN Play Institute

Unstructured Outdoor Play is Essential for Sport Readiness

Deborah J Rhea, EdD, LiiNK Project Director, Professor, Kinesiology & G. Kate Webb, PhD, Adjunct Professor
Texas Christian University

Restoring Time and Space for Play in Taiwan

Wei-Shun Tseng, OT, Ju-Pi Pan, Cindy Chung, Jackie Wang, & Jen Hsiu-Chuan Wang
Play Taiwan

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Press Play: A Story of Play, Inquiry, and Systems Change

Kim Adams, MA, Leadership, Play Advocate and Consultant

Introduction

The Gap Between Play Policy and Classroom Practice

In recent years, California has introduced a program called Transitional Kindergarten (TK), designed to provide every four-year-old child in the state with a "high-quality, play-based learning experience" the year before kindergarten (Saucedo, 2025). TK is intended to align with the California Preschool and Transitional Kindergarten Learning Foundations (PTKLF; California Department of Education, 2025a), emphasizing a developmental approach in which play is integral to the curriculum. The rollout of TK has been problematic due to inconsistent quality.

Expanding a program for four-year-olds into elementary school settings posed curriculum-development and facilities-related challenges (PPIC, 2025). Rapid program expansion meant teacher requirements could be waived. In a survey conducted by the California Department of Education and analyzed by the Learning Policy Institute, only 52% of TK teachers statewide in 2023–24 had 24 units of early childhood education or child development (Watanabe, 2025). Despite California policy and guidance clearly positioning TK as developmentally appropriate, many TK classrooms look and feel like kindergarten classrooms, with developmentally inappropriate content, adherence to misaligned standards, and the use of report cards.

Though the California Department of Education uses the term Developmentally Appropriate Practice, a growing body of early childhood experts are leaning towards terms such as developmentally focused or developmentally effective. The rationale behind this change in terminology is to place greater focus on child development than on the term "appropriate" (Lawrence, 2026).

Conclusion: The Work Continues

The iterative process of change toward embracing play is ongoing. For it to be sustainable, it must continue to evolve. Entering the 2026–27 school year, FUSD has decided to continue its work by providing more professional learning for principals to

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deepen their understanding of developmentally focused practice in early learning and to provide access to and training on observation tools. This next phase of the work coincides with California's growing emphasis on Preschool through Third Grade (P–3) alignment. As districts across the state work to create more coherent early learning experiences for children, questions about developmentally focused practice become increasingly important beyond TK. The conversations that began in TK about play, observation, assessment, relationships, and child development are now expanding into Kindergarten and the early elementary grades. As part of this next phase of the work, I have been invited to begin a similar process with Kindergarten teachers during the 2026–27 school year, exploring how play and developmentally focused practice are imperative for all children.

In many ways, the district's journey began when it decided to "press play." Even before the first workshop, district leaders were asking questions about developmentally focused practice and how to best support four-year-olds. The workshop helped turn curiosity into action within a system that was ready for change. What began as a single professional learning event evolved into a process of collective inquiry, shared leadership, and systems change. In the children's book The End Is Just the Beginning (Bender, 2021), readers are reminded that endings often mark the start of something new. That idea captures the cyclical nature of both play and change. Each shift answered some questions and revealed new ones. While tools and structures will evolve, the commitment remains the same: supporting teachers in creating developmentally focused learning environments where children can learn and grow through play.

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Play IS Readiness: Rethinking What Prepares Children for Kindergarten

Jennifer L. Berube, PhD

Introduction

In a preschool classroom, four-year-olds Marcus and Sofia have transformed the dramatic play corner into a veterinary clinic. Marcus, wearing a too-large white button-down, holds a toy stethoscope to the chest of a stuffed dog while Sofia stands nearby with a clipboard. “This puppy is very sick,” Marcus announces. “She needs medicine.” Sofia shakes her head. “First you have to check her temperature. That is what doctors do first.” Marcus considers this, then nods and reaches for a plastic thermometer.

What are we watching here? On the surface, it looks like dramatic play, something we might dismiss as a break from “real learning.” Instead, look more closely. Marcus is holding an imaginary scenario in mind while regulating his impulses to follow the play scenario’s internal logic. When Sofia redirects him, he adjusts without arguing. Sofia is coordinating her behavior with his, monitoring the shared story they are building together. Both children are using language to negotiate meaning, taking turns, managing mild frustration, and sustaining focus on a shared goal.

These skills are not trivial. They are the very capacities that decades of research have identified as the strongest predictors of school success: stronger than knowing letters, stronger than counting, stronger than any of the academic content we have become so anxious for young children to master (Spiegel et al., 2021; McClelland et al., 2014).

We have been asking the wrong question. We ask, "Is this child ready for school?" As if readiness is a threshold to cross. Readiness is not a state children achieve before learning begins. It is a practice. The capacities that predict school success do not sit dormant, waiting to be deployed. They exist only in their exercise. Play is where they are exercised. Play does not build readiness, as if readiness lives somewhere else. Play IS readiness, because readiness is nothing other than these capacities in action. When we remove play, we remove readiness itself.

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Throughout this paper, I deliberately use the word "capacities" rather than "competencies". The words carry different assumptions. Capacity (from the Latin *capacitas*, the ability to hold or contain) emphasizes potential, something dynamic that grows and expands through use. Competency (from *competere*, to be sufficient) emphasizes demonstrated skill, something static that can be measured and checked off. Competency is the language of standards-based education and assessment frameworks. It fits a model of readiness as a threshold: children either have the competencies, or they lack them. Capacity fits a different model. Capacities are not proven once and possessed forever. They exist in their exercise. If readiness is a set of competencies, it is a checklist. If readiness is a set of capacities, it is a practice. Play is practice.

Conclusion and Recommendations

The research is unequivocal; the capacities that predict school success are the capacities children exercise in play. When we remove play from preschool and kindergarten classrooms in order to “prepare” children for academic demands, we remove the very context in which readiness lives. We have created a tragic mismatch: children who have had rich play experiences arrive at kindergarten with the very capacities that predict success, only to find classrooms that have dismantled the practices that would sustain them.

What would it mean to take a developmentally responsive kindergarten seriously? It would mean starting, not from standards, not from what first grade will demand, but from the children themselves. Who are five-year-olds? What do they need? What are they capable of, and under what conditions? A developmentally responsive kindergarten would treat these questions as foundational.

This is not a call to lower expectations. It is a call to align expectations with development, to recognize that the capacities we most want children to have are capacities they exercise in play, in relationship, in active engagement with materials and peers. They are not capacities that develop through worksheets or direct instruction in skills children are not yet ready to master.

A developmentally responsive kindergarten would be play-rich, relationship-centered, and designed around what we know about how young children learn. It would

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have dramatic play corners, block areas, and time to explore. It would have teachers who deeply understand child development and see their role as supporting the whole child. It would assess children in ways that inform teaching rather than ranking and sorting. Moreover, it would trust that children who are thriving (curious, engaged, regulated, connected) are children who are ready to learn.

A developmentally responsive kindergarten would not require teachers to protect childhood against the institution. It would be the institution that protects childhood.

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Reimagining Readiness: The Transformative Power of Play in Language and Literacy

Tori K. Flint, PhD & Myae Han, PhD

Introduction

Play is often described as the work of children (Paley, 2009). Yet, in many contemporary early childhood classrooms, play is treated as enrichment or a reward rather than as foundational to children's reading readiness and broader language and literacy development (Roskos & Christie, 2011). Children's play is not simply a "break from learning," but a primary context in which they experiment with sounds, words, texts, and identities as readers, writers, and speakers (Vygotsky, 1978; Wohlwend, 2011). In imaginative play, children negotiate roles, invent narratives, and draw on their community and cultural funds of knowledge, creating rich opportunities for vocabulary growth, oral language practice, and reading and writing development (Flint, 2016; Souto-Manning et al., 2024).

Neuroscience perspectives further underscore why playful experiences matter for school readiness. Play helps shape neural circuits associated with flexibility, emotional regulation, and complex social communication, which are implicated in language learning and literacy development (Pellis & Pellis, 2010). When children repeatedly engage in varied forms of play, they rehearse the cognitive and social processes that undergird decoding, comprehension, and written expression (Roskos & Christie, 2011). As such, play is not an optional "add-on" to language and literacy instruction but part of the neural training ground through which young children build capacities for engaging with words, print, symbols, and meaning-making (Pellis & Pellis, 2010).

Despite this evidence, policy and curricular reforms framed around reductionist notions of school readiness have increasingly organized language and literacy as discrete skills to be mastered in advance of "real" reading, writing, and language use (Neuman et al., 2007). This paper offers an alternative vision of readiness as a holistic construct that emerges at the intersection of children's bodies, emotions, relationships, language, and symbol systems and is cultivated through high-quality play (Ehret et al., 2023; Roskos & Christie, 2011). Reimagining readiness in this way positions play as a transformative

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force that enables young children to become powerful readers, writers, and speakers, and affirms play as a fundamental right of all children.

Conclusion and Recommendations

This paper has argued that play is not peripheral to language and literacy learning but a transformative and essential context through which young children develop the cognitive, linguistic, social-emotional, and embodied capacities that support school readiness. Drawing on interdisciplinary research, the paper challenges prescriptive, technical conceptions of readiness and critiques policy-driven interpretations of the "science of reading" that privilege discrete, decontextualized skills over meaning-making, engagement, and holistic child development. Across the literature, a consistent pattern emerges: when children engage in sustained, socially rich, and materially supported play, they develop foundational language and literacy competencies—including vocabulary, narrative skill, print awareness, phonological sensitivity, and emergent writing—alongside agency, motivation, and resilient literate identities.

Despite this evidence, play has been increasingly diminished in kindergarten classrooms. Heightened academic pressures, accountability demands, and misconceptions about rigor have led to reductions in time, space, and support for play, often replacing it with extended whole-group instruction, worksheets, and scripted curricula. This erosion of play is particularly concerning given that kindergarten serves as a critical bridge between early childhood and formal schooling. The lack of play in kindergarten not only constrains children's opportunities to integrate language, literacy, and social interaction, but also risks undermining self-regulation, engagement, and long-term learning trajectories. Bringing play back to kindergarten is therefore not a nostalgic gesture, but a research-based imperative.

Reframing readiness as a holistic and ecological construct positions play as a central instructional practice rather than an optional enrichment activity. To support this shift, several recommendations are offered. First, kindergarten classrooms should intentionally reintroduce extended, high-quality play that integrates print, writing tools, and multimodal materials. Second, professional development must equip teachers to

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sustain play while explicitly linking playful activity to language and literacy goals. Third, policymakers and curriculum designers should reconsider readiness expectations and accountability systems that marginalize play. Finally, future research should continue to document how play-based literacy practices support diverse learners across cultural, linguistic, and institutional contexts.

Restoring play to kindergarten affirms children's rights as learners and meaning makers and offers a more just, ecologically grounded vision for early language and literacy education.

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Kids Deserve More Than Just Change — They Deserve Justice

Mark Jackson, BS, Criminal Justice

Introduction

Policies influence nearly every part of a child's life—from where they live and go to school, to whether they have safe places to play. That's why policy reform is about more than just laws or government plans—it's about real children and real families. When a policy causes change, people often assume that's a good thing. But change doesn't always mean progress, especially when it leaves out or harms certain groups.

After Hurricane Katrina hit New Orleans, many government systems were overhauled quickly. Public housing was demolished, schools were closed or turned into charter schools, and more police were brought into communities. These changes had significant effects, but they didn't always help families—especially Black families and low-income residents. Thousands were displaced and couldn't return. Children were uprooted from their homes and schools with no clear plan to help them feel safe or rebuild their lives (Gotham, 2007).

Kids in disasters don't just lose homes—they lose routines, friendships, and safe spaces to play and process what's happened. If we don't reform the policies that caused these harms, we risk repeating the same mistakes in future crises.

Conclusion

Children are not just the future—they're the present. And their needs must guide how we build and rebuild our systems. Reform matters because justice is ongoing. Because play is power. Because children deserve more than resilience—they deserve joy.

When we reform policy to reflect that truth, we're not just improving laws. We're improving lives. And we're making space for every child to grow up in a world that makes room for their laughter, rest, questions, and play.

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Time, Space, and Permission: Critical Ingredients for Integrating Play in Public Schools

Denisha Jones, PhD, JD

Introduction

Despite the mounds of research that documents how child-led free play supports self-regulation/executive functioning (Colliver et al., 2022; Barker et al., 2014); strengthens peer relationships and social competence, increases physical activity (Flanders et al., 2009; Jaggy et al., 2023; Razak et al., 2018); is associated with gains in cognitive flexibility and problem solving, richer oral language and narrative skills, and stronger social-emotional competence (Nicolopoulou et al., 2015; Pellegrini & Smith, 1998) play continues to disappear from kindergarten and is almost non-existent in first through third grade (Hofferth & Sandberg, 2001; Thompson et al., 2023). Increased pressure to improve standardized test scores and to prove that students are meeting state and national standards has had far-reaching negative impacts on early childhood education. The pushdown of academics into kindergarten resulted in less time for child-led free play. Dubbed a crisis in kindergarten (Miller & Almon, 2009), this troubling trend has prompted early childhood educators and researchers to sound the alarm. However, after the COVID-19 pandemic, claims of widespread learning loss fueled continued pressure to push academics earlier.

This article provides an overview of findings from a yearlong study involving three teachers who participated in the Hatch Partners in Play cohort in Pittsburgh, PA. Two first-grade teachers and a kindergarten teacher in a public school piloted the PlayLab program, which included dedicated time for play with high-quality, open-ended materials three to five times a week. Data collected from initial interviews, two observations, and a final focus group reveal a shift in teachers' beliefs about play and learning and in their role in supporting play, leading to increased children's access to play. This shift revealed three critical ingredients for integrating play in public school early childhood classrooms: time, space, and permission. Next, I will review barriers to play in public schools, then explore how Playlab removed them by addressing three critical ingredients.

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Conclusion

We know that play is vital for children's development and that play is learning. Nonetheless, children spend less time playing in school today, and this growing play deficit is suspected of contributing to a decline in children's mental health (Gray et al., 2023). As early childhood educators, we have a responsibility to advocate for what we know young children need. We must resist the pressure to separate play from learning and inform parents, other teachers, and administrators about the benefits of play.

Playlab is a tool for ensuring all students have access to play. It provides teachers with a structure for integrating play into the classroom. Playlab creates the time, space, and permission for teachers to observe children playing and witness the power of play. Playlab gave students time, space, and permission to demonstrate their capabilities through child-led free play. As the teachers witnessed how protected playtime facilitated students' academic learning, they shifted their beliefs about play. They advocated for more students to have access to Playlab and served as mentors to the other teachers. They also shared Playlab with the parents, inviting them to come to the school and observe their children playing and read their play stories. They reassured families that time for play was a worthwhile investment.

This study sought to understand the role of the teacher in play-led environments. What do teachers do differently when they lead with play? These teachers observed, directed, guided, and learned from play. However, most importantly, they became play advocates. As they witnessed the power of play to boost children's confidence, language skills, cooperation, and problem-solving, they embraced play as essential to academic learning. They took the time, space, and permission needed to remove the barriers to play.

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Celebrating Play in Early Intervention: Every Child Deserves a Playful Journey

Lucinda Jones, Early Interventionist and Key Worker

Introduction

Every child has a right to a playful journey throughout childhood, regardless of ability, strengths, identity, or areas of growth. In Bathurst, New South Wales (NSW), Australia, a small yet impactful early intervention service uses its voice to advocate for and celebrate the unique and wonderful play of children with developmental delay, children with disability, and neurodivergent children. Bathurst Early Childhood Intervention Service (BECIS) views play not only as a child's right, but also as a source of joy, belonging, agency, connection, and participation. Joy and play are a powerful combination at the heart of its early intervention approach.

As an author who does not have a disability, careful consideration has been given to the language used throughout this paper. Language choices can influence societal attitudes and understandings of disability (People with Disability Australia, 2019). This paper adopts a disability-affirming and neuro-affirming approach informed by the social model of disability, while recognising that language preferences are individual. For the purposes of this discussion, person-first and identity-first language will be used. For children without a diagnosis but with developmental delay or concern, the term *children with developmental delay* will be used, consistent with terminology currently adopted by Australia's National Disability Insurance Scheme (National Disability Insurance Scheme, 2025).

Currently, Australia's early intervention bodies are reviewing the use of the term *intervention* (Moore et al., 2025). While best practice increasingly recognizes that the term may not be disability-affirming or neuro-affirming, consensus regarding alternative terminology is still emerging. Therefore, this paper will use the term *early intervention* throughout.

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Conclusion and Recommendations

BECIS demonstrates how a human rights and strengths-based approach can place play at the center of early intervention. Through partnerships with children, families, professionals, and community, the service actively promotes every child's right to play in ways that are meaningful, joyful, and authentic. Its work illustrates how recognising and celebrating diverse forms of play can strengthen participation, belonging, agency, and wellbeing for children and families.

To strengthen children's right to play within early intervention and beyond, this paper proposes the following recommendations:

1. **Recognise play as a fundamental human right**, not solely as a therapeutic or developmental tool.
2. **Adopt disability-affirming and neuro-affirming approaches** that respect and celebrate diverse forms of play.
3. **Support families in understanding and advocating for play**, including recognising their children's unique strengths, interests, and ways of participating.
4. **Create inclusive communities and environments** where all children can access meaningful play opportunities.
5. **Embed the right to play within policy, practice, and professional education**, ensuring that children's voices, rights, and experiences remain central.

BECIS imagines a world where play is accessible, inclusive, celebrated, and naturally available to all children. It imagines communities where children can play in ways that are meaningful to them and where their play is recognised as valuable and worthy. It imagines families who proudly advocate for their children's right to play and professionals who champion play as a cornerstone of childhood.

Ultimately, every child deserves a playful journey. When children's play is recognised, protected, and celebrated, we create communities in which every child can

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confidently say: *"I can play my way. My play is valued. My play is my right."* Let every child's play be celebrated. Let early intervention have a playful heart. Let children play.

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Realising the Right to Play through Pedagogy: A Scottish Perspective on Systemic Change in Education
"Embedding Play in National Education Systems"

Fiona Kirland, MEd, Play Scotland

Introduction

Play as a Right in Education

'Play is the highest level of child development. It is the spontaneous expression of thought and feeling, an expression which his inner life requires... It promotes enjoyment, satisfaction, serenity and constitutes the source of all that can benefit the child....At this stage play is never trivial; it is serious and deeply significant.'

(Froebel in Lilley, 1967, p. 84)

Children make sense of their world through play. It is how they explore ideas, try things out, and build relationships with the people around them. Careful observation quickly shows that play is where children's curiosity, creativity, determination and problem-solving are most clearly expressed (Bruce, 2015; Moyles, 2015). For those of us working in the play sector, this is not a sentimental claim but a practical one. Play provides a powerful route into learning, wellbeing, belonging and inclusion, particularly when adults are able to recognise the learning taking place and create conditions that support children in leading their own exploration while being thoughtfully and responsively supported (Else, 2014; Athey, 2007).

Play is also very firmly a children's rights issue. Article 31 of the *United Nations Convention on the Rights of the Child* sets out the right to rest, leisure and play, and *General Comment No. 17* makes it clear that this right should be realised in children's everyday lives, including within the settings where they spend so much of their time (UN Committee on the Rights of the Child, 2013). In Scotland, the UNCRC has been incorporated into Scots law, strengthening this commitment and duties for public bodies, including schools and local authorities, in day-to-day decision-making (Scottish Government, 2024).

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Despite this, many education systems, Scotland's included, struggle to deliver on play. While play is widely recognised as essential in early childhood, it is often progressively constrained as children move through primary education (in Scotland, primary education spans ages 4–12). The pressure to demonstrate evidence of progress intensifies. As they go through school, children lose time, space, and permission to engage in freely chosen, meaningful, and developmentally rich play (Brooker, 2013; Ardelean, Smith, & Russell, 2021). We know that children have a right to play, and that play is a powerful and well-evidenced way for children to learn; however, existing school structures often make this difficult to realise in practice. The gap sits in the misalignment between policy intent, accountability expectations, professional learning, the physical environment, and school culture.

This paper explores how Scotland is working to support schools in embedding play pedagogy as a whole-school approach. Play should not be an add-on, and certainly not confined to the early years, but rather essential from the first year to the last. Drawing on my role as Play Pedagogy Lead at Play Scotland, it outlines how schools are supported to build shared understanding, strengthen leadership, shape environments and practice, and evaluate impact over time. It also highlights the levers that make change more sustainable, which include shared language, credible observation, and supportive leadership. The aim is to offer practical learning for international colleagues seeking to move from strong statements about children's right to play to everyday practice that makes that right real.

Conclusion/Recommendations

1. Position play as both a rights issue and a pedagogical one.

Ensure Article 31 is visible in education policy, school improvement planning and accountability, so it is treated as a core entitlement rather than optional enrichment. Where the UNCRC is incorporated, planning for play is part of meeting public duties, not a discretionary extra.

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2. Invest in professional learning.

Prioritise observation, interpretation of play, and practical ways to make learning visible. Use accessible frameworks and resources that connect theory to day-to-day practice.

3. Support whole-school approaches and thoughtful implementation.

Enable leadership teams to protect time for professional dialogue, inquiry, and gradual change. Treat play pedagogy as cultural work that requires follow-through, reflection, and review, not a one-off initiative.

4. Tune environments for equity, depth, and inclusion.

Provide sufficient time and space for sustained play, and ensure that indoor and outdoor environments include open-ended materials that children can transform, combine, and revisit. Use guidance that supports inclusive practice and practical set-up without requiring significant new spend.

5. Strengthen meaningful engagement with families and communities.

Build a shared understanding of the value of play and address anxieties about readiness, progress, and attainment through clear, practical communication and evidence of learning. Plan engagement deliberately and reduce barriers for families who have not always found school welcoming.

The child's right to play is universal, but the conditions that support it must be intentionally created. Scotland's experience suggests that when rights, pedagogy, and practice are aligned, play pedagogy becomes a realistic and powerful way to help children thrive and to shape education that is effective, inclusive, and grounded in children's rights.

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The Power of Play: Why Unstructured Time Matters in Primary School

Anne Lamont, MEdSt & Sara Scott, BEd

Introduction

The Felixstow 3 Portfolio is a group of public schools in the northeast metropolitan area of Adelaide, South Australia, comprising 12 primary schools.

Our strategy for public education in South Australia (Department for Education, 2024) was released in 2023 with the purpose of ensuring every child and young person can learn and thrive. During 2024, school leaders in the Felixstow 3 Portfolio actively engaged with the strategy, focusing on the four Areas of Impact: Equity and excellence, Effective learners, Learner agency, and Wellbeing. Through targeted conversations, we examined how children and young people experience schooling and identified opportunities to foster environments that nurture key dispositions and capabilities, specifically belonging, resilience, persistence, curiosity, creativity, self-regulation and agency.

Time2Play is a two-year initiative (2025–2026) designed to transform learner outcomes by increasing opportunities for unstructured play during the school day. Guided by the principle that all children and young people have the right to play and need to play, the project aligns with Article 31 of the United Nations Convention on the Rights of the Child (United Nations, 2026). This principle is grounded in the understanding that play is a fundamental human right as well as a vital driver of healthy development and learning.

Conclusion

Through a strategic blend of student agency, educator professional development, family engagement, and robust evaluation, Time2Play is re-establishing play as a cornerstone of student growth, embedding it as an essential practice for long-term wellbeing and learning outcomes. Within the Felixstow 3 Portfolio, the project has provided a practical way to bring South Australia's education strategy to life by creating environments in which children develop essential dispositions such as resilience, curiosity, collaboration, creativity, and self-regulation.

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Early findings highlight clear benefits, including: students are calmer and more focused after play, more able to resolve conflict, more imaginative, and more connected to peers. Families report similar gains at home, and educators have grown in confidence to step back, facilitate rather than direct, and balance risk with opportunity.

As the initiative expands, Time2Play will continue to build a culture that values children's right to play and recognises it as foundational rather than optional. The project provides a scalable, research-informed model for schools seeking to enhance wellbeing and learning by giving children what they need most—time, space, and trust to play.

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Ready or Not, Here I Come: Redefining Kindergarten Readiness to Meet Children Where They Are Upon Arrival

Kyler P. Leiter, PhD, Equity, Inclusion, and Trauma-Informed Committee Chair

Introduction

What does it mean to be ready for kindergarten? The definition of kindergarten readiness has changed substantially in our lifetime. In the past, kindergartens were mainly play-based and served as a bridge between home and elementary schools. Today, many kindergartens resemble first- and second-grade classrooms of the past, emphasizing academic skills and structured, teacher-led instruction. As a result, play has been reduced or removed completely, and children are often expected to arrive at kindergarten with established academic knowledge. In this paper, I argue that we must reorient our approach to kindergarten curricula. Instead of focusing solely on academics, we should also prioritize social and emotional development through playful means. In doing so, we can create early childhood education (ECE) programs that are developmentally responsive, engaging, and inclusive of all children and their backgrounds. Only then can we meet children where they are when they arrive in kindergarten.

Conclusion

The current conception of kindergarten readiness, driven by academic standards and standardized testing, has shifted ECE environments away from their foundational roots in social, emotional, and child-led play. This paradigm not only diminishes the joy and curiosity inherent in young children's development but also risks long-term harm to their social-emotional well-being, overall engagement, and equity. International models, such as those in the Nordic region, show that delaying formal academic instruction and emphasizing play and social development can produce high academic achievement without compromising children's overall well-being. These models challenge American policymakers, educators, and families to reconsider the purpose of kindergarten and prioritize developmentally responsive, inclusive, and engaging pedagogies, which will ultimately ease schools' academic expectations for children upon their arrival to kindergarten.

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Reforming ECE requires a collective effort: policy changes, professional development opportunities, and a cultural shift toward valuing whole-child development as a public responsibility (the phrase “it truly takes a village” comes to mind). Children will enter our kindergarten programs with varied experiences and knowledge. To improve kindergarten quality, we must meet children where they are upon arrival, not dictate where they should be on day one. Schools must embrace a balanced approach that recognizes the importance of social-emotional skills, cultural responsiveness, and experiential learning alongside academics. Only through such comprehensive reform can we ensure that kindergarten truly functions as a gateway to lifelong learning, well-being, and success for *all* children, no matter their background. Stakeholders must advocate for policies grounded in the considerations and recommendations stated above. By doing so, we can restore kindergarten to its rightful purpose: nurturing curious, competent, and confident learners prepared for the challenges and opportunities of the future through play.

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Reimagining the Educational Ecosystem: Modeling Play, Choice, and Community Partnership for Holistic Development

Angie Nastovska, PhD, iLEAD California

Executive Summary

Education systems across the United States are confronting a convergence of challenges: declining student engagement, increased anxiety and depression among children and adolescents, widening inequities, and mounting pressure to produce measurable academic outcomes. These challenges are not isolated incidents; they are symptoms of systems that have gradually removed play from the learning process.

This White Paper presents a comprehensive, play-centered response through the iLEAD Schools educational ecosystem. Grounded in developmental science and supported by iLEAD California (iCA), the iLEAD model integrates three core pillars—Individualized Learning, Social-Emotional Learning (SEL), and Project-Based Learning (PBL)—to ensure that play functions as both a biological necessity and a rigorous academic method.

Drawing on examples from site-based schools, online, homeschool, independent study programs, trauma-informed pathways such as Empower Generations, and community partnerships with the LEAP Children's Museum, this paper demonstrates how play can be systematically embedded across leadership, instruction, and community engagement. The paper concludes with actionable recommendations for educational leaders, policymakers, and advocates seeking to uphold the child's right to play while strengthening academic achievement and community resilience.

Conclusion and Recommendations

The iLEAD model demonstrates that play is not a luxury but a necessity for healthy development and effective learning. When play is embedded into systems, leadership practices, and community partnerships, children thrive academically, socially, and emotionally.

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Educational leaders are encouraged to model play at the systems level, expand flexible learning modalities, formalize community partnerships, and integrate Individualized Learning, SEL, and PBL as a unified framework.

By embracing these recommendations, educational systems can honor the child's right to play while preparing young people for resilient, connected, and purposeful lives.

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Strengthening Child, Teacher, and Parent Relationships Through Play

Chris Navarro, MA, Director of School & Community Programs; Richard A. Kissel, PhD, Chief Program Officer; & Tivy Whitlock, PhD, Community Programs Educator
The DoSeum

Introduction

It takes a village to raise a child. This African proverb is deeply relatable, as evidenced by its widespread use (Goldberg, 2016). The persistence of this sentiment suggests that, throughout time, humanity has acknowledged that every adult in a child's life should work *together* to nurture, grow, and teach our children. In this spirit, The DoSeum uses the term caregiver rather than "parent" to acknowledge the variety of families in our "villages" today. Children benefit when caregivers and teachers cooperate. Further, caregivers and teachers benefit from external support provided by community partners in third spaces – spaces outside of home and occupation (school or work). Places like children's museums can serve as safe, public spaces for educators and families to interact without the pressures inherent to the strict formal roles of "student" or "teacher". Informal educators can facilitate authentic, joyful learning activities – rooted in play – to empower friendly interactions and enrich relationships between caregivers and teachers, benefiting their children. This is one of the essential values of museums – allowing students, teachers, and caregiver chaperones to enjoy field trips. But beyond the limited engagement of field trips, how can museums foster deeper, more impactful connections? The DoSeum's *Strengthening School & Family Relationships* (SSFR) program fosters community learning through play – inviting families, teachers, and school administrators to celebrate and support one another in a third space.

Conclusion/ Recommendations

With the average American spending less than five percent of their life in the classroom (Falk & Dierking, 2010), museums and other third spaces can and should embrace both their opportunity and responsibility for strengthening young learners' education. While many museums offer a standard program portfolio of daily workshops or demonstrations, one-and-done field trips, and camps, for example, The DoSeum's commitment to its community has expanded and evolved to think beyond the standard.

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SSFR is one program that resulted from this approach, and it has demonstrated that embedded partnerships yield the most impactful and most rewarding results.

While many teacher professional development programs within the museum industry emphasize one-day sessions, which can yield a high number of participants, The DoSeum's approach is one of quality over quantity, presenting deeper and more meaningful experiences for teachers that, in many cases, lead to actual change in the classroom via a true partnership between museum staff and our partner schools.

Though the SSFR program has been continually adapted, one element remains consistent: play. Play is essential to the DoSeum experience and has provided a stable foundation for SSFR's goals. Keeping play at the center of SSFR family nights connects families and their educators, transforming their communities into centers of joyful learning.

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Ready for Me: A DEY Campaign to Change the Narrative About Going to Kindergarten

Michele Hemenway Pullen, university degrees in **Psychology and Counseling,** as well as **Learning and Behavior Disorders**. **Specialized Pedagogy:** background training in **Waldorf Education** and **Early Childhood Education;** Denisha Jones, PhD, JD; Hans Petersen, MSE; and Sierra Roussos, MAE

Introduction

In 2023, Defending the Early Years (DEY) launched regional Working Groups (WGs) to support early childhood advocates in working together to address issues related to our national campaign and to restore the link between high-quality and child development (Defending the Early Years, n.d.). We began with six regional groups, each with two co-facilitators, and 6-25 members recruited from our networks. Potential working group co-facilitators completed an online application and participated in a virtual informational interview. Once we determined that they met the criteria for successfully leading a working group (experience leading adults, understanding of local issues, etc.), they signed an agreement and began recruiting members.

Our Kentucky Working Group (KWG), co-facilitated by co-authors Michele and Hans, held regular meetings with an active group of 12-16 members. At one of our quarterly meetings for all the co-facilitators, they shared their art campaign titled Ready for Me, which engaged children, teachers, and parents in sharing what schools needed to be ready for children. Using funds from a DEY mini grant, they hosted sessions throughout the community and facilitated participants in creating art in response to prompts about schools being ready for children. In 2025, we presented their work at the Network for Public Education conference in Columbus, Ohio, and, at the request of another WG co-facilitator, we agreed to make Ready for Me a national campaign for DEY.

Conclusion

Taking Ready for Me National

The KY WG, Ready for Me, recognizes the essential role that children's and early childhood professionals' voices must play in identifying what schools need to be

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genuinely ready for incoming kindergarteners. The power of art as advocacy offers one effective way to bring those voices into the public sphere. Lily Yeh's work in art activism demonstrates how creative expression, particularly when created by those who are often unheard, can elevate lived experiences and shift public narratives in meaningful ways.

As the KY WG developed the Ready for Me model, the work of other DEY Regional Working Groups stalled for various reasons. During this period, one co-facilitator expressed interest in adapting and implementing the KY WG's Ready for Me model within their own region. From this conversation, the idea of a National DEY Ready for Me Advocacy Campaign emerged.

The potential of this project to empower young children, early childhood educators, and advocates across the country, while serving as a vehicle to bring their voices to the forefront of the kindergarten readiness conversation, is significant and compelling—this potential alone warrants action.

In collaboration with the remaining co-facilitators, DEY had hoped to launch a national campaign. It began to develop accessible, adaptable resources that early childhood educators and advocates could use across diverse contexts. Due to DEY's closure on June 30, 2026, Michele from the KY WG reached out to the International Play Association USA affiliate to discuss transferring the Ready for Me initiative. In early June 2026, the Governing Board of IPA USA adopted Ready for Me. All participating cohorts from the DEY original "Ready for Me" campaign will now join this effort. We will be able to build on our work from DEY and the considerable local and international reach of IPA USA, a not-for-profit organization.

The goal remains to create a comprehensive toolkit that includes informational materials, implementation guidelines, and advocacy support, in a format that is clear, inclusive, and usable, with additional guidance and support as needed. By doing so, Ready for Me aims to support locally grounded advocacy efforts while advancing a shared national narrative: schools must be ready for children, not the other way around. Ready for Me was born, nurtured, and experienced its own period of early childhood in the loving embrace of Defending the Early Years. We are ready to join the world of

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liberation and play now outside that safe, warm place and will hope to honor it through our continued thread, the not-so-invisible one that joins us all.

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Play as a Biological Necessity The Importance of Attractive and Playable Outdoor Play Spaces for the Healthy Development of All Children

Suzanne Quinn, PhD, KOMPAN Play Institute

Introduction

Play, as an activity, is important across the lifespan, but especially for children and youth. Play is a biological necessity, a byproduct of enabling conditions, and should be present in healthy, unstressed children and adults (Burghardt, 2010b).

In the U.S. and many places worldwide, dedicated outdoor play spaces for children (playgrounds, play parks, playscapes) provide the conditions and environments in which children can play. These playgrounds, play parks, or playscapes support physical fitness, social connection and development, cognitive and creative enrichment, and experiences in nature. In this article, I will explain why active outdoor play matters, especially for children, and share recommendations from the Physical Activity Alliance, the American Academy of Pediatrics, and others. I will also present research on the importance of active outdoor play; what attracts children to dedicated outdoor play spaces; the importance of considering children of all abilities; how this information supports advocacy for dedicated outdoor play spaces in communities; and how to design these spaces effectively.

Conclusion/ Recommendations

Active outdoor play has benefits for children in all areas of their development – physical, social, cognitive, creative, and in their connection to local ecologies. Children need nourishing experiences that are accessible to them and their families. Communities benefit from dedicated play spaces for people's health and well-being.

Research indicates that to be effective and attract people to stay and play, these spaces should be innovative, featuring enjoyable, unique equipment and natural elements. Apply Universal Design Principles to the design of dedicated outdoor play spaces so people of all abilities can enjoy the health and social benefits.

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Unstructured Outdoor Play is Essential for Sport Readiness

Deborah J Rhea, EdD, LiiNK Project Director, Professor, Kinesiology, &
G. Kate Webb, PhD, Adjunct Professor
Texas Christian University

Introduction

Children do not necessarily know what their brains and bodies need; they depend on their parents, teachers, and other influential adults to provide developmentally focused movement opportunities. Unstructured outdoor play is fundamental for healthy brain and body development in childhood. Sadly, adults sabotage children by bypassing the developmental process and replacing unstructured outdoor play with sports.

Overall, adults want children to be healthy and happy, but the opposite trend is growing among children. If we pause to reflect on why this generation is the most unhealthy and unhappy of all, it is due to the removal of play from children's lives and the adult push for children to participate in sports and competition before they are developmentally, physically, and emotionally ready (Forrest et al., 2025).

Unstructured outdoor play lays the foundation for a child to be sport-ready. Sport readiness is the child's overall state (physical, mental, emotional, social) to meet the demands of a sport (Purcell, 2005). Therefore, parents need to understand that sport readiness develops naturally through daily outdoor play, which provides valuable opportunities for long-term motor skill development (Aicinena, 1992; Kochanek et al., 2019).

Consider the following two scenarios of park spaces a child might have access to. Which of these scenarios would lay the foundation for healthy development, and which one would fall short?

Scenario One: A parent working on soccer drills with their two sons (ages 7 and 10). The parent sets up cones, an agility ladder, and a soccer goal as a circuit. The sons would do the explained circuit drills– with eyes down and seemingly uninspired – receive a few minutes of feedback from the parent before trudging back to the start of the circuit to run robotically through the exact same sequence again.

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Scenario Two: Parents sitting on a blanket while their kids (10 and under chase birds, climb a tree, swing, or dig for fossils. They use physical skills such as running, dodging, stopping, starting, skipping, accelerating, and strategizing, as well as laughing, throughout their play.

Scenarios One and Two can be seen throughout the United States. The first scenario is adult-directed, repetitive, and boring. This is NOT the secret formula for children's health, fitness, and sports readiness. The second scenario illustrates the joy, excitement, laughter, physical challenges, and strength-building that occur when children lead their play.

Conclusion

Sport readiness is a child's ability to meet the demands of participation in sport and to learn the values and skills required to do so successfully (Aicinena, 1992; Harris, 2000; Kochanek et al., 2019). Sport-ready children must meet developmental milestones in muscular strength and neuromuscular control. Setting these milestones for each age group and then testing children for these competencies is necessary to understand their developmental level. Researchers have assessed components such as muscular strength and neuromuscular control in physical education classes (Webb et al., 2025a; Webb et al., 2025b). Integrating these assessments into schools and sports programs on a large scale will help determine children's health and identify where intervention strategies are needed to help children become sport-ready. Although some national physical testing standards exist, they need revision to assess the muscular strength components included in the above studies and accurately gauge sport readiness among our youth.

Current trends in state legislation are making strides toward protecting and increasing recess time during the school day. California's Senate Bill 291, passed this year, requires all school districts to provide 30 minutes of daily recess, separately distinct from meal and physical education times (CDE, 2025). School adoption of recess protocols, such as The LiiNK Project, along with legislative recognition of required recess time, will significantly increase the percentage of children who enter adolescence with a sport-ready foundation.

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Overall, when children have unstructured outdoor play throughout the school day, parents purposefully trade sedentary time for it. If parents realize sports should not replace outdoor unstructured free play time, the U.S. will present a new generation of sport-ready children who have increased baseline health, a lower chance of future comorbidity, more positive trends in mental health and social-emotional skills, confidence in the ability to move, increased opportunity for advanced skill, and decreased injuries. Outdoor unstructured play opportunities allow children to develop their limbs and muscular strength naturally, thereby increasing sport readiness and lifelong physical activity opportunities for generations to come.

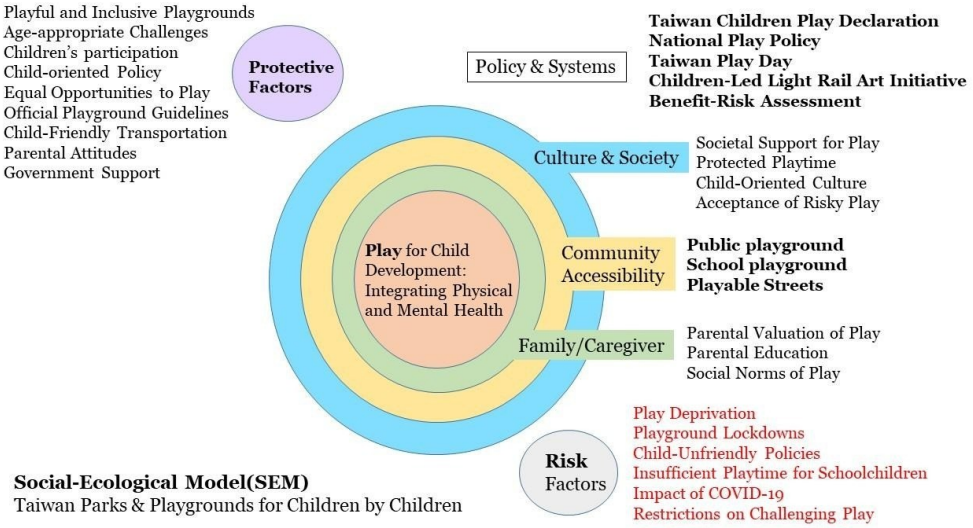
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Restoring Time and Space for Play in Taiwan

Wei-Shun Tseng, OT, Ju-Pi Pan, Cindy Chung, Jackie Wang, &
Jen Hsiu-Chuan Wang
Play Taiwan

Introduction

Registered as a non-profit organization in 2017, Play Taiwan originated from a spontaneous grassroots movement led by parents dedicated to reimagining children's play environments. Over the past decade, Play Taiwan has spearheaded a national play revolution, advocating for high-quality, engaging, and diverse play spaces. Central to Play Taiwan's strategy is applying the Social-Ecological Model (Bronfenbrenner, 1979). This framework recognizes that a child's development is not isolated but shaped by nested layers of environmental influence (Figure 1).



Play Taiwan's Advocacy Framework: Applying the Social-Ecological Model (2017–2025)

The organization strategically operates across these levels to ensure systemic sustainability by:

- **Macrosystem (Policy & Legislation):** At the highest structural level, Play Taiwan engages in policy reform and legislative advocacy. A landmark achievement is drafting t*he Taiwan Children's Play Declaration*, which provides

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a foundational framework for government agencies to recognize play as an essential right, not a luxury. By amplifying children's voices in urban planning, Play Taiwan ensures that play rights are anchored in national governance and legislative frameworks. Furthermore, we extend the Right to Play beyond traditional playgrounds into the broader urban fabric through initiatives such as the Children's Light Rail Art Project, facilitating children's direct participation in urban governance.

- **Exosystem & Mesosystem (Social & Cultural Climate):** The organization actively reshapes the cultural narrative surrounding childhood through public education and media outreach, emphasizing that playtime is development time. This shift encourages parents, educators, and the public to value play as vital to cognitive, emotional, and physical health.
- **Microsystem (Community & Physical Environments):** On the ground, Play Taiwan has supervised the renovation of nearly 500 children's playgrounds. These efforts have transformed Taiwan's public spaces from standardized equipment into inclusive, themed, and sensory-rich environments.

By intervening at every level of the social-ecological hierarchy, Play Taiwan ensures that playgrounds are not merely physical sites, but free, accessible public assets. This holistic approach guarantees that every child—regardless of socioeconomic background—can exercise their fundamental right to play and rest in a fair, equitable, and developmentally supportive environment (Russo & Pereira, 2025).

Government authorities must prioritize children's right to play and formally integrate it into national and urban planning policies. It is time to listen to the children. By addressing these environmental and regulatory barriers, we can ensure that every child—regardless of age—has the time, space, and freedom to play.

Conclusion

The surge in developmental delays and the vanishing of play are warnings we cannot ignore. By applying the Social-Ecological Model, Play Taiwan remains committed to dismantling regulatory and environmental barriers that stifle growth. We

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call upon global stakeholders to join us in this revolution. It is time to listen to the children, invest in their freedom, and ensure that every child—regardless of their background—has the time, space, and community support to simply play.

Achieving this vision requires not only grassroots advocacy but also institutional commitment. Taiwan's evolving policy landscape offers a historic opportunity to embed children's play rights into national governance structures.

As the Ministry of Health and Welfare undergoes organizational restructuring in 2026 to establish the Child and Family Support Administration, we see a critical foundation for advancing children's participation in public policy. This new agency should integrate child protection, family support, and play advocacy to create comprehensive developmental environments.

Play Taiwan remains committed to providing expertise and recommendations, with priorities including: developing innovative and challenging play spaces; implementing Benefit-Risk Assessments; establishing Play Sufficiency policies; creating Climate-Resilient Playgrounds; formalizing children's participation in urban planning; and building Playable Cities.

The play revolution is no longer a choice; it is a necessity for a sustainable and equitable future. The question before us is simple: will we build a world where children can grow, or one where they are merely managed? The answer must be clear—and the time to act is now.

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Nature is Essential

Children are biologically connected to the natural world, yet opportunities to play, learn, and explore in nature continue to decline. Experiences in natural environments support children's physical, social, emotional, and cognitive development while fostering curiosity, empathy, environmental awareness, and a sense of belonging. The articles in this category examine how nature-based play and place-based education create meaningful opportunities for children to connect with their communities and the world around them. Drawing on perspectives from diverse cultural and geographic contexts, these authors highlight innovative approaches that support children's development while strengthening relationships with the natural environment. The research, frameworks, and practical strategies in these articles give readers tools to advocate for and create more meaningful opportunities for nature-based play and learning.

Authors

Fostering Young Children's Empathy through Nature Play

Julie Ernst, PhD & Claire Underwood, PhD

Nature-Based Play in Kenyan Early Learning through Play: *The Pendo Mazingira Framework*

Dinah Awino Kawino, BS in Environmental Education

Nature and Place-based Environmental Education: A Primary Grade Teacher Focused Group Case Study in Wilmington, NC

Christine Jie Li, PhD; Beth Saile, MS; & Callie Hendricks, BS

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Fostering Young Children's Empathy through Nature Play

Julie Ernst, PhD & Claire Underwood, PhD

Introduction

Empathy is surfacing as an important driver of positive change in social and environmental contexts. There is a need to support the development of empathy in young children, given the time-sensitive period of early childhood and the relevance of empathy to social-emotional learning, which is an emphasis in early childhood education. This white paper provides insights into how nature play can be one of the strategies drawn upon to foster empathy in young children.

Conclusion

Children have a natural curiosity and desire to care for one another and the world around them, and they can be remarkably capable. By offering opportunities to practice empathy through nature play, children can learn to respond to one another with expressions and actions of encouragement, care, and support, as well as through shared problem-solving, which helps them connect with one another and the world around them. By responding to one another, children build emotional connection and resilience; they are reminded of their capabilities and learn that they do not need to rely solely on the teachers and caregivers supporting them and others, which in turn provides opportunities for and reinforces empathic responding. As such, nature play has great potential to foster the development of empathy during the critical period of early childhood. By creating opportunities for children's nature play and "stepping back" to make space for children's empathic responding, adults (teachers, researchers, and play workers alike) can leverage the affordances of nature play to nurture children's empathy development.

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Nature-Based Play in Kenyan Early Learning Through Play: *The Pendo Mazingira Framework*

Dinah Awino Kawino, BS in Environmental Education

Executive Summary

Across the world, children's opportunities for free and meaningful play, especially in nature, are increasingly constrained by academic pressure, rigid routines, urbanisation, and compliance-driven systems. In Kenya, these conditions have contributed to early disconnection between children and the natural world, affecting both immediate wellbeing and the development of long-term environmental identity. This white paper presents practice-based insights from Pendo Mazingira, a nature-based eco-empathy and play framework facilitated in Kenyan early learning environments, including Montessori, community-based, and faith-affiliated schools. Developed through co-facilitation with qualified Early Childhood Development (ECD) teachers, Pendo Mazingira demonstrates how child-led, nature-rich play can be integrated into everyday school routines using low-cost materials and context-responsive approaches. Grounded in environmental education and community development practice, the paper addresses a critical gap in early childhood education: while environmental issues are widely discussed at policy levels, children's early relational experiences with land, water, air, plants, trees, animals, and natural resources are rarely prioritised as foundations for future care. Pendo Mazingira positions nature-based play not as an add-on, but as essential to children's emotional wellbeing, belonging, and eco-empathy. The paper introduces two core frameworks: The *Eight Nature Pendos*, recognising diverse pathways to nature connection, and the *M.I.R.A.C.L.E Approach,* a facilitation ladder supporting sensitive adult presence and child agency. Field observations suggest that open-ended play and non-intrusive facilitation support calm, sustained engagement, social connection, and imaginative exploration, while also renewing teachers' appreciation for play as a relational practice. Rather than presenting large-scale evaluation data, this paper offers early insights grounded in observation and reflection. Focusing on the Children's Corner of Pendo Mazingira, it contributes to global conversations that recognise play in nature as a right,

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a necessity, and a pathway to environmental care arguing for locally grounded, culturally responsive approaches within Kenyan early learning contexts.

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Nature and Place-based Environmental Education: A Primary Grade Teacher Focused Group Case Study in Wilmington, NC

Christine Jie Li, PhD; Beth Saile, MS; & Callie Hendricks, BS

Introduction

This project examines how to make nature- and place-based environmental education more accessible in elementary classrooms, particularly in coastal North Carolina. Although research consistently shows that outdoor and locally grounded learning strengthens student engagement, sense of place, and pro-environmental attitudes, teachers face persistent barriers, including limited time, a lack of standards-aligned materials, and insufficient preparation resources. A five-day carnivorous plant unit was developed as a model for fully prepared, standards-aligned curriculum that integrates local ecology, hands-on activities, and clear instructional supports. During Fall 2025, a focus group of elementary teachers from New Hanover County Public Schools evaluated three coastal ecosystem lessons, highlighting strengths such as local relevance, engaging phenomena, strong content support, and opportunities for scientific discourse. Teachers also identified key needs, including explicit differentiation strategies, ready-to-use materials, pacing guidance, and integration of real data. Findings underscore the importance of designing phenomenon-driven, classroom-ready, locally grounded environmental education (EE) curriculum that aligns with state standards and supports teacher implementation.

The shift in how much time children spend outdoors has become one of the most talked-about childhood trends of the past decade (Waite, 2010). The author of *Last Child in the Woods* argues that children suffer from nature-deficit disorder when disconnected from the natural world. Other studies show that digital platforms compete directly with outdoor experiences and classroom instruction (Siskind et al., 2022). Urbanization and reduced green areas also add to the safety concern and keep children from exploring outdoors (Kabisch et al., 2017). Together, these ideas underscore a growing recognition of the need for nature and place-based education among elementary students, approaches that ground learning in real environments, local ecosystems, and hands-on experiences. This shift pushes back against overly test-driven

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models by showing how outdoor, experiential learning supports academic growth, emotional well-being, and a deeper sense of stewardship for the places that children call home (Sobel, 2004).

Conclusion/Recommendations

Lessons Learned from the Teacher Focus Group. Focus group participants showed strong consensus on curriculum strengths and recommendations for improving classroom readiness. Participants emphasized that the lessons were engaging and locally relevant, while also identifying constraints related to time, materials, and instructional support. The following themes represent the most common findings:

1. Standards Alignment is Essential for Adoption. Teachers were clear that even high-quality environmental lessons cannot be used unless they are explicitly connected to state standards. Future curriculum development must center standards alignment from the outset.

2. Teachers Regarded the Lessons as an Integrated Whole Rather Than as Separate, Disconnected Sessions. Teachers described the lesson plans as functioning more like multi-day instructional units than single-day lessons. While they viewed this positively for its depth, teachers emphasized the need to frame the lessons as a unit that could be chunked across multiple days. A teacher identified as VM said, “I would not be able to get through all the components in one day in 45 minutes.” Teachers recommended implementing suggested stopping points, guiding questions for each section, and language that helps teachers decide how to pace lessons across days.

3. Participant Engagement Was Notably High, Particularly During Lessons that Incorporated Elements such as Fire, Location, and Structured Discussion. Teachers identified high levels of engagement in the lessons, with fire ecology and longleaf pine savannas emerging as particularly compelling because of their perceived “wow factor” and the concept of an environmental “phenomenon.” VM highlighted the importance of beginning each unit with a phenomenon that prompts students to notice, wonder, and investigate, and said, “Fire will captivate [students]. . . something that people deem bad actually helps the environment.”

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Teachers also noted that the activities naturally encouraged scientific discourse and evidence-based reasoning, even when this was not a stated design goal. One teacher, AB, said, “We were engaged in argument – claim, evidence, reasoning – and that’s a science and engineering practice.” This suggests alignment with current shifts towards inquiry-driven science education.

4. Local Relevance Was a Major Strength and Motivator. Teachers emphasized that the place-based focus on coastal NC ecosystems was one of the curriculum’s greatest strengths, in contrast to broader programs that lack geographic specificity. They expressed that students benefit when lessons focus on species and ecosystems they can see in their own community. They described this local focus as a meaningful way to support environmental identity and community connection.

AB said, “That’s the biggest drawing factor for me… It’s specific to my area.”

EB said, “My students would like it because it’s about their hometown.”

Teachers stressed opportunities for students to learn outside of the classroom by visiting local parks or free public sites, increasing equity and accessibility.

“I can take my children to a place I don’t have to pay for, like a park,” VM said.

5. Teachers Equally Valued Content Support and Student Activities. Teachers stressed that they are not content specialists, and that the strong background information included with the curriculum gave them confidence and instructional effectiveness.

“There was a lot of information I learned today… It gave me the confidence to teach it,” VM said.

Teachers noted that background content, vocabulary, and key explanations should be explicitly included in written materials so they could anticipate student questions.

6. Accessibility and Differentiation are Attainable; But Must Be Clearly Defined. Teachers agreed that lessons were adaptable for diverse learners and multilingual learners, but emphasized that differentiation supports should be labeled and built in,

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rather than assumed. Teachers identified visual supports, step-by-step instructions, and structured scaffolds as especially important.

7. Teacher Time Was the Main Barrier, Not Willingness. The most consistent barrier to implementation identified was time required to prepare materials. Teachers were clear that they would not implement lessons requiring extensive assembling, cutting, or prep outside instructional hours.

"If I have to create all the items . . . I don't have the time, so I'm not going to do that," VM said.

Teachers favored reusable, pre-made materials (i.e., card sets, posters) that could be stored easily and used year after year.

8. Teachers Requested More Data and Higher-Order Questioning Supports. Teachers emphasized the need to integrate real data, including charts and graphs, to support analysis and alignment with statewide assessment expectations. They requested pre-written higher-order questions and guidance on discussion trajectories to support standards-aligned conversations.

9. Community Partnerships Were Seen as a Major Opportunity. Teachers identified numerous local organizations, parks, and professionals that could meaningfully extend lessons, including state parks, conservation groups, arboretums, fire departments, and island education programs. Teachers cautioned that these extensions should be framed as optional, recognizing variability in scheduling and access.

Together, these insights highlight the importance of creating place-based curriculum that is phenomenon-driven, standards-aligned, fully prepared, and rooted in the unique ecology and nature of coastal North Carolina. We hope more educators will fall in love with taking students outdoors to explore their places and communities through nature exploration and outdoor learning.

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Play Across the Lifespan

Play is a lifelong human need that contributes to learning, well-being, creativity, connection, and personal growth from infancy through older adulthood. While play is often associated with childhood, its benefits extend across every stage of life, supporting curiosity, resilience, relationships, and a sense of vitality. The articles in this category explore how playful experiences enrich educational settings, shape professional preparation, and foster engagement in adulthood. From the college classroom to broader reflections on play across the human lifespan, these authors challenge readers to reconsider play as something to be protected, encouraged, and celebrated at every age. Through research, reflection, and practical examples, they show that play is not something we outgrow, but a fundamental part of what it means to be fully alive, connected, and continually learning.

Authors

From the Womb to the Tomb: Play Across the Lifespan

April Kendrick, PhD & Kimberly Blitch, PhD
The University of Alabama
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"How come we never do anything fun?" Inspiring Play Advocates in the College Classroom

Stephanie Kuntz-McAllister, PhD

Being Fully and Vibrantly Alive Through Play: Play in the College Classroom

Sharon M. Peck, PhD

Playful Pedagogies and Preservice Teachers' Mindsets

Sharon M. Peck, PhD; Tabitha Dell'Angelo, PhD; Tugce B. Arda Tuncdemir, PhD; Ruth V Guirguis, EdD; & Akosua Obuo Addo, PhD

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From the Womb to the Tomb: Play Across the Lifespan

April Kendrick, PhD & Kimberly Blitch, PhD
The University of Alabama
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"What do most Nobel Laureates, innovative entrepreneurs, artists and performers, well-adjusted children, happy couples and families, and the most successfully adapted animals have in common? They play enthusiastically throughout their lives."

(Stuart Brown, Institute of Play)

Introduction

Play is the fundamental right of children (U.N. Article 31, 1989). There are a plethora of studies spanning across fields of education, human development, psychology, and pediatrics on the benefits and impacts of play on physical, social, emotional, and cognitive development (Burdette & Whitaker, 2005; Frost, 1998; Milteer & Ginsburg, 2012; Saracho & Spokek, 1998; Sanders, 2010). Play is a state of mind, a way of being, an attitude or motivation rather than a behavior (National Institute for Play, N.D). However, the concept of play remains constrained during early childhood, perhaps due to pressures for academic success, the demand for standardized and structured activities in early grades, and even an influx of technology.

Conclusion of Benefits of Lifespan Play

Play is a fundamental aspect of human experience extending beyond childhood, offering invaluable benefits across various life stages. Research suggests that play significantly enhances cognitive skills throughout one's life, fostering problem-solving skills, enhancing cognitive flexibility, and encouraging critical thinking and creativity. The nature of play evolves, but the benefits are the same. Play supports cognitive agility and neural plasticity and serves as an essential outlet for emotional expression and regulation. Play relieves stress, providing relief and joy, thus improving mood, mental health, and well-being. It fosters connection, a sense of community, and belonging (Howes & Matheson, 1992). Play supports balance, strength, and coordination, encouraging physical activity. Playing outdoors offers unique benefits, including

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connection with nature, which also supports mental health and well-being. Regular participation in physical play reduces the risk of chronic diseases and contributes to long-term health.

Engaging in play throughout life fosters lifelong learning and adaptability. As individuals encounter new challenges, whether personal or professional, experiences gained through playful learning can help them adapt to new situations.

The stress-free nature of play encourages curiosity and exploration, facilitating continuous learning well into older age (Flack et al., 2023). By nurturing a playful mindset, individuals remain open to new ideas and experiences, enhancing their ability to cope with change (Guralnick & Groom, 1987).

In conclusion, play is a lifelong necessity—an essential component of human growth, connection, and well-being. From prenatal movement to the cognitive and emotional enrichment experienced in older adulthood, play remains central to how individuals learn, adapt, and thrive. Play opportunities for all ages matter across contexts, from learning and schooling to work, hobbies and pastimes, and community-building settings. Recognizing play as a fundamental human need across the lifespan requires shifting societal attitudes, educational practices, and community planning. We invite readers to consider how to integrate play into the settings and contexts we move through daily, from our workplaces to family reunions. By valuing and nurturing play across developmental stages, we promote healthier individuals, stronger families, and more connected communities.

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"How come we never do anything fun?" Inspiring Play Advocates in the College Classroom

Stephanie Kuntz-McAllister, PhD

Introduction

One day, my undergraduate students came into my classroom already engaged in a fervent discussion about the struggles they are having in their classes. I listened to the usual complaints of too much reading, unfair grading, and long lectures. What I then heard from them completely reshaped my teaching philosophy:

"How come we never do anything fun? All we ever talk about is how kids learn best, but I don't think they [instructors] even care about how we learn best."

This statement shook me to my core. I had to pause and reflect on my own practices. *Do I do fun things in my class? Is my class engaging? Am I teaching in a way that is actually conducive to learning? Am I actually modeling what I want my students to be? Is my teaching going to inspire my students to be play advocates?* I was inspired to be better, and frankly terrified by the possibility that I could evolve into the type of instructor I hated as a college student. I chose to critically evaluate how aligned my beliefs about teaching and play were to the practices in which I was *actually* engaging. I also began to consider how my actions were influencing the professionals my students will become. This paper will discuss strategies I have utilized for integrating play into my college classroom to promote learning and inspire my students to become play advocates, and discuss the reflection process I underwent to develop those strategies.

Conclusion/ Recommendations

How you choose to integrate play into your classroom will be unique to you, your course material, and your students. What works well in my classroom may not work well for you. I encourage you to experiment with different strategies and approaches to find what ignites a passion for play in your students. Integrating play in the ivory tower of academia is a challenge that requires innovation, passion, and sometimes failure. It may be hard, but our students are desperate for play. Our world needs more passionate play

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advocates, and you have the opportunity to shape the next generation of advocates for play. So, ask yourself, *do we ever do anything fun in my class*?

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Being Fully and Vibrantly Alive Through Play: Play in the College Classroom

Sharon M. Peck, PhD

Introduction

Higher education is one of the least playful environments that adults encounter, despite a growing body of research demonstrating the developmental, cognitive, and social benefits of play across the lifespan. This white paper reflects on my experience engaging college students in studying the role of play in their lives and using improvisation games as a catalyst for playful writing. While the course was intended to support novice writers through freewriting, applied improvisation, and playful exploration, the most profound outcome was my unexpected transformation as an educator. Integrating play reshaped classroom dynamics, strengthened relationships, and challenged entrenched academic norms. It clarified for me the power that play has for teaching, learning, and living fully.

Conclusion/Recommendations

Implications for Higher Education

This case study suggests that integrating play into higher education has far-reaching implications:

- *Play Supports Student Learning*: Play reduces anxiety, increases intrinsic motivation, and supports deeper engagement with content. It helps students take risks, develop voice, and build community.
- *Play Humanizes Educators*: When educators embrace play, they model authenticity, vulnerability, and joy. This strengthens relationships and creates more inclusive learning environments.
- *Play Counters Burnout*: Play offers a pathway to professional renewal, helping educators reconnect with their purpose and creativity.
- *Play Challenges Rigid Academic Norms*: Integrating play disrupts assumptions about what learning should look like. It invites institutions to reconsider how they define rigor, professionalism, and success.

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- *Play Is a Lifespan Need*: Higher education must recognize that adults need play just as children do. Universities can become spaces where play is not only permitted but celebrated.

Higher education does not need more efficiency. It needs more aliveness. Improvisation and spontaneous play offer a pathway — not only for student learning but also for educator well-being, creativity, and joy. They remind us that teaching is a relational, imaginative, deeply human act. When we allow ourselves to play, we create classrooms where everyone can breathe again, where curiosity returns, where connection deepens, where learning feels like discovery, and where we — educators and students alike — feel fully, vibrantly alive. Play is not a luxury. Play is a lifeline. And it is available to all of us, at any moment, if we are willing to say: yes.

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Playful Pedagogies and Preservice Teachers' Mindsets

Sharon M. Peck, PhD; Tabitha Dell'Angelo, PhD; Tugce B. Arda Tuncdemir, PhD; Ruth V. Guirguis, EdD; & Akosua Obuo Addo, PhD

Introduction

Although play is widely recognized as central to early learning, higher education often treats it as incompatible with rigor. Grounded in play-based pedagogy and growth-mindset theory, this multisite pre–post study examined whether embedding playful elements in teacher preparation programs [TPPs] shifts preservice teachers' [PSTs] attitudes toward play. Using MANOVA, we found a significant reduction in non-playful attitudes after the intervention, but no statistically significant change in playful attitudes. Age mattered: The highest playful attitudes appeared among PSTs aged 18–22 and over 38, with a dip among those 28–33. Findings suggest mid-adulthood pressures may suppress playfulness, while targeted curricular and environmental strategies can help revitalize it. Results underscore the value of experiential, play-infused learning for creativity, engagement, and reflective practice across teacher education and professional development (Dweck, 2006; Mezirow, 2018; Sutton-Smith, 1997).

Conclusion/Recommendations

Results

RQ1 change in playful attitudes over time. The multivariate effect of pre/post status was significant (Pillai's Trace = .039, $F(2,188) = 3.852$, $p = .023$). Univariates showed no significant change in playful attitudes ($F(1,189) = 1.028$, $p = .312$), but a significant reduction in non-playful attitudes ($F(1,189) = 7.710$, $p = .006$), with post-test scores lower ($M = 2.57$, $SD = .78$) than pre-test ($M = 2.75$, $SD = .82$).

RQ2 age differences in playful attitudes. Age yielded a significant multivariate effect (Pillai's Trace = .259, $F(10,378) = 5.617$, $p < .001$). Playful attitudes were highest among PSTs over 38 ($M = 3.83$, $SD = .59$) and 18–22 ($M = 3.62$, $SD = .57$); lowest for 28–33 ($M = 2.94$, $SD = .57$). Non-playful attitudes also varied ($F(5,189) = 6.378$, $p < .001$), highest over 38 ($M = 3.46$, $SD = .71$) and lowest 28–33 ($M = 2.15$, $SD = .64$).

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RQ3 (Interaction). No significant interaction emerged between time and age for either outcome (all p >.24), indicating age did not moderate pre–post patterns.

Two takeaways stand out. First, a single semester of play-integrated coursework reduced resistance (non-playful attitudes) but did not yet boost playful mindsets to a statistically significant degree. Transforming adult beliefs likely requires multi-semester, program-level commitments with iterative practice and reflection (Dweck, 2006; Mezirow, 2018). Second, age patterns suggest a dip in playfulness during the 28–33 range—possibly due to career-family pressures and institutional norms valorizing control and outputs—followed by a rebound after 38 as confidence and autonomy grow. This arc echoes scholarship on how formal constraints can narrow play perspectives over time (Sutton-Smith, 1997; Zhulamanova & Raisor, 2020) and how guided, hands-on exposure can renew advocacy for play (Canaslan-Akyar & Sevimli-Celik, 2022; Galbraith, 2022).

The "true fun" triad—playfulness, connection, flow—offers a practical lever (Price, 2024). Classrooms that normalize risk, embed authentic tasks, and structure connection enable deeper engagement; movement, attention breaks, and light-touch games can scaffold flow (Bloomer & Marchese, 2016; Bonilla, 2024; Lengel & Kuczala, 2010). In music and arts contexts, aligning growth-mindset practices with playful making can democratize artistry and build resilience (Hare, 2024; Koops & Taggart, 2011; Yeager & Dweck, 2012).

Recommendations include:

- *Program-wide infusion.* Move from isolated "play units" to a coherent, longitudinal sequence in coursework, fieldwork, and reflection. Treat play as a pedagogical stance—not an add-on—supported by transparent rationales and outcomes (Forbes, 2021; Hirsh-Pasek et al., 2020).
- *Culture of care.* Engineer environmental signals—spontaneity, informality, flexibility, psychologically safe risk-taking—to counter rhetorics that frame play as unserious (Noddings, 2002; Sutton-Smith, 1997).

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- *Age-sensitive design*. Offer differentiated pathways: mentoring and flexible formats for mid-career PSTs; leadership and co-design roles for older PSTs; structured reflection for younger cohorts to connect play with learning evidence (Rodriguez-Meehan, 2022; Zhulamanova & Raisor, 2020).
- *Professional development*. Extend playful pedagogy into in-service learning to refresh practice and reduce burnout through creative, collaborative professional development opportunities (Slade & Gallagher, 2021).

Embedding playful elements across TPPs can dislodge resistance to play even within a semester, a promising first step toward culture change. Achieving measurable gains in playful mindsets likely requires sustained, program-level design that blends growth-mindset practices, hands-on creative work, and reflective cycles (Dweck & Yeager, 2019; Mezirow, 2018). When teacher education treats play as rigorous, relational, and purposeful, future educators are better equipped to cultivate classrooms where curiosity, experimentation, and joy fuel deep learning (Hirsh-Pasek et al., 2009; 2020).

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Play as a Biological Necessity

Play is not simply a leisure activity or a break from learning. It is a biological necessity that supports healthy development, well-being, and lifelong learning. Across species and cultures, play serves as a powerful mechanism through which young individuals develop the cognitive, physical, social, and emotional capacities needed to thrive. The articles in this category explore the growing body of research demonstrating the essential role of play in neurocognitive development, physical health, self-regulation, social competence, and school success. They also examine key questions about equity, access, and the quality of children's play experiences across diverse contexts. From laboratory research and public health perspectives to classroom practice and international examples, these authors provide evidence, insights, and practical recommendations that reinforce a simple but powerful message: when children are denied opportunities to play, healthy development is compromised. These articles offer readers the research and advocacy tools needed to support and defend play as a fundamental biological necessity for all children.

Authors

The Role of Purposeful Play in Promoting Neurocognitive Development

Stephanie Adams, DHSc, OTR/L, OTA

The Missing Link: How Physical Play Solves Today's Classroom Behavior Crisis and Prepares Children to Learn

Preston Blackburn, BA

Why Play Is a Public Health Necessity

Tony Christopher, MBA, National Institute for Play

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Play Is for Everyone, or Is It?

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The Role of Purposeful Play in Promoting Neurocognitive Development

Stephanie Adams, DHSc, OTR/L, OTA

Introduction

Play is widely recognized as a fundamental occupation of childhood and a critical context for learning, growth, and development. All children are born with an internal drive to play, which is imperative for all developmental milestones. Beyond enjoyment, play serves as a powerful mechanism through which children develop essential cognitive, social, emotional, and language skills (Bodrova & Leong, 2003).

In recent years, increasing attention has been placed on neurocognitive development-executive functions (EF). They are a set of higher-order cognitive processes necessary for goal-directed behavior, self-regulation, and adaptive responses (Berk & Meyers, 2013). Emerging evidence consistently demonstrates that play is not only supported with the use of executive functions, but also actively facilitates the development of EF within the prefrontal cortex of the brain (Hughes, 2011).

Conclusion/Recommendations

Play is not a luxury or a break from learning. It is a critical foundation for executive function development and overall child well-being. When children engage in meaningful play, they are actively building the cognitive, emotional, and social skills necessary for success in school, relationships, and daily life.

By reframing play as a powerful and purposeful developmental tool, professionals and caregivers can create environments that nurture executive functions naturally, laying the groundwork for resilient, capable, and engaged learners.

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The Missing Link: How Physical Play Solves Today's Classroom Behavior Crisis and Prepares Children to Learn

Preston Blackburn, BA

Introduction

Young children crave physical play. How do we know? If you open a classroom door to the hall, the gate to the playground, or the door to the gym, what do they do? They take off running and screaming in delight. Their bodies were designed to move in big body physical play.

Today, however, children are more sedentary than ever, both in and out of school. Academic pressure has made preschool the new first grade, and elementary school has become more academically stressful as teachers fight to meet standardized testing benchmarks. This change has led to a sit-to-learn philosophy where children's bodies spend more time at desks, focused on worksheets and other academic pursuits, rather than running, climbing, playing tag, hopscotch, or jump rope. After school, the long hours in neighborhood play are gone, swapped for enrichments, extras, extended child care, and perhaps the biggest culprit: screens.

Conclusions/Recommendations

For now, the burden of filling the play gap falls on schools. Schools must alter schedules to accommodate increased playground time with materials that encourage creative, active play. They must incorporate more PE each week, while changing the traditional sports focus into one that is movement-focused. Possibly the most challenging aspect is that schools must support overburdened and overextended teachers so they can plan for more movement during class time. Administrators should look for ways to ease teachers' burdens in other areas to give them time to work on developing movement-based learning. School systems can also bring in training from play professionals to help teachers learn strategies and techniques for adding movement to the classroom.

Physical play is inexpensive, readily available, easy to implement, apolitical, and something children's bodies and brains crave. When we lean into their need to move, we

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have the power to fill the gap between Maslow's and Bloom's in a way that supports ALL children in their development and ultimately on their learning journey.

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Why Play Is a Public Health Necessity

Tony Christopher, MBA, National Institute for Play

Substack version – shorter and without references

Introduction

Watch a couple of young children playing. They chase each other, laugh, invent rules, argue about the rules, and start over. Most adults watching see fun — loud, messy, slightly chaotic fun. What they don't see is the learning that is happening.

Those children are reading faces, tones, and boundaries — figuring out when to push and when to ease off. They test cause and effect, handle excitement and frustration in the same five minutes, and learn to stay in the game without turning it into a fight. When one trips, loses, or gets left out, they practice something even more valuable: recovering and rejoining.

No one is teaching them any of this. There is no lesson plan. Yet they are building foundational skills they will use for the rest of their lives — and when adults play, they refresh and sharpen those same capacities.

That scene, in miniature, is the argument of this essay. Play is not a break from real life or a reward for finishing the important things. It is one of the main ways human beings develop and maintain the abilities that keep us mentally and socially healthy. And because those abilities are visibly weakening across our whole population — children and adults alike — play deserves a place beside sleep and nutrition as a genuine public health necessity.

If that sounds like a stretch, stay with me — starting with what "public health" actually means.

What Public Health Is

The American Public Health Association describes its mission as promoting and protecting the health of people and the communities where they live, learn, work, and play (American Public Health Association, n.d.). Notice that play is already in the

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sentence. In plain terms, public health is the organized effort to prevent disease, prolong life, and promote health — not one patient at a time, but across entire populations.

Your doctor treats you; public health looks after all of us at once. Its experts include disease researchers, as well as restaurant inspectors, school nurses, and policymakers — anyone addressing health at the level of whole communities. That wide-angle view matters: patterns invisible in one exam room become obvious across millions of people.

Dr. Camara Jones, a former president of the American Public Health Association, captures the field with a simple picture (Jones, 2014). Imagine our communities built near the edge of a cliff. When someone falls off, an ambulance meets them at the bottom and rushes them to medical care — good, but people would rather not fall at all. So public health builds fences along the edge and nets partway down: prevention — clean water, vaccines, seatbelt laws, anti-smoking campaigns — everything that keeps people from needing the ambulance.

When public health decides something is essential, ordinary life changes. Two familiar examples show how.

How Sleep and Food Became "Health"

We sleep in order to be fully awake and alive. Cut sleep short, and we become irritable, slow to react, and easily triggered; over years, chronic shortfalls raise the risk of obesity, heart disease, depression, and accidents. That knowledge did not spread on its own. As the science piled up, public health translated it into guidance any family can follow: adults need 7 or more hours, and teenagers need 8 to 10 (Watson et al., 2015; Paruthi et al., 2016). The Centers for Disease Control and Prevention has even called insufficient sleep a public health problem (CDC, 2016).

Nutrition traveled the same road. When science showed that vitamin D deficiency causes rickets, which softens children's bones, public health had vitamin D added to milk in the 1930s — and rickets nearly vanished (Rajakumar, 2003). Iodized salt eliminated most cases of goiter; folic acid in flour sharply reduced devastating birth defects (CDC, 1999). Dietary guidelines, food labels, the food pyramid and MyPlate,

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school-lunch standards — all one pipeline: science produces knowledge, public health turns it into simple guidance, and the guidance becomes the daily habits of millions.

That is why today's parents receive official guidance on vaccines, well-child checkups, car seats, screen time, tooth brushing, water safety, sleep, food, and sixty minutes of daily physical activity. The machinery exists, and it works.

Which raises a question: is anything essential missing from that list?

The Problem: A Population in Trouble

Here is why the question is urgent. By nearly every measure, the mental health of our population — beginning with our children — is a slow-moving public health disaster.

In 2019, before anyone had heard of COVID-19, the CDC surveyed a large, demographically representative sample of American high school students. According to their own reports, 36.7 percent had experienced persistent feelings of sadness or hopelessness in the past year. Nearly one in five — 18.8 percent — had seriously considered suicide. Another 15.7 percent had made a suicide plan; 8.9 percent had attempted suicide; and 2.5 percent had attempted suicide seriously enough to require medical treatment (CDC, 2022). The pandemic pushed those numbers higher still, and they have barely come back down.

Nor is it a recent blip. Researchers have compared teenagers' answers to identical questions on standard psychological assessments across the second half of the twentieth century, and the change is stark. In 1948, 16.2 percent of fourteen- to sixteen-year-olds agreed with the statement "I work under a great deal of tension." By 1989, 41.6 percent agreed. Agreement with "Life is a strain for me much of the time" rose from 9.5% to 35%. Agreement with "I am afraid of losing my mind" rose from 4.1 percent to 23.4 percent — more than a fivefold increase (Gray, 2011).

Adults are struggling too. More than one in five American adults now experiences a mental illness in a given year. In 2023, Gallup found that 29 percent of adults had been diagnosed with depression at some point in their lives — the highest figure it had ever recorded (Witters, 2023). Suicide took about 49,000 American lives in 2022, the most ever counted (CDC, 2023). In 2023, the U.S. Surgeon General declared an

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epidemic of loneliness: roughly half of adults experience it, and weak social connection damages health on a scale comparable to smoking up to fifteen cigarettes a day (U.S. Surgeon General, 2023).

We have responded just as the cliff picture predicts: more ambulances, more therapists, more medications, more crisis lines—all badly needed, all worth funding. Yet the stream of people going over the edge keeps growing. Public health asks a different question: where is the fence?

Conclusion

What This Would Mean

For parents, it means protecting genuinely free time, stepping back so children can work things out themselves, and treating play as preparation, not distraction. It also means weighing risk honestly: a scraped knee heals; a childhood without practice at handling life leaves a lasting mark. For schools, it means guarding recess and unstructured social time as fiercely as math class, because they build the self-regulation that makes math class work. For workplaces, it means proactively fostering a culture of playfulness—leaving room for informal connection and unscripted time, where adaptability actually grows. And for policymakers and health leaders, it means putting play into the pipeline that served sleep and nutrition so well — guidelines, well-child visits, school policy, public campaigns — and measuring it the way we measure diet and rest.

The Bottom Line

Watch those children again. They are not wasting time. They are building the equipment for a workable life — steadiness, flexibility, connection, and the quiet conviction that they can handle whatever comes next. At the National Institute for Play, we put it simply: play is productive; play is learning.

When opportunities for that learning shrink across a whole population, the effects show up everywhere — in classrooms, workplaces, emergency rooms, and loneliness statistics. Sleep restores us. Food fuels us. Play prepares us in youth and

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restores us as adults. That is why play is not merely important, enriching, or a nice-to-have.

Play is a public health necessity.

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Lessons from the Laboratory: Not All Rats Benefit from Play and Why That Matters for Children

Jackson R. Ham, PhD

Introduction

Play is widely recognized as essential for healthy child development, supporting emotional regulation, social skills, and executive function. As opportunities for free and risky play have declined over recent decades, educators and policymakers have increasingly promoted play-based approaches to support children's well-being. However, most discussions assume that play is universally beneficial—that simply providing opportunities to play will produce positive outcomes for all children.

Research from animal models challenges this assumption. Studies of juvenile rats show that while play typically supports healthy brain and social development, a substantial minority of individuals do not benefit in the expected way. In controlled laboratory settings, approximately 20% of rats exhibited poor social-emotional regulation and atypical brain development despite having normal access to play. These differences were not due to how much the animals played, but instead how they engaged socially during play and/or as the play opportunities were insufficient.

These findings have important implications for children. Observational research suggests that some children—particularly neurodivergent children—may struggle to engage in peer play even when opportunities are available. Simply placing children together does not guarantee meaningful or beneficial interaction. Evidence from structured interventions, such as integrated play groups, demonstrates that intentionally designed social environments can help children, who might otherwise withdraw from play, derive its developmental benefits.

This white paper argues that play should be understood not as a one-size-fits-all solution, but as a powerful developmental tool that must be thoughtfully supported. Policies and practices that focus solely on increasing access to play may leave some children behind. Instead, attention should be given to how play environments are

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structured, how children are supported within them, and how individual differences shape developmental outcomes.

Conclusion/Recommendations

In rats, social play is involved in shaping social behavior and brain development, and the same seems to be true for humans. Research from both animal models and human studies demonstrates that play is a powerful driver of emotional regulation and executive function. However, evidence from rats also shows that play is not universally beneficial in its default form (Ham et al., 2026).

A significant minority of individuals—both rats and children—do not experience the typical benefits of play despite having access to it. These findings highlight the limitations of one-size-fits-all approaches. When play environments are intentionally structured and supported, children who might otherwise withdraw can engage more successfully and derive meaningful developmental benefits. Key recommendations include:

1. Policy frameworks should recognize that access to play alone is not sufficient.
2. Educational and recreational programs should incorporate flexible, inclusive play models that account for individual differences.
3. Structured and guided play interventions should be made available for children who struggle with peer interaction.
4. Training for educators and play facilitators should include strategies for supporting diverse play styles without suppressing autonomy.

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Play in Kindergartens in Greece

Evanthia Synodi, PhD

Introduction

In many parts of the world, play, in terms of time, space, resources, and children's control over it, diminishes in the daily routines of children's lives, both in and out of school. Despite play traditionally being a basic feature of the education provided to young children in Western countries, in recent decades many factors have contributed to play being pushed aside and even undervalued in early years education (Brostrom, 2012; Sahlberg & Doyle, 2019). According to articles 12 and 31 of the Convention of the Rights of the Child (United Nations, 1989), children have the right to play in and out of school (article 31) and for their opinions to be seriously considered when decisions about their lives are made (article 12). Instead, official and centrally imposed early years policies tend to emphasise teachers' obligation to teach what out-of-school agents have decided, which at times devalues or ignores play, the individual interests of children and their pace of development (on top of devaluing the education of the professionals working with young children).

Kindergarten teachers in Greece are responsible for working with children ages 4 to 6. These kindergarten teachers are under pressure to teach specific information and cultivate specific skills in children. However, the official curriculum does not clearly link children's right to play and participation to the learning process.

Conclusion

Early years teachers need to help ensure play finds its appropriate place in young children's lives and education. Professional development for teachers, as well as courses on the latest knowledge about play in initial teacher education, are necessary. Campaigns to inform the public and parents are also required. Children's freedom to play needs to be understood more deeply, thus providing not only for article 31 of the Convention of the rights of the child (United Nations, 1989) but for articles 5 and 12 as well, that is, children's right to adults who help them learn their rights (including that of

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play), form informed opinions and consult them and seriously take their views into account when decisions about things that affect children's lives are made.

Finally, I need to clarify that the above analysis is based on my disagreement with teachers who treat play merely as a delivery mechanism for teaching predefined adult learning outcomes or state standards and appropriating play; another term for this is colonizing play. Still, I agree with the idea of children becoming master players (Reynolds & Jones, 1997). I also agree with Sicart (2017), who discusses play as a way of being in the world, involving freedom and subversion, the moral development of human beings, and creativity and personal expression. Such a conceptualisation of play is way beyond what the official curricula demand of teachers, because it indicates the value of play to the human species and is based on a holistic view of children, their development and learning. Children's control over their play and the advantages of the play they engage in need to be reflected in the ways and content for adults to teach them, rather than the curriculum defining and directing almost everything adults do in kindergartens, which children have to follow.

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Play Is for Everyone, or Is It?

Elaine Zweig, PhD, Educational Consulting &
Lin Moore, PhD, Texas Woman's University

Introduction

Play is far more than a leisure activity; it is a fundamental human right and the primary vehicle for early childhood development. For children aged three to eight, play is essential to healthy physical, social, emotional, cognitive, and moral growth (Else, 2014; Isenberg & Quisenberry, 2002). This necessity is universally recognized, with the United Nations Convention on the Rights of the Child (Article 31) declaring that every child has the right to rest, leisure, and recreation (United Nations Committee on the Rights of the Child, 1989). In Early Childhood Education (ECE), play is a dynamic process in which children discover, learn, and interact with the world around them.

However, the application of play is not a one-size-fits-all model. It exists on a spectrum, ranging from child-initiated, spontaneous, unstructured play to adult-facilitated, guided play focused on specific learning outcomes. For children with special needs, these experiences are transformative. Inclusion in Early Childhood Education (ECE) involves accepting, understanding, and attending to individual differences across physical, cognitive, and social domains (Division for Early Childhood & National Association for the Education of Young Children, 200909). When play is purposefully planned and scaffolded, it allows children with disabilities to function as equals alongside their typically developing peers, preparing them for lifelong inclusion in a diverse society (Moore & Zweig, 2021).

Recommendations

1. **Professional Development:** Pre-service and in-service training must move beyond basic development to focus on integrating play and physical activity specifically for children with disabilities.
2. **Health and Wellness Policies:** School districts and childcare facilities should mandate regularly scheduled outdoor play and active indoor breaks to mitigate obesity and improve mental health.

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3. **Priority Funding:** Allocate financial resources to ensure all public and school playgrounds meet ADA accessibility standards, with an emphasis on natural elements and multisensory components.
4. **Advocacy:** Educators and families should join national and international organizations, such as the International Play Association, to protect play as a social justice issue and a fundamental right.
5. **Strengthened Research:** Future studies should focus on observational data of peer interactions in inclusive settings and incorporate the "voices" of children themselves to determine their play preferences.

Conclusion and Call to Action

Successful inclusive education is fundamentally achieved by accepting, understanding, and attending to the diverse needs and differences of all children within the learning community. By fluidly interchanging the professional roles of stage manager, mediator, co-player, scribe, observer, and planner, educators can effectively facilitate both unstructured and guided play-based learning that reaches across the developmental spectrum. These intentional strategies and environmental arrangements ensure that children with special needs are not merely present, but are fully engaged in activities that support physical health, social competence, cognitive function, and creative problem-solving.

Because all children are naturally born to be "discoverers, thinkers, and problem solvers," childhood must be protected as a treasured time to experience the joy of shared adventure and mutual endeavors, no matter their abilities. Educators, families, and policymakers must therefore join together in a **call to action** to appreciate, advocate for, and preserve every child's **fundamental right to play**. Only through this commitment to inclusive, play-based practices can we prepare every child for lifelong participation in a diverse and equitable society.

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Play and Climate Change

Climate change is reshaping the environments in which children live, learn, and play. Rising temperatures, extreme weather events, urbanization, environmental degradation, and the loss of natural play spaces increasingly affect children's opportunities for outdoor play and connection with nature. At the same time, communities worldwide are developing innovative approaches to create sustainable, accessible, and resilient play environments. The articles in this category explore the relationship between climate change and children's play experiences while highlighting practical solutions that support both environmental sustainability and the child's right to play. From using recycled and upcycled materials to community advocacy and policy initiatives, these authors offer research, examples, and strategies to help readers protect children's opportunities for play while contributing to a healthier, more sustainable future for all.

Authors

Upcycled Materials for Play Equipment to Expand the Benefit of Playing in Nature in Urban Areas

Ananta Hari Noorsasetya, PhD; Anna Sutanto, MEM; & Veronica Purwaningsih, LLB

The Impact of Environmental Changes on Children's Play Experiences

Ridhi Sethi, PhD Human Development, MSc Child Development, MEd

The Taiwan Children's Play Declaration and Protocol for Replication

Wei Shun Tseng, OT; Jen Hsiu-Chuan Wang; Xiang-Ru Lin, LLB; Eugenia Lin; & Elsie Shih-Hua Chang

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Upcycled Materials for Play Equipment to Expand the Benefit of Playing in Nature in Urban Areas

Ananta Hari Noorsasetya, PhD; Anna Sutanto, MEM; & Veronica Purwaningsih, LLB

Introduction

While many Indonesian cities claim to be child-friendly, play equipment and playgrounds remain limited in number and access. In general, two types of playgrounds are available in Indonesia's urban areas. First, privatized playgrounds are either in outdoor fenced areas or inside air-conditioned rooms, accessible by ticket or membership. Second, public playgrounds are located in green outdoor spaces or as part of public facilities. While public playgrounds are widely accessible, many have inadequate play equipment and limited opportunities to interact with nature because of constricted space and resources, concerns about changing weather, and the practicality of "clean" play (Shafira & Pramitasari, 2024; Tiara & Dwiputri, 2025).

While Dankiw et al. (2023) define nature play as playing activities in an outdoor setting with opportunities to interact with nature elements (e.g., water, soil, leaves); we propose that nature play also includes utilizing what is available in the surrounding area of the green space. In addition to standard play equipment, selected upcycled materials could be redesigned as permanent or pop-up play equipment, inspiring other possibilities for playing in nature.

Conclusion & Recommendations

In creating child-friendly cities and communities, nature play is limitedly fostered in Indonesia. Often, nature play occurs in a controlled environment where nature is a mere background for shade and views, without nature elements being part of the play activity.

To address this, we proposed a middle ground that responds to concerns about safety, resources, and cleanliness in nature play by harnessing upcycled materials from the surrounding area to create additional, customizable play equipment and expand the benefits of playing in nature. In addition, upcycled tires are an excellent option for landing beds that prioritize safety.

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The design incorporates elements of nature as a bridge to build familiarity with nature. The three proposed basic designs described here serve as a starting point for further development based on material discoveries and suggestions from parents, children, and future designers.

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The Impact of Environmental Changes on Children's Play Experiences

Ridhi Sethi, PhD Human Development, MSc Child Development, MEd

Introduction

Play happens naturally for children and opens their world by stimulating their imagination. Play provides us with a joyful way to connect with, relate to, and interact with the world**.** A child's healthy development depends on play. It makes learning fun while fostering moral, social, emotional, cognitive, and physical development. Regular playtime helps children grow into competent, self-assured, well-rounded adults. Regular play and exercise are essential for children's development and have many advantages, from better mental and social skills to better physical health (Berk et al., 2006).

Early childhood development is built on play, and having the opportunity to play is a fundamental human need. For children, it is seen as a fundamental right. From a child development perspective, outdoor play is characterized by flexibility, inventiveness, spontaneity, intrinsic drive, and nonliteral or symbolic use of items (Bäckström et al., 2024). Current outdoor trends in early childhood education indicate that these spaces are becoming increasingly bereft of opportunities to experience nature, despite abundant evidence of nature's importance to children's well-being (Dowdell et al., 2011). When used as learning spaces, outdoor spaces can give children the freedom to use their bodies and imaginations to create, invent, and change their surroundings. Additionally, natural materials offer children many opportunities for creative play (Kiewra and Veselack, 2016). They emphasized that young children must experience things firsthand, digest knowledge in ways that suit them, grapple with issues, and develop original, creative solutions to learn (Kiewra and Veselack, 2016).

Today, nearly every child faces at least one of the following climate risks: sand and dust storms, tropical storms, riverine floods, drought, high heat, fire, and heatwaves. At least three overlapping climate threats endanger the health, education, and survival of 1.1 billion children worldwide. Up to six overlapping hazards affect nearly 4 million children worldwide. The paper also examines children's exposure to climate-sensitive risks, including air pollution and vector-borne illnesses such as malaria (UNICEF, 2026).

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Conclusion

Children are especially vulnerable to climate change. Schools frequently close and playgrounds vanish during floods. When youngsters should be studying and playing with friends, they spend weeks indoors, miss school, and lose their routine. Climate change is also affecting their sense of security and childhood, as well as their immediate surroundings. To protect children from the effects of climate change and air pollution, we must prioritise their environmental health. UNICEF cautions that we are already witnessing changes in children's health and communities in a climate-changed world.

The desirability and viability of outdoor learning are influenced by various contexts and conditions worldwide. Numerous contextual elements, such as weather, culture, safety, and the availability of nearby outdoor spaces, shape its practice (Kiviranta et al., 2024).

In the era of climate change, supporting children's play requires balancing environmental protection with its positive developmental benefits. Educators, families, legislators, and communities should implement measures to foster safer, more resilient, and more adaptive play environments rather than limiting outdoor play (UNICEF, 2026). Governments must introduce a wide range of measures to ensure the fulfillment of all Article 31 rights, and to ensure that children's experience of place informs decision-making. Children need to be at the heart of the global response.

Play areas that are climate-resilient should be accessible, safe, and entertaining even amid shifting weather. Incorporating natural shade through trees and vegetation, offering covered outdoor areas and shelters, and utilizing a variety of natural elements like gardens, logs, rocks, and loose parts that promote different types of play and improve kids' interaction with nature are all ways to accomplish this (Kiviranta et al., 2024; Ramsden et al., 2025). To reduce the effects of heat stress and flooding while allowing kids to play outside safely, outdoor environments in areas with rising temperatures and extreme weather events should also incorporate climate-adaptive design elements like heat-reducing surfaces, permeable materials, and enhanced drainage systems (Lee et al., 2025; UNICEF, 2026).

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The Taiwan Children's Play Declaration and Protocol for Replication

Wei Shun Tseng, OT; Jen Hsiu-Chuan Wang; Xiang-Ru Lin, LLB;
Eugenia Lin; & Elsie Shih-Hua Chang

Introduction

Article 31 of the United Nations Convention on the Rights of the Child (UNCRC) states that "children have the right to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts" (UNCRC, 1989).

Because of their age, children are still trying to understand the world and explore themselves. No one must overlook their inherent rights. Children's right to rest and play should be equally prioritized. Outside school and home hours, children should be allowed to engage in physical activity and play that suit their interests and allow them to socialize with their peers.

The fourth edition of the Occupational Therapy Practice Framework: Domain and Process is an official document of the American Occupational Therapy Association. (Occupations are the activities people engage in every day to give their lives meaning and purpose. Occupations can be done alone or with family members and friends; occupations can be done at home, at work or school, and in the community.

Every individual should participate in purposeful, meaningful activities that promote physical and mental health and overall quality of life. These activities should be emphasized across nine key occupations that evolve with age: activities of daily living, play, social participation, rest and sleep, work, education, health management, and others. Among these, the Play & Leisure domain is especially critical for children and adolescents. Play is an essential part of children's lives, serving as the most natural means of communication, self-discovery, emotional expression, and exploration of the world.

Play Taiwan was officially registered as a non-profit organization in 2017. A group of parents concerned about children's play spontaneously initiated a revolution across Taiwan, advocating for the most fun activities and playground changes. Through

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their actions, they aim to amplify children's voices and ensure more people hear them. We prioritize policies and legislation for children's play and safeguard children's right to play, supporting a childhood filled with unrestricted play.

To ensure children's right to play and the time they need to play, we must understand their needs and listen to their voices. This aligns with Article 12-1 of the Convention on the Rights of the Child, which asserts that " the child who is capable of forming his or her own views has the right to express those views freely in all matters affecting the child, the views of the child being given due weight in accordance with the age and maturity of the child" (UNCRC, 1989). In recent years, playground and park design, urban planning, and policy in many countries have begun to prioritize children's participation by actively listening to their needs and opinions.

Recommendations

From Research to Policy: Expert Policy Translation.

We consulted five experts from landscape design, an environmental NGO, a pediatrician, and human rights organizations who provided technical expertise to translate children's voices into feasible policy recommendations.

1. Promoting Unstructured Play

The intensity of advocacy targeting parents regarding the significance and benefits of unstructured play should be reinforced, comparable to the promotional efforts of public health campaigns (e.g., “5 A Day “). Furthermore, the core benefit of play, articulated as “Potential Development Originates in Play,” should be officially integrated into a Parenting and Children’s Health Handbook (or equivalent governmental guidance documents).

2. Enhancing Play Time and Framework

The guarantee of playtime and activities must be increased to ensure that after-school programs allocate sufficient time for activities, exercise, and free play. In parallel with the “After-School Sports Programs” model, “After-School Play Programs” should be established.

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3. Safeguarding Recess Time

It is essential to guarantee that children are afforded a full and uninterrupted recess time following every instructional session.

4. Modifying Physical Activity Curricula

Revise existing school physical activity initiatives (e.g., the Sport & Health 150 Policy in Taiwan) to explicitly include diverse play activities as a key component, rather than focusing exclusively on structured exercises such as running and jump rope.

5. Mandating and Auditing School Playground Provision

Establishing two distinct playgrounds in Primary and Secondary Schools—one for upper/middle grades and one for lower grades, designed to accommodate children's developmental needs and promote age-appropriate segregation —requires a rigorous audit of implementation status. This is crucial to ensure children have access to adequate and appropriate recreational space.

6. Assessing and Optimizing On-Campus Play Accessibility

Conduct a comprehensive inventory of on-campus play. Strategies such as converting underutilized classrooms into multi-functional play spaces should be pursued to expand opportunities for children, particularly those housed on upper floors, to engage in physical activity outside the classroom.

7. Inventorying Temporary Play Streets in School Zones

Pilot an assessment of the feasibility of temporarily converting the operational hours of School Access Routes across various municipalities into play streets. This initiative aims to increase access to play spaces and playmates, drawing on the "Streets for Kids" program developed by the National Association of City Transportation Officials (NACTO) in America.

8. Addressing Climate Change Impacts on Play

The UN Committee on the Rights of the Child's General Comment No. 26, issued on August 22, 2023, asserts that climate and environmental degradation compromise

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children's rights to engage in outdoor activities and interact with the natural environment. The government must adopt proactive measures, including installing cooling infrastructure, such as shading and water play facilities, to safeguard children's rights to health and play.

9. Institutionalizing Child and Youth Participation in Play Design

To align with the general principles of the Convention on the Rights of the Child—specifically the "Best Interests of the Child" and the Right to Express Views—it is imperative to develop "Child and Youth Participation Design Guidelines" and accompanying training programs. The objective is to institutionalize child participation in the creation of play spaces that are optimally suited to children's physical and mental developmental needs.

The Taiwan Children's Play Declaration is a landmark, child-led advocacy initiative fundamentally championing the right to play as an essential human right for every child. Co-created by children and the dedicated organization Taiwan Parks and Playgrounds for Children by Children, the Declaration is a powerful instrument that reflects the genuine voices, distinct needs, and lived perspectives of children across the nation.

Their collective ideas were meticulously shaped into a Declaration that not only issues a firm demand for action but also inspires a necessary paradigm shift toward a more inclusive, child-centered approach in urban planning, education, and policymaking.

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Play and Culture

Play does not occur in a vacuum. Children's play is shaped by the cultures, communities, traditions, values, and social experiences that surround them. At the same time, play serves as a powerful way for children to express identity, build relationships, make meaning of their experiences, and develop a sense of belonging. The articles in this category explore the dynamic relationship between play and culture, examining how play reflects, challenges, and transforms the social worlds children live in. Through discussions of justice, belonging, identity, and lived experience, these authors highlight the ways play can foster inclusion, amplify diverse perspectives, and create opportunities for connection across differences. The research and insights presented in these articles encourage readers to view play not only as an individual developmental process, but also as a cultural practice that helps children understand themselves, their communities, and their place in the world.

Authors

Play as a Vessel for Justice and Belonging

Sarah Aiono, EdD, Longworth Education, Aotearoa New Zealand

Hiding in Plain Sight: Play and Culture

Anna Beresin, PhD

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Play as a Vessel for Justice and Belonging

Dr. Sarah Aiono, Longworth Education, Aotearoa New Zealand

Introduction

Across many education systems, play has been steadily displaced by policies and practices that prioritise standardisation, measurement, and early academic performance (Aiono et al., 2024; Paris & Alim, 2017; Pyle & Danniels, 2017; Hirsch-Pasek et al., 2025). In classrooms shaped by accountability pressures, children are increasingly expected to demonstrate proficiency in discrete skills long before they have had opportunities to explore, imagine, and connect with others. While these trends affect all learners, their consequences are most acute for children from Indigenous, minoritised, and historically marginalised communities.

For these communities, play has never been peripheral (Aiono & McLaughlin, 2018; Brown & Brown, 2022). It has functioned as a cultural practice through which knowledge is transmitted, relationships are nurtured, and identities are affirmed. When schooling systems marginalise play, they do more than narrow pedagogical options; they undermine children's opportunities to see themselves, their families, and their cultures reflected in learning. Repositioning play as a central and legitimate pedagogy is therefore not only an educational concern, but also a matter of equity and justice (Blucher et al., 2018; Paris & Alim, 2017; Penetito, 2010).

This paper draws on findings from a design-based research project conducted in Aotearoa New Zealand that explored culturally sustaining play pedagogies in an elementary (K– Grade 3) school serving predominantly Māori (indigenous New Zealanders) and Pacific Island children. While grounded in a specific Indigenous context, the findings speak to global challenges faced by education systems, including those in the United States, where similar tensions exist between accountability-driven reforms and culturally responsive practice. This paper shares key insights from the research and offers strategies for reclaiming play as a right that supports belonging, identity, and learning.

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Conclusion and Recommendations

The findings from *Ko te tākaro te kauwaka e pakari ake ai te tangata* reaffirm that play is far more than a recreational activity; it is a powerful driver of learning, identity, and belonging (Aiono et al., 2024; Aiono & Waitoa Tuala-Fata, 2025; Hirsch-Pasek et al., 2025; Whitebread, 2012; Walsh et al., 2007). It is a pedagogical space where learning, identity, and belonging intersect. For Indigenous and minoritised learners, play offers opportunities to see their cultures valued, to build relationships, and to engage deeply with learning in ways that are meaningful and sustaining.

Reclaiming play as a right requires intentional action at multiple levels. Based on the research, the following recommendations are offered:

- Protect time for play by embedding it within the school day and not making it contingent on academic performance.
- Embed cultural knowledge through partnerships with families and communities, allowing local values and traditions to shape play environments.
- Invest in teacher learning through coaching models and reflective tools that make play-based pedagogy visible and actionable.
- Ensure resource equity so that play materials and environments reflect the identities of all learners.
- Shift accountability narratives to recognise belonging, wellbeing, and cultural identity as essential educational outcomes.

The Māori whakataukī, or proverb, that guided the research is *Ko te tākaro te kauwaka e pakari ake ai te tangata*, meaning “Play is the vessel through which children grow strong.” It reminds us that play is fundamental to children’s learning, identity, and wellbeing. When education systems honour this understanding, they create conditions for all children to flourish academically, socially, and culturally.

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Hiding in Plain Sight: Play and Culture

Anna Beresin, PhD

Introduction

Children's cultures are often missing from academic discussions of play, even though there is no activity without culture, and play abounds in cultural expression. This paper argues that children's play cultures are visible in objects, movements, sounds, jokes, games, and peer-created rules, but adults often overlook, judge, or absorb them.

Perhaps this omission is rooted in the psychological tradition of emphasizing universal development and individual differences. Perhaps it reflects discomfort with the idea that children have a cultural life without adults. Perhaps it is related to adult ambivalence about culture itself. Even spaces that appear sterile represent a form of cultural withdrawal.

Many discussions with educators regarding their confusion about inside jokes like "six seven" conclude with some variation of adults just not getting children these days. Yet, I have found that asking adults about the joke cycles and neighborhood play of their own youth quickly brings childhood cultures past and present into focus. "Six seven" is not far from "Guess what? Chicken butt." Just ask adults about what made them laugh or to show you how they would begin a game in their neighborhood when they were young.

Viewing childhood carefully from a distance helps, as travelers notice what is different and what is the same, but we may miss these things when we look at our everyday routines at home and at school. When we travel, we notice the handshakes, the melodies, the shapes of things. Children are travelers by design, and growing up means entering into new, confusing, cultural frames. To examine children's play without highlighting culture is to miss the taste of the everyday and the struggles these choices contain.

As with adults, children's culture includes both material culture—the objects made for children and those modified by children for their own use, from paper balls to

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go-karts—and immaterial culture related to motion and sound. Children still use found objects in novel ways: rocks for game pieces, string for handwrought string games, and electronic memes shared as if they were marbles. These tangible intangibles can disappear before they are studied; they are often kept secret from adults, typically for good reason. Grownups often pass judgment on children's peer cultures, take them over, or repackage them as novel toys for profit. Yet such bits of culture reveal what is valued in a specific locale and can serve as markers of social tension and humor.

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Recommendations

There is no play without a social life; even if toys are stand-ins for people, the players are online, or the "people" are AI bots. There is no social life without culture, so ideally there is no play study without play culture study. Avoiding it as a topic reflects cultural constraint.

A toy store is not the same as a hardware store because of the cultures of

children, although both offer means of repair. What materials are used for playful improvisation? Is improvisation even allowed? Recess is not the same as gym because of children's culture. Who holds the chalk in the schoolyard? Who is in charge of the games?

Schools, hospitals, museums, play programs, and institutions of advanced learning miss out on so much by excluding the full range of children's cultural topics. Denying children's very identities as members of specific cultures (plural) disavows their skills in making meaning and making change, bit by bit, craft by craft, game by game, and also weakens broader commitments to equity, advocacy, and opportunity in play settings (Jarrett et al., 2023).

Children's cultures have been increasingly trivialized, and their playtime has been co-opted by adult-organized physical activity or passive entertainment, a colonization of play and acceptable play forms (Elkind, 2007 & 2015). When children's cultures are rendered insignificant, it sends the message that children's voices are unwelcome and can feel like a personal rejection, potentially leading to a clash between the school and the child's home life. Without cultures in play, we lose not just the baby's bathwater, but the siblings in the tub and the rubber duck.

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Play in the Age of Algorithms

Children today are growing up in a world increasingly shaped by screens, algorithms, artificial intelligence, and digital technologies that compete for their attention, influence their choices, and mediate their experiences. While technology offers new opportunities for connection, learning, and entertainment, it also raises important questions about children's development, well-being, relationships, and opportunities for authentic play. The articles in this category explore how digital technologies affect children's brains, behavior, learning, and family life, and what may be lost when screen-based experiences replace child-initiated play. From the influence of algorithms and artificial intelligence to the role of parents in restoring balance, these authors provide research, practical strategies, and critical perspectives that help readers navigate the challenges of modern childhood. Together, they reinforce a powerful message: as technology becomes increasingly integrated into daily life, protecting time, space, and opportunities for rich, meaningful play is more important than ever for healthy development and human flourishing.

Authors

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How Our Brains Develop Through Play, and What Happens When Screens Get Involved.

Chima Abimbola Eden, MSc & Opeoluwa Ihediohia, MEd, BEd

Introduction

Today's children are born into a digital age and can swipe a screen before they learn to walk. This is a significant shift in kids' development as they begin to learn, play, and connect online. As they grow up, these kids have unprecedented access to screens. They see screens first, feel screens first, and hear screens first, unlike any generation before them.

The young child's brain, with its tremendous plasticity, is particularly sensitive to environmental forces, including those conveyed through digital media (Hutton et al., 2020). Neuroplasticity has two sides: toddlers can quickly learn to use digital interfaces, but they are also vulnerable to the negative effects of excessive screen time. Parents, educators, and pediatric providers need to understand the competing pressures and challenges of balancing effective technology use with practices that support healthy development.

Studies have shown that digital media can be toxic to cognitive functioning, social connection, and behavioral adaptation (Paulus et al., 2019). Children's screen-time choices today will shape how an entire generation develops and relates to technology.

Conclusion/Recommendations

The connection between screen time and childhood development is complex and requires a nuanced approach rather than quick solutions. Research and technology offer significant advances in learning and cognition, but excessive and inappropriate use of technology poses dangers to a developing brain. Instead, the answer is not to erase technology but to highlight approaches with evidence of success and the potential to reduce harm.

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Primary Recommendations

For Parents:

- Decide on screen time quality over quantity; prioritize educational, interactive content, not passive entertainment
- Establish regular limits of screen time with zones and no-screen-time intervals
- Deliver incremental educational value and relational connection through co-viewing experiences on STEM content
- Work to ensure that the time they spend on screens is balanced by active exercise and outdoor activities that include social interaction.
- Set and maintain a good example of responsible technology use and hold family discussions about becoming responsible digital citizens.

For Educators:

- Using technology in a meaningful, curricular way. Technology should complement core experiences rather than replace them
- Build in real-life experiences with opportunities to talk with people to complement online learning
- Collaborate with parents and teach them about educational technology

For Policymakers:

- Fund research so we can examine how, in the long term, exposure to screens will affect the development of children
- Establish evidence-based guidelines on the proper usage of educational technology in schools
- Develop public awareness campaigns for healthy screen time use.
- Provide high-quality educational materials and digital literacy resources for all kids.

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Future Considerations:

Given the fast-paced advancements in technology, continuous research and guideline updates are essential. Emergent technologies such as virtual reality and artificial intelligence will require further research into the developmental impacts. Longitudinal studies at scale, starting at such a young age and following participants into adulthood, will be key to understanding potential long-term effects of digital childhood on the life course.

The goal should be to cultivate a generation of individuals who can leverage technology while maintaining cognitive flexibility, social skills, and emotional intelligence necessary to thrive in a complex world. This can only be achieved through the collaborative efforts of parents, educators, health professionals, and policymakers to create healthier digital environments that future generations will be grateful for.

With a focus on empirically supported tactics and a willingness to learn from fresh evidence as it surfaces, we can help kids find a healthy relationship with technology, and one to last a lifetime. Let us be sure the screen generation is not also the sacrifice generation. Let us support this generation in possessing the keys to a grounded integration of digital and analog learning that will produce the widest range of development in this digital-human life.

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Is Digital Play Really Play? Prioritizing Offline Play in a Commercialized World

Rachel Franz, MEd

Introduction

Child development experts agree that the best practices in supporting young children's development are infused with child-led play. When educators provide children with the time and space to play with rich, open-ended materials and opportunities to connect with peers and trusted adults, children thrive. As children play, responsive caregivers follow children's interests, scaffold their experiences, celebrate their unique identities, and cultivate culturally responsive environments. This type of play– indoors and outdoors– meets young children's social, biological, and cognitive needs and is a critical part of childhood (National Institute of Play, n.d.).

Yet, there is a growing, powerful narrative that young children *need* technology early and often to thrive in our increasingly digital world; some scholars even argue that using tablets must be included as part of preschoolers' daily routine in order for educators to be responsive and culturally relevant (Chu et al., 2024; Rogow, 2023). Families have bought in on the need for early technology use, and a majority believe that their children need technology to learn and develop successfully (Fairplay, 2025). Another survey found that parents of young children believe that their children learn better from educational apps than hands-on toys (Radesky et al., 2016). Schools and popular childcare standards require educators to engage children with digital devices (NAEYC, 2020). And some researchers have added "digital play" to the list of different forms of long-recognized, evidence-based play types (Chu et al., 2024).

Conclusion/Recommendation

While "digital play" continues to gain traction, we must recognize that digital platforms are not neutral tools; corporate environments put profit over kids. If we don't, we risk displacing the child-led, hands-on play that children need by exposing them to harmful manipulative design tactics and content. To protect children's well-being and

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right to play, we need to reject the false equivalence of digital play and reclaim early childhood settings as play sanctuaries to truly ensure that all children can thrive.

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Screens, Play, and the Developing Brain: Restoring Balance in Modern Childhood

Celia Hogan, Nature Education Specialist

Introduction

Children's daily environments have changed dramatically over the past decade. Across many countries, children are spending more time engaged with digital devices and significantly less time participating in free, imaginative, and outdoor play. While digital technology offers benefits, increasing evidence suggests that excessive screen exposure, particularly in early childhood, can affect sleep, attention, emotional regulation, and social development.

At the same time, opportunities for play, movement, and exploration have declined. Research from neuroscience, psychology, and education shows that these experiences are critical for healthy brain development. Through play, children develop executive function, resilience, creativity, empathy, and the ability to regulate emotions and manage risk.

This white paper examines current research on the developmental impacts of screen exposure and the role of play in supporting healthy brain development. Drawing on international studies and practical examples from play-based programs, it highlights the growing imbalance between digital engagement and real-world play experiences.

The paper concludes that restoring balance in modern childhood does not require eliminating technology, but ensuring that children continue to experience the types of play that support their development. Recommendations focus on protecting time for free play, expanding access to nature-based play, supporting healthy screen habits, strengthening relationships, and designing learning environments and communities that prioritize play-rich childhoods.

Childhood is changing at a pace no generation has experienced before. Over the past decade, screens have shifted from being an occasional part of children's lives to an everyday presence woven into home, school, and social environments. At the same time, opportunities for free, imaginative, active, and outdoor play have steadily declined

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(Gray, 2011, 2013). Many children now spend more time sitting, watching, and swiping than exploring, creating, and connecting with others face-to-face (Rhodes et al., 2022).

From a New Zealand perspective, these trends mirror what is being observed internationally: Rising screen use across all ages, declining outdoor play, increased sedentary behavior, and growing concerns about children's well-being (Rhodes et al., 2022; Royal Children's Hospital National Child Health Poll, 2024). Neuroscience shows that these shifts matter. The developing brain relies on movement, rich sensory input, relationships, and unstructured play to build the neural pathways that support attention, emotional regulation, empathy, and resilience (Radesky & Christakis, 2023).

Research now links high screen exposure, particularly in early childhood, with challenges in sleep, attention, self-regulation, and social development (Domoff et al., 2020; Madigan et al., 2019; Radesky & Christakis, 2023). For older children and adolescents, heavy use of smartphones and social media is associated with increased anxiety, loneliness, and mood difficulties (Haidt & Rausch, 2026; Kelly et al., 2025; Twenge, 2020).

Alongside these concerns, a strong evidence base highlights the protective power of play. When children climb, imagine, negotiate, take risks, and explore natural or social environments, they strengthen the very skills and capacities that digital experiences often displace (Prins et al., 2022; Sandseter et al., 2021; Sandseter & Kleppe, 2024).

This paper explores what current research reveals about these contrasting developmental pathways and how families, educators, and communities can help restore balance in a digital age.

Conclusion/Recommendations

Children's developmental environments have changed rapidly, and the rise of digital technologies has outpaced our understanding of their impact on young minds (Radesky & Christakis, 2023). At the same time, opportunities for free, active, imaginative play have declined worldwide (Gray, 2011; Haidt, 2024). Research across neuroscience, psychology, education, and public health shows that this shift is not

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neutral: Chronic screen exposure and reduced play affect attention, self-regulation, emotional well-being, and the development of core skills children rely on throughout life (Domoff et al., 2020; Madigan et al., 2019; Twenge, 2020).

Yet the evidence also presents a clear pathway forward. Play, particularly unstructured, social, and nature-based play, offers powerful protective benefits (Prins et al., 2022; Sandseter et al., 2021). It supports healthy brain development, fosters resilience, and builds the cognitive and emotional skills that help children thrive in an increasingly complex world (Ernst, 2024; McDonnell et al., 2024).

When families, educators, and communities create environments where play is prioritized and digital engagement is balanced and intentional, children experience measurable improvements in well-being and development (Warburton et al., 2022).

By restoring play to the center of childhood and guiding screen use with intention, we can help children grow up with the capacities, confidence, and connection they need to flourish.

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Playful Parents in Technoference Times

Miriam McCaleb, PhD

Introduction

It is a sad reality that not everyone understands the value of play as a conduit for learning and wellbeing (Bipath et al., 2022). As an advocate for children, an early childhood teacher, and a child development researcher, I have always found it necessary to help some parents understand what children's play means.

This might include explaining, in developmental terms, the value of children's play. Sadly, in this outcome-focused, hyper-busy, maximization-obsessed time in which we live (Paine, 2023), there is apparently more need than ever to justify play. It seems to have become necessary to explain not only the benefits of play but also to clarify its definition as spontaneous, hands-on, and child-led.

Those who work with children and families must learn to communicate how a child's development is fostered when they participate in building a fort, the skills a child develops when they build with blocks or model with clay, and how creative play prepares the brain for adulthood.

Having worked in this realm for more than 30 years, I find nothing new in this need to promote child literacy – that is, to support adults in becoming more literate and knowledgeable about children and explaining the "why" of play. Unfortunately, what is new is the number of people who seem to require such support in the "how" of play.

Given the vital role of play in encouraging responsiveness and fostering warm, reciprocal connections between children and adults (Silton et al., 2026), support for parents in recognizing the role that serve-and-return interactions have in fostering healthy neurobiological growth is essential. Such serve-and-return interactions are exemplified in playful exchanges between the youngest babies and their loving families (Komanchuk, Letourneau, et al., 2023).

Into this already compromised play landscape, there is a new threat: the Great Distractor. Nowadays, use of smartphones is ubiquitous (Morris et al., 2022):

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distracting parents and displacing playtime (Hiniker et al., 2015; Lemish et al., 2020), and the downsides are mounting.

Conclusion

Technoference is a risk to an optimal parent-child connection, and a distraction from IRL. By supporting parents and demanding safer digital and physical environments, we can - and must - promote the vital role of play, with life-enhancing benefits for the next generation.

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Let's Grow Brain P.O.W.E.R.! What Kids REALLY Need to Thrive and How Screens Interfere

Katie Talarico, MSEd

Introduction

Parenting in the digital age is difficult. Maintaining consistent rules is exhausting, and screen time battles feel inevitable. Devices are hard for families to manage. The truth is that parents today are tasked with an impossible feat: to MANAGE the UNMANAGEABLE. Most screen-based activities for children (and adults) have been purposefully designed to be unmanageable: to capture and hold their attention hostage, and to override their best intentions.

These purposeful design features, in combination with well-financed marketing departments, have steered screens into a role of perceived necessity and inevitability in childhood - without proof of benefit. At the same time, an ever-growing body of independent research shows significant harms to the health and well-being of children who overuse screens. Parents are inundated with conflicting messages.

Many advocates are working tirelessly for change through legislation and policies that protect children online, push companies to create safer products for children, and hold companies accountable for harms they cause. However, this is a slow process, and parents are still on the front line, protecting and guiding their children through the digital world. Families need solutions!

On the bright side, research also shows extraordinary benefits to children's development from simple and time-honored activities like play, outdoor time, chores, engaging with others, and reading. We must push back on the assumption that screen time is necessary and inevitable for learning and growth, and strive to bring healthy development back to the center of childhood.

Let's Grow Brain P.O.W.E.R.! aims to do both. Research shows that parents are more receptive to positively framed messages about screen time than to negatively framed, or fear-based, messages (Fairplay, 2025). The Let's Grow Brain P.O.W.E.R.! framework shifts the focus to healthy development, or in other words, what children

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really need to grow and thrive. P.O.W.E.R. is an acronym that highlights healthy developmental activities that provide children opportunities to build the *human skills* they will need in the future.

P- Play

O- Outdoors

W- Work/Chores

E- Engage (with others)

R- Read

When children spend more time on these healthy, screen-free activities, they not only reap the extraordinary benefits these simple activities offer for growing brains and bodies, but they also have less time each day for screens. MORE BRAIN P.O.W.E.R. TIME = LESS SCREEN TIME!

Let's Grow Brain P.O.W.E.R.! offers a simple, memorable framework of shared language that prioritizes healthy child growth and development, gives families a roadmap to healthy development, and educates families about how screen time interferes.

Conclusion

Screen-based activities will never provide as much learning as three-dimensional, sensory-rich, synchronous, and in-person activities. The P.O.W.E.R. activities: play, outdoor time, work/chores, engaging with others, and reading, lead children into the three-dimensional, sensory-rich physical world and allow them to practice the human skills that will help them in the future.

Screen overuse is interfering with children's healthy development, including physically, mentally, socially, emotionally, cognitively, and academically. Giving a child a device might calm and entertain them in the moment, but it also displaces the real-life learning children need to grow and thrive. Families receive conflicting information about screen time and are often unsure of how to proceed. We must provide families with a path forward without blame or shame. When families include more P.O.W.E.R.

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activities in the day, screen time will naturally be reduced. Small changes can have a big impact on development. As families learn about how screen time affects their growing child, they can make more changes when they are ready.

Let's Grow Brain P.O.W.E.R.! provides a simple, memorable framework that promotes healthy developmental activities, encourages healthy change, and explains how screen overuse interferes. Let's Grow Brain P.O.W.E.R.!

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The Algorithm in the "Toy Box": Navigating AI, Play, and Culture

Jessie Ming Sin Wong, PhD

Introduction

Toys are a universal and essential part of childhood. They are tools of play, props for imagination, and objects through which children make sense of their world. Foundational theories of development demonstrate that object play is not just common but essential for cognitive growth. Toys serve as critical pivots for developing abstract thought and are the primary instruments through which children build symbolic understanding (Piaget, 1962; Vygotsky, 1978). The right toys, introduced at the right time, can promote healthy development and create rich learning opportunities (Dauch et al., 2018).

For millennia, these toys remained relatively constant. They were dolls, blocks, and balls, crafted from wood, clay, and rock (Chrisp, 1996). Today, the " toy box" looks very different. We have entered the era of the "smart toy," an era where playthings can listen, respond, learn, and connect to the internet. Artificial intelligence (AI) has moved from research labs into our children's playrooms as interactive robots, adaptive learning games, and voice-activated companions (Holmes et al., 2019; Lee et al., 2024; Su & Yang, 2022). These new toys offer incredible promise, with the ability to personalize experiences and foster new skills (Snooplay, 2024). They also introduce profound new challenges that touch upon the very culture of childhood. This white paper explores the complex relationship between AI, play, and culture, offering guidance for parents and educators to navigate this evolving landscape thoughtfully and protect every child's right to meaningful play.

Conclusion/Recommendations

AI is a powerful new force in the world of play. It can offer children personalized, engaging, and educational experiences that were unimaginable a generation ago. However, without careful guidance and critical oversight, these same technologies risk promoting a homogenized global culture, replacing vital human relationships, and compromising a child's fundamental right to privacy. The path forward is not to ban

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these new tools, but to engage with them wisely. We must shift the conversation from what a toy can do to what it *ought* to do in the service of a child's holistic development.

To ensure that AI serves play, and not the other way around, this white paper offers the following recommendations:

1. ***For parents and caregivers***: Embrace your role as a media mentor and culture curator. Actively choose toys that reflect your family's values, play alongside your child to guide his or her experience, and champion a balanced diet of play that prioritizes social, outdoor, and imaginative activities.
2. ***For educators***: Integrate technology with clear pedagogical goals. Use AI as a tool to support learning, not as a replacement for teacher-led instruction. Model critical thinking by discussing with students how these tools work and the biases they might contain.
3. ***For the toy industry***: Adopt an "ethics by design" approach. Prioritize children's developmental needs and cultural affirmation over engagement metrics. Provide radical transparency in privacy policies and give parents meaningful control over their children's data.
4. ***For play advocates and policymakers***: Champion stronger, clearer regulations that protect children's data and hold companies accountable for algorithmic bias. Support the development of independent rating systems that can help parents evaluate the ethical and cultural quality of smart toys.

The "toy box" has changed forever. It is our collective responsibility to ensure that even as toys become smarter, our approach to play remains wise, humane, and dedicated to the flourishing of every child.

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Playwork

Play is a fundamental human need, but meaningful opportunities for child-directed play are increasingly under threat. As children's freedom, time, space, and access to play continue to diminish, the role of Playwork has never been more important. Rooted in the belief that children are experts in their own play, Playwork seeks to create and protect environments where children can freely choose, direct, and determine their play experiences.

The articles in this category introduce readers to the growing Playwork movement and examine the challenges posed by our modern play deficit. They explore why Playwork matters, how it supports children's healthy development and well-being, and what actions are needed to expand Playwork practices and advocacy efforts within communities. These authors offer a compelling vision for restoring play to its rightful place in children's lives, along with insights, strategies, and calls to action that can help readers become champions for child-led play. Through their collective work, they remind us that protecting play requires both individual commitment and systemic change.

Authors

Cultivating a *Playwork* Movement, Part 1: Our National *Play Deficit*

Jonathan McCloud, PhD; Susan Chlebowski, UK-trained Playworker and Forest School Leader; & Jill Wood, MLIS

Cultivating a *Playwork* Movement, Part 2: The Task Before Us

Jonathan McCloud, PhD; Susan Chlebowski, UK-trained Playworker and Forest School Leader; & Jill Wood, MLIS

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Cultivating a *Playwork* Movement, Part 1: Our National *Play Deficit*

Jonathan McCloud, PhD; Susan Chlebowski, UK-trained Playworker
and Forest School Leader; & Jill Wood, MLIS

Introduction

The last few decades have brought substantial changes to how children in the United States experience childhood. A combination of factors has restricted and reduced childhood autonomy and agency. These include, but are not limited to, changes in parenting and caregiving practices (Doepke & Zilibotti, 2019), decreases in the availability, accessibility, and usability of public and private spaces, and various legal and social policies (Gray et al., 2023; Lareau, 2011). As children have experienced this reduction of independence, their ability to play freely without adult interference has suffered dramatically. Though ostensibly well-meaning, adult expectations for children and ways of being with children have inadvertently limited children's ability to experience the truest sensation of being and presence: self-directed free play. Consequently, children in the United States are experiencing and being shaped by a socially and emotionally debilitating deficit of free play (Gray et al., 2023).

This paper, the first of two, examines the social, cultural, and institutional conditions that have contributed to our national play deficit. The authors consider how restrictions on children's freedom, time, and space; assumptions about play within adult society; and unequal access to play shape children's opportunities for self-directed play. The authors also examine emerging efforts to respond to these conditions and the need for a broader, more connected response.

Conclusion

Our national play deficit is not the result of a single policy, institution, or sociocultural moment. Our deficit has grown through the subtle accumulation of forces that narrow children's freedom, time, and space for unrestricted, self-directed free play. These forces are shaped by implicit assumptions adults hold about the nature of childhood and the purpose and value of play itself. Pervasive social inequities further shape how communities experience the play deficit. Our play deficit is therefore best

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understood as a broad feature of contemporary childhood, produced and sustained through the systems and relationships that organize children's daily lives.

Recommendation

The work already underway across childhood settings and play-friendly spaces shows a desire for change and the capacity to make it happen. However, these efforts remain largely dispersed and disconnected. A meaningful response to our play deficit must mature into a holistic, unified, and unifying response. The task before us requires greater connection among those already working to protect and provide for children's autonomy, agency, and free play. Such connection can begin to create a shared language, relationships, and collective power needed to address the national scope of the play deficit.

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Cultivating a *Playwork* Movement, Part 2: The Task Before Us.

Jonathan McCloud, PhD; Susan Chlebowski, UK-trained Playworker and Forest School Leader; & Jill Wood, MLIS

Introduction

This paper, the second of two, builds on the examination of our national play deficit as presented in Cultivating a *Playwork* Movement, Part 1: Our National Play Deficit. In the first paper, the authors considered how the subtle accumulation of socio-cultural forces has narrowed children's freedom, time, and space for unrestricted, self-directed free play, and how the play deficit is experienced unevenly across communities. The paper concludes that our national play deficit is best understood as a collective, structural problem, and calls for a more robust and connected response among those already working to protect and provide for children's autonomy, agency, and free play.

Playwork, a professional practice and ethical framework for being and working with children (Playwork Principles Scrutiny Group [PPSG], 2005), provides a needed and curative response to our national play deficit. *Playwork* provides adults with a moral and ethical framework in building their relationships with children, as well as intellectual and practical tools to create opportunities and hold spaces for children's free play (Brown, 2015; Brown et al., 2019; Hughes, 2012). This second paper, Cultivating a *Playwork* Movement, Part 2: The Task Before Us, examines the history and practice of *Playwork*, considers strategies for developing a sustainable *Playwork* presence in the United States, and explains how *Playwork* can help adult society begin to repay its debt to children.

Conclusion

The national *play deficit* is multi-layered and complex. *Playwork* is a comprehensive response to that complexity. *Playwork* addresses the layers of adult society, institutions, and communities that contribute to the deficit. This paper has provided a practical, integrated framework through the credentialing continuum, the consortium model, and daylighting *Playwork*. The framework is not reliant on a single

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institution or organization, nor does it depend on an individual champion. The framework is designed to grow with communities.

This paper holds another ambition: to draw the reader towards *Playwork*. Perhaps the reader's next encounter with *Playwork*, be it a conversation, conference, or community event, will feel more recognizable and more urgent because of this paper. *Playwork* is not a distant or exclusively international practice, nor is it limited to niche playgrounds that promote risky adventures. *Playwork* is portable. It is transferable and ready to meet children wherever they are.

Children are living the *play deficit* today, and adult society's debt to children and their play is real. The strategies outlined in this paper are a starting point for developing a *Playwork* movement that works simultaneously through top-down and bottom-up approaches. A *Playwork* movement starts with people already present and committed in children's lives, alongside those who prepare and support future generations of practitioners. This paper and its authors are offering an opening gesture, a challenge, and an invitation to a conversation that does not yet have a home in the United States.

Recommendation

The strategies proposed here operate together as a framework that requires a collection of individuals from multiple locations within the play studies, play-advocacy, and play-adjacent communities. The next step is to convene a National *Playwork* Summit and Working Group to address what Law's (2021) research identifies as an unmet and essential condition for a *Playwork* movement to develop in the United States. The summit should include those already working at the intersection of play, children, and professional practices across the United States. Those most obviously in need of attendance are *Playworkers* currently practicing in the United States. Play scholars and advocates, as well as academic faculty and administration, and various organizational leaders must also attend and reflect the geographic, cultural, and community diversity of the United States.

The National *Playwork* Summit is not a ceremonial gathering, but a working assembly with ambition. The summit should produce an organized body aligned by a mission, vision, and a national *Playwork* agenda. Dedicated individuals and groups

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should leave the summit charged with deliverables aligned to each strategy outlined in this paper, including a set of translated *Playwork Principles* for the US context. This is not a replacement for the existing Principles but a contextually adapted interpretation that honors their origins while reflecting the social, cultural, and historical conditions of the US. Ideally, the summit would generate benchmarks for professional *Playwork* training and education to guide various actors/points along the credentialing continuum.

Who Should Be Present

The summit should include a broad and diverse representation of the play ecosystem, including:

- *Playworkers* currently working in the United States.
- Scholars from fields such as play studies, childhood studies, education, recreation, public health, and social work.
- Leaders of organizations that provide play opportunities for children and youth.
- Representatives from anchor institutions such as parks and recreation departments, schools, museums, libraries, and community-based organizations.
- Advocates for children's rights, disability inclusion, and equitable access to play.
- Professionals working in adjacent fields whose work intersects with play, including landscape architects, city and rural planners, youth workers, educators, and public health practitioners.
- Community leaders, students, and early-career practitioners who represent the future of the field.
- Teachers/educators, early childhood educators, and care providers currently working with children.

As a closing gesture, the reader who has engaged with this paper is precisely the individual the National *Playwork* Summit needs. The *Playwork* conversation has yet to find a home in the United States. This recommendation invites you to help build one.

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The Method, Strategies, and Principles of Play

Play is a powerful vehicle for learning, development, well-being, and human flourishing. Yet supporting meaningful play requires an understanding of the principles, environments, relationships, and pedagogical approaches that help children thrive. The articles in this category explore a wide range of play-based methods and strategies that support children's cognitive, social, emotional, creative, spiritual, and physical development. From loose parts, process art, storytelling, literacy, and outdoor learning to therapeutic play, social-emotional learning, risk-taking, and Reggio-inspired practices, these authors demonstrate the many pathways through which play fosters resilience, belonging, curiosity, and growth. Grounded in research and practical application, the articles provide educators, families, researchers, and practitioners with insights, tools, and approaches for creating environments where play can fulfill its transformative potential and support every child's right to learn, develop, and flourish through play.

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Reading for Resilience: Using Children's Literature to Support Early Childhood Mental Health

Marjorie Cole, MEd, President, IPA – Canada

In Canada, young children are growing up in the long shadow of widespread social and emotional disruption. The COVID-19 pandemic altered routines, relationships, and early learning environments during critical stages of development, and many of its effects—such as increased anxiety, delayed social skills, and family stress—are still being felt (Mental Health Commission of Canada, 2023). At the same time, children continue to face challenges related to grief, housing insecurity, economic pressure, and changes in family life (Government of Canada, 2022). These experiences are appearing in early childhood settings as emotional dysregulation, withdrawal, and difficulty with relationships. Similar patterns are observed internationally, making this a shared global concern (Masten & Barnes, 2018). Yet early childhood educators are often given limited training or resources to respond to these growing mental health needs (Shulman, 2016).

Children's literature offers a simple, affordable, and developmentally appropriate way to support young children's emotional wellbeing. Through stories and shared reading, children can safely explore emotions, build coping skills, and feel less alone within the supportive framework of play-based learning (Kumschick et al., 2014; Reach Out and Read, 2023).

Introduction

The early years of life are a time of rapid emotional, social, and brain development. During this period, children learn how to understand feelings, form relationships, and feel safe in the world. These early emotional experiences lay the foundation for mental health across the lifespan (Masten & Barnes, 2018). When young children feel supported and emotionally secure, they are better able to learn, play, and connect with others. When they feel overwhelmed, frightened, or alone, their development can be disrupted in ways that last for years (Shulman, 2016).

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Recent years have highlighted that young children are experiencing more stress than ever before. Family changes, economic pressure, illness, community stress, and the lingering effects of the COVID-19 pandemic have all increased emotional strain on children and caregivers (Mental Health Commission of Canada, 2023). Many young children are now showing signs of anxiety, grief, emotional dysregulation, and difficulty with relationships (Government of Canada, 2022).

However, many early childhood environments are not equipped to respond to these needs in developmentally appropriate ways. Mental health support is often limited, and young children cannot benefit from traditional therapy that relies on talking and insight (Masten & Barnes, 2018). Young children need something that fits their world of play, imagination, and stories.

Children's literature offers exactly that. Stories give children a way to explore emotions, challenges, and relationships through characters and imagination. When educators use books intentionally, they can help children feel seen, understood, and less alone. In play-based early learning settings, story time is already a daily routine. Shared reading should be recognized as a powerful mental health support for young children (Kumschick et al., 2014; Reach Out and Read, 2023).

Conclusion and Recommendations

Children's mental health begins in the earliest years of life. When young children feel safe, understood, and emotionally supported, they can better learn, form relationships, and handle challenges (Masten & Barnes, 2018). Children's literature offers a simple, powerful way to support this emotional development (Kumschick et al., 2014).

Books help children make sense of their feelings, see that others struggle too, and imagine ways to cope. When reading is combined with play and caring relationships, it becomes a form of emotional care (Reach Out and Read, 2023).

Recommendations:

1. Early childhood programs should recognize shared reading as a mental health support, not just a literacy activity.

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2. Educators should receive training on using books to support emotional development and regulation.
3. Childcare centres and other early learning environments should build diverse collections of books that include stories about feelings, loss, change, and resilience.
4. Encourage story-based play as part of daily routines.
5. Policies and funding should support mental-health-informed literacy programs in early childhood settings.

By placing stories at the heart of emotional support, we can help young children grow into more resilient, confident, and connected individuals.

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Play is a Powerful Therapeutic Tool

Mina Dilip, MA, Play Therapist

Introduction

People tend to dismiss play as mere leisure. Some cultures view play as a waste of time. However, emerging trends in psychology and neuroscience demonstrate its profound role in healing and recovery. This white paper explores the healing power of play as a therapeutic tool, highlighting its impact on trauma recovery, nervous system regulation, emotional healing, resilience-building, and the development of social skills. Using a case-study-based backdrop of field evidence and cross-cultural perspectives, this white paper aims to provide practical recommendations for practitioners, institutions, and policymakers. By framing play as an essential component of health care, this paper calls for systemic recognition and investment in play therapy as a critical intervention, not only for children but also for adolescents and adults.

Conclusion

Healing does not always come through heavy conversations or analytical insight. Sometimes, it comes through laughter, imagination, and the simple act of play. Play is a quiet revolution. It does not demand; it invites. It does not pressure; it opens. It does not lecture; it allows. For children, adults, families, and communities, play is not a luxury—it is a lifeline.

Reclaiming play is not about escaping reality; it is about transforming it. It is about finding safety in chaos, joy in despair, and connection in isolation. In a world that demands seriousness, choosing to play may be the most radical act of healing we can do.

The call to action is urgent: invest in play therapy, train practitioners, adapt culturally, and advocate for systemic recognition. By honouring the healing power of play, we honour the most natural pathway to recovery and well-being.

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Unlocking Potential: The Transformative Power of Loose Parts Play in Early Childhood Education

Michelle Fazio-Brunson, EdD, Northwestern State University of Louisiana; Cynthia DiCarlo, PhD, Louisiana State University; April Giddens, EdD, Northwestern State University of Louisiana; & Omar Vigo, PhD, Louisiana State University

Introduction

This white paper explores the benefits of loose parts play in early childhood education. It addresses the problem of limited opportunities for children to develop crucial cognitive, social-emotional, and physical skills through open-ended play-based experiences. Drawing on research and practical applications, it proposes implementing loose parts play to foster creativity, problem-solving, and overall development in young learners, supporting their right to play (Gibson et al., 2017). Despite decades of research supporting the benefits of open-ended play, opportunities for loose parts experiences remain limited in many early childhood settings. Yet in practice, these opportunities remain unevenly implemented, with many programs still relying heavily on structured, adult-led activities.

Conclusion/Recommendations

Loose parts play is a powerful approach to early childhood education, offering measurable benefits in approaches to learning, cognitive growth, social-emotional well-being, and physical development. Young children are naturally curious, driven to explore, and eager to test ideas. When given open-ended materials, they investigate cause and effect, experiment with spatial relationships, and innovate through hands-on experiences. These opportunities allow children to build independence, develop resilience, and demonstrate their knowledge in ways that are developmentally appropriate and personally meaningful.

In an educational climate that increasingly prioritizes standardized outcomes, loose parts play is a vital reminder of the value of process over product. It affirms the importance of unstructured, child-led exploration as a core component of learning, not an optional extra. By providing children with environments rich in diverse, open-ended

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materials, educators can support agency, creativity, and lifelong learning skills while honoring children's right to play.

Recommendations for Implementation

- Offer developmentally appropriate materials and open-ended activities that allow time for sustained discovery throughout the daily schedule.
- Provide a wide range of discovered, recycled, and natural materials with varied textures, sizes, and shapes to stimulate creativity and sensory exploration.
- Design indoor and outdoor loose parts play spaces with accessible storage to foster independence and autonomy.
- Invest in professional development focused on engaging, intentional ways to integrate loose parts play into curriculum and routines.
- Partner with families by requesting safe, appropriate materials and sharing strategies for using loose parts at home.
- Document learning through observations, photographs, and examples of children's work to communicate the value of loose parts play to families, administrators, and policymakers.

When implemented thoughtfully, loose parts play benefits every child and strengthens the quality of early learning programs. It is both an educational strategy and a statement of belief that children deserve the freedom, time, and materials to explore, create, and grow. By embracing loose parts play, educators, families, and policymakers commit to fostering environments where every child can explore, create, and grow — and to shaping an educational culture that values curiosity, agency, and the right to play.

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This is Your Brain on Stories: Make-Believe Play, Fairy Tales and Resilience

Stephanie Goloway, EdD

Introduction

Make-believe play. Pretend play. Dramatic play. No matter how we label the ephemeral story creation of childhood, two things remain constant: its omnipresence in childhood, and its critical importance to healthy development across all domains. Yet, like play in general, this powerful weaving of symbols, social interaction, and whimsy is in decline. The same can be said for another bastion of make-believe, fairy tales. Parents and teachers often reject these ancient tales as frightening and inappropriate for children.

In this paper, I'll examine recent neuroscience on the developmental significance of fairy tales and storytelling, and how this relates to make-believe play. I will suggest implications for the neurodevelopmental adaptive capacity for resilience. I offer strategies for encouraging rich, imaginative play in all settings, along with a plea to protect the joyful, messy quicksilver of make-believe so children can successfully ride the inevitable waves of change in their worlds.

Conclusion

Make-believe play is a pervasive and universal part of child development. It is an important way for children to develop symbolic thinking, interact with other children, self-regulate, and demonstrate agency and initiative. All of these contribute to the brain's capacity for resilience. In many settings, however, children are not given the time and space to engage in rich, meaningful pretend play.

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Reframing Early Art Experiences: How Process Art Supports Real Learning

Daniele Hunter, EdD

Introduction

The Product Art vs Process Art Debate

Two distinct types of art are most commonly used in early childhood settings. They are product and process art. Product art refers to closed-ended activities with step-by-step instructions and an end result that looks nearly identical for each child (Bongiorno, 2014; McLennan, 2010). Process art, by contrast, has no predetermined end goal (McLennan, 2010), no step-by-step instructions to follow, and an end product unique to each child (Bongiorno, 2014; Capriotti, 2025). Given the differences between product and process art, it is no wonder there has been a longstanding debate in early childhood about which art is right for young children to engage in.

Conclusion

Product art and process art are fundamentally different art forms most commonly found in early childhood settings. This has led to a longstanding debate over which is better for young children. While product art may support things such as following directions and motor skill development, it is often misaligned with children's readiness, limiting their creativity, and is primarily driven by adults. Process art, on the other hand, supports children's naturally unfolding development, promotes higher-level thinking skills, and strengthens children's social-emotional development. Ultimately, the question is not about which type of art is better, but rather which approach aligns with how young children learn.

While children may grasp a concept taught by an adult, their true understanding does not develop unless they have a chance to learn in the way their bodies and brains are designed. This knowledge is built through active, meaningful, and social experiences that let children build on their prior knowledge. You can't pour it into children. As educators, the experiences we offer to young children must align with this belief. When it comes to art, process art supports every part of what young children need for long term learning to happen. It is both physically and mentally active, engaging children's

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bodies and minds as they manipulate tools, think creatively, question, and problem-solve. Process art allows children to work within their current developmental level, building seamlessly off of their prior knowledge with no expectation of meeting a goal they are not yet ready for. Finally, process art lets children think freely, drawing on their social backgrounds and community upbringing to create, imagine, and learn.

While putting this into practice might seem daunting for some, it is essential for early childhood programs. As central members of children's learning, growth, and development, educators must commit to shifting perspectives toward more valuable art practices. These changes don't need to be major; even small shifts can have a significant impact. Beginning with well-stocked art areas, educators can create a space that welcomes process art and the creativity, imagination, and learning it brings. By shifting engagement toward open-ended questions, teachers encourage children to think more deeply about their work. Letting go of unrealistic expectations placed on educators fosters teaching practices that honor each child's natural development. By keeping the goals of the experience in mind above the end result, educators can maintain art experiences that value the learning process and the construction of knowledge. Finally, by celebrating the journey of process art, educators can begin shifting onlookers' understanding, helping them see each milestone in a child's learning journey as a pivotal moment that lays the foundation for ongoing growth and development.

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Part 1: Where Did All The Play Go?
The Play Confusion: When Everything Is "Play," Nothing Is

Debra L. Lawrence, PhD, Professor, Delaware County Community College
Co-President, IPA USA

"The opposite of play is not work — the opposite of play is depression"
(Sutton -Smith 1997, p. 198)

Part 1 focuses on the issues that have led to a deficit in child-led play in early childhood settings and offers ideas for fixing a broken system. It asks: What is replacing child-initiated play?

Part 2 discusses how play continuums have contributed to the issues facing early childhood educators and provides strategies for getting back on track, what to use in assessment, and the tools needed to make learning visible.

Introduction

Children's childhoods have disappeared, and the shift away from child-led play diminishes their engagement and focus, making it hard for them to develop curiosity and explore the world around them. Instead of having the freedom and autonomy to learn through play, childhood has turned into 'getting ready' for a future filled with standardized tests and developmentally misaligned activities.

Children's play is being replaced by SMARTboards, iPads, Chromebooks, YouTube videos, flashcards, worksheets, homework, dance, gymnastics, softball, tutoring, teacher-directed classrooms, and daily schedules organized into small blocks of time that require too many transitions.

The early childhood profession needs to return to what we know works with children. To focus on the science of how children learn. To provide the time, space, relationships, and environment where children thrive. As Bev Bos reminds us, "The Child is the Curriculum" (Saia, 2016). This reminder may encourage educators and administrators to feel hopeful and proactive about restoring meaningful play in early childhood settings.

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To begin this exploration, educators must regain their agency; instead of asking, 'Why is it this way?' they must use their power to say, 'There is a better way to provide early childhood education.' Early childhood professionals must push back against 'readiness' pressures and unrealistic academic expectations that do not align with children's development, and share with families and administrators why child-led free play is how children learn. Advocating for this shift is essential for meaningful change in early childhood practices and for the profession to become *developmentally focused* rather than *planning activities that meet state standards*.

Conclusion

What You See, Feel, and Hear in the Setting.

Whatever the setting, what children see, how they feel, and what they hear all affect their development. What a teacher sees, feels, and hears also impacts the teacher. Children and teachers come from different cultural backgrounds, which can make children feel less safe or feel that their culture is not valued. Teachers need to be aware of how their cultural experiences may affect their ability to form loving, positive relationships. Here are a few things to consider. When you walk into your setting, does it feel welcoming to families and children? What does it smell like? Are there areas to get away? Is it comfortable?

What do children see? Is it visually overstimulating? Is it cluttered? Do you have enough materials for groups of children to play together? Is your daily schedule based on the clock or on the children?

What do you hear? Loud music or just music all the time? What type of music, yours or the children's? Do you hear crying and fighting, loud teacher voices, toys being dumped, chaos? If you hear this, the children are frustrated because you are too structured and they do not have enough time to play.

In Part II, the paper discusses solutions and strategies for Part I's problems, describes terms that have confused teachers, and explains how play continuums have been used to trick us into thinking they are play. Part II also compares

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the definition of child-led play with other definitions used to address the readiness movement. Part II guides you to reimagine an environment where children thrive.

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Part 2: Where Did All The Play Go?

The Play Confusion: When Everything Is "Play," Nothing Is

Debra L. Lawrence, PhD, Professor, Delaware County Community College
Co-President, IPA USA

Part 1 focuses on the issues that have led to a deficit in child-led play and offers ideas for fixing a broken system. It asks: What is replacing child-initiated play?

Part 2 offers strategies for getting back on track, a clear definition of child-led play, ways to assess children's development, scenarios, and the tools needed to make learning visible.

Introduction

Play has become confusing. To cater to the "readiness movement," early childhood teachers are bombarded with different terms used to describe play, or what others have called play-hijacked terms (Pyle & Danniels, 2017; Hughes, 2012; Sands, 2016). Have you heard of any of these? We play with a purpose; we play to learn; we use play-based strategies.

Recognizing that these terms dilute and erase play from early childhood will begin to rectify years of readiness preparation and return home and early childhood settings to places where children's laughter, joy, excitement, and curiosity can be felt, seen, and heard. Teachers and parents need the confidence and knowledge to push back on those who believe play is frivolous and only a break from learning (Yogman et al., 2018). When early childhood professionals see the value of child-initiated play, they can regain the joy and excitement of watching children's learning unfold during play.

Conclusion

Pushing Back and Reviving Child-led Play/Free Play

Redefining the role from teacher to play facilitator is how to institute child-led free play. Here are some tips to get you started.

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- A facilitator who acknowledges that children are capable rather than needing teacher guidance and control, and who recognizes and values child-led play as a biological necessity rather than a break from learning.
- Is aware that children's chronological age does not align with their developmental age and uses the Centers for Disease Control and Prevention (2025) to determine each child's development.
- Makes learning visible to parents and administrators by using authentic assessment strategies, work samples, photographs, documentation boards, running records, and other artifacts.
- Uses knowledge gained through observations to enhance the environment based on children's emerging interests or inquiries
- Uses these interests as the source for a project or study, moving away from purchased or teacher-determined curriculum or repetitive monthly themes.

In Part I, you have been given some reasons for the play deficit.

In Part II, you have been given some strategies for pushing back. These papers do not cover all the reasons early childhood educators struggle to provide child-led free play. If this topic interests you, there are many more authors in the 2026 IPA USA White Paper and in the 2024 IPA USA White Paper. These are excellent resources for you and can be found at IPAUSA.ORG/WHITEPAPER

The Case for Play

An important next step is to gather the language you feel comfortable using to "push back" on what harms children's development and "push in" on child-initiated free play. Frame them, and put them up on walls or in the hallway so visitors and families can see why child-initiated FREE play is how children learn.

The following resources are just the beginning of your journey to protect childhood. Included are quotes from theorists that describe how child-led play is a biological necessity for building the foundations of future learning. Myths about play and school readiness, and a link to the U.N. Article 31 on the rights of the child to play.

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Information from the American Academy of Pediatrics about child-led play. Some of these suggestions are also on the Reference page.

- PowerPoint of my slides from theorists. I have permitted you to edit -PowerPoint Slides of Theorist Quotes
- Myths about Play and School Readiness- Please note my description of where I got these and verify before using.
- The United Nations Convention on the Rights of the Child (UNCRC) recognized childhood as "a special, protected time, in which children must be allowed to grow, learn, play, develop and flourish with dignity." Article 31 states, "Every child has the right to rest, relax, play and to take part in cultural and creative activities.... Children also need leisure, defined as time and space without obligations, entertainment, or stimulus, which they can choose to fill as actively or inactively as they wish" (United Nations, 1989, Article 31).
- Pointer (2026, para. 1): "Play is crucial for supporting healthy development; promoting stable, nurturing relationships; and mitigating toxic stress. A child's play experience can impact their physical, mental, and social-emotional health outcomes."
- In 2025, the American Academy of Pediatrics reaffirmed a 2018 clinical report, The power of play: A pediatric role in enhancing development in young children. *Pediatrics*, 142(3), Article e20182058, by stating, "Child-led play is a singular opportunity to promote the social-emotional, cognitive, language, and self-regulation skills that build executive function and a prosocial brain. Furthermore, play supports the formation of the safe, stable, and nurturing relationships with all caregivers that children need to thrive." That play builds executive functioning. "Play is not frivolous: it enhances brain structure and function and promotes executive function (ie, the process of learning, rather than the content), which allows us to pursue goals and ignore distractions," and warns that when play and safe, stable, and nurturing relationships are missing, "toxic stress can disrupt the development of executive function and the learning of prosocial behavior, (para 1-3).

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- The American Academy of Pediatrics describes child-led play as essential to cognitive, language, physical, social, and emotional development, along with positive, loving, and consistent relationships as children play (Ginsburg, 2007).
- Bruce Perry (2001) discussed how play contributes to children's understanding of the world around them. With the school readiness movement focused on academics, Perry reminds us that a child's curiosity and active exploration of the environment fuel development. As this cycle repeats, children's curiosity and motivation grow stronger.
- To see how the brain creates connections, examine how neural pathways develop. Free play creates these neural connections, promoting development across physical, social, emotional, and cognitive abilities. Free play wires the brain for the skills we will use throughout life. These skills include "physical agility, social confidence, emotional regulation, creativity, and resilience(Brown & Vaughn, 2009)
- Ginsburg (2007) explains the benefits of child-initiated play, describing opportunities to use creativity, imagination, and physical, cognitive, social, and emotional strength, which are development's building blocks.
- In the book Play Across All Spaces, edited by Erin Casey and Courtney Dewhirst (2026), we gain more insight into why child-led play is a biological necessity for young children's healthy development.
- Panksepp states that "play is not just something that keeps kids busy, but instead 'activates fundamental biological systems that support learning and development,' p. 5.
- Panksepp (2007) reminds us that brains are wired for play, which allows us to adapt to new experiences. Panksepp (2007 continues by stating that play allows the brain to adapt to new experiences.
- Pellis and Pellis (2009) describe how child-led play stimulates development in the areas responsible for executive function and social and emotional development.
- Porges (2009 describes how play supports our ability to handle stress and connect with others when children's play promotes enjoyable interactions.

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- Stuart Brown (2014), a leading psychiatrist, author, and founder of the National Institute of Play, discusses how play deprivation disrupts normal development of social, emotional, and creative problem-solving and can carry serious consequences for the individual and the public.
- Children's development: NAEYC (2020) explicitly establishes in Principle 1 that all domains of child development—cognitive, physical, social, and emotional—are interrelated and interdependent, meaning development in one domain influences and is influenced by development in other domains.
- Transcript of Peter Gray's Podcast.
- Schamuhn, T. (2024, November 6). The Power of Play with Peter Gray [Episode 105]. The Child Psych Podcast. Spotify/Publisher. https://open.spotify.com/episode/4bB2tJtVPBB1krFtzxPlA5?si=FVx4iGCiRIeLmkQv3AogVQ

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Explorers and Detectives: The Multimodality of Children's Literacy Development Through Play and the Role of the Educator

Emma Melo, BA

Introduction

The decision to research the topic of children's literacy development through play came about as a request for a faculty professional development on supporting emergent literacy, and my own fascination with how educators in Reggio Emilia refer to the "mysterious signs and symbols" of emerging literacy and numeracy as "the codes" (Chieli, 2025). In 2025, I attended the Students and Professors Study Group, L'approccio educativo di Reggio Emilia, at the Loris Malaguzzi International Center in Reggio Emilia, Italy, to deepen my understanding of Reggio Emilia's innovative approach to early childhood education.

I came to the conference seeking answers to many questions, including how literacy is learned and taught within the Reggio Emilia context, and whether there was any formal preparation for primary school. After three days of attending presentations, studying documentation and artifacts of children's work, visiting schools and ateliers, and conversing with teachers and pedagogistas, it became clear that children in Reggio schools were developing complex literacy skills and habits through play and project work, without formal academic or prescribed curricular instruction. Instead, the teacher's role was to help children "fall in love with the codes," or in other words, to support the journey and natural desire through which children explore, use, play with, and make meaning from the "fascinating and mysterious" marks, signs, and symbols of their culture (Chieli, 2025).

As an ECE practitioner who appreciates the complexity of both children's learning and the role of the teacher behind this simple statement, "falling in love with the codes," I was led to ask the following questions: how do children develop literacy skills and habits through play; how can early childhood educators support emergent literacies and protect play; and, how are children's use of "the hundred languages" as termed by the Reggio approach (Edwards et al., 2012) evidence of developing literacy skills?

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I am the Pedagogical Coordinator at the Highland Presbyterian Church Nursery and Weekday School in Louisville, KY, USA, where I facilitate emergent and contextual curriculum, project work, and professional development. I am also a faculty member in the children's program at the Louisville Ballet School and a lifelong dancer. I am an early childhood education professional, an advocate for children's rights, and a promoter of the arts. I firmly believe that the early childhood years are the most important time for the development of the human brain and body, and that the early childhood educator plays a crucial role in supporting and facilitating this growth. As an artist and educator who embraces the pedagogical philosophy of "The Hundred Languages of Children" (Edwards et al., 2012), I know firsthand the value and legitimacy of human expression through multiple modes and media. I also believe the professions of ECE and arts education are undervalued and under-supported, and I aspire to amplify the voices and work of children and educators who have historically been unheard and unseen.

In researching this topic, I selected publications mostly from the last five years within a constructivism paradigm that aligns with my teaching and learning philosophy. I also chose postmodern research paradigms that challenge dominant, narrow, or static thinking. The methods and tools used to collect and interpret data (Mueller et al., 2024) are familiar to my pedagogical practices of observation and documentation.

Conclusions

The idea of "teacher as researcher" has become a major focus of my workplace professional development. We have collectively continued this study of early literacy by co-constructing knowledge through examining our practices and documentation, consulting external resources, and participating in hands-on learning opportunities. I continue to research how play in early childhood builds reading and writing skills, and specifically, how the latest findings can be appropriately applied to early childhood literacy development in ways that protect play and early childhood from academic pushdown. We aim to fill the research gap with our own findings. We must continually align our values and practices with theory to support young children's learning and rights. However, we must guard against complacency and be willing to challenge

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dominant powers, rather than become overly reliant on research while ignoring the evidence before our own eyes.

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Children's Right to Play: Nurturing Social-Emotional Learning (SEL) Through Play in Early Childhood

Lin Moore, PhD, Texas Woman's University &
Elaine Zweig, PhD, Educational Consulting

Executive Summary

Play serves as an essential pathway for children to develop social-emotional learning (SEL) by enabling them to acquire social competencies through joyful, self-directed engagement. The Collaborative for Academic, Social, and Emotional Learning (CASEL) outlines five core competencies—self-awareness, self-management, social awareness, relationship skills, and responsible decision-making—which are each uniquely supported by diverse play types. Specifically, sensory play builds self-awareness and confidence, while physical play fosters self-management and perseverance. Furthermore, imaginative play and games with rules develop social awareness and empathy; construction play hones relationship skills through cooperation; and exploratory and nature-based play promote agency and responsible decision-making.

To realize these benefits, playful experiences must occur within nurturing relationships and safe environments that reflect children's diverse cultural and linguistic backgrounds. Adults facilitate this by providing the necessary space, time, and materials for both free and guided play. Finally, successful SEL integration requires stakeholders to recognize play as a fundamental right. Including policies necessitates ensuring ample time for play, specialized teacher preparation, and adequate funding for materials that support the development of the whole child.

Introduction

The recent focus on the critical value of social-emotional learning for young children requires a re-examination of the role of play in supporting whole-child development (OECD, 2021; The Lego Foundation, 2018). Social competencies are a set of social, emotional, and cognitive skills that allow children to interact successfully with peers and adults (Ecological Approaches to Social Emotional Learning Laboratory,

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2024; Schmidt, 2019). The prefrontal cortex manages these skills and takes time to learn and apply appropriately across various settings (Bergen, 2007; Springer, 2020). Early childhood educators, parents, and caregivers, as caring adults, are uniquely positioned to provide opportunities for children to acquire and practice social competences through playful learning.

Conclusion

Children need joyful, playful learning to develop social competencies and emotional well-being. It is time for adults to stand up and advocate for children's right to play at home, in their communities, and in their school and educational settings.

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Is Risk the Reward? Toward an Emphasis on Risk-Taking and Decision-Making in Play and Learning Spaces

Alissa Rupp, FAIA

Introduction

To thrive in an ever-changing world, children develop and improve their ability to adapt. Adapting successfully requires trying new things, preferably in a context where "failure" is survivable. The instinct to protect children from failure is strong, so adults often shield children from contexts perceived as risky. Yet this can limit children's opportunities to adapt or learn from bad decisions when the stakes are low (Vedantam, 2025) and thus leave them unprepared when the stakes are higher. Children's museums provide a unique environment where parents trust that children are safe; children encounter new challenges in a playful space; and adults and children alike learn how to react to mistakes or failures (Rupp et al., 2023). With this in mind, museum professionals and others who are focused on learning through play must encourage children to assess—and take—risks.

This paper will discuss how children's risk-taking and risk-assessment relate to the development of core competencies and resilience. The overarching mission of children's museums—encouraging learning through all types of play—may also set the stage for children to become better decision-makers and face challenges with confidence.

Conclusion/Recommendation

Risk is the Buzz Word; Growth is the Point. So, while there is a lot of buzz about risk, the idea posited here is that taking risks is not the point of the play, or of the learning. *Growth* is the point. Developing diverse competencies is the point. Risk is meant to be mitigated, competency builds over time, and decision-making is a skill that bridges the two. Assessing the results and consequences of our decisions is how we grow (Keeler, 2020). But it is a process: when we see videos on social media of small children competently using a very sharp tool, or handily starting and using a cooking fire, or fluidly playing an instrument in front of hundreds of people, or expertly climbing a tall

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rock face, what we are seeing is actually a low-risk situation. We are seeing a situation where someone—probably an adult who cares about them—helped that child develop their skills, making the activity the child was undertaking *less risky*. The younger person took on what they could and grew into the skill. At the point of the viral video, what the child could take on might indeed be high stakes; that is, something quite bad could happen. But if something is high-stakes, that is the best reason for it to be low-risk. That high-stakes situation is now within that child's capabilities because they feel competent, know their boundaries, make informed decisions in the moment, and will be resilient if things do not go as planned. And children's community, we hope, will be there for them no matter the outcome.

Work in this area with children and youth has significant societal implications. In his far-reaching discussion of gun violence in the United States, Jens Ludwig (2025) describes a range of dangerous situations faced by youth. Each emerged from a relatively short, intense interval, in which a series of very bad decisions were made by one or more of the young people involved. When youth are navigating stressful conditions in their day-to-day lives and then face a physical or emotional challenge they cannot manage or avoid, good decision-making (or "self-interruption") can prevent a disastrous outcome. However, if we combine such a situation with access to a firearm, the heat of the moment can easily result in a fatal decision before any cooler heads or helpful bystanders can prevail. In such a moment, the stakes are indeed very high; there are extreme risks, and the competencies required—diffusing a situation, calming oneself, resisting the urge to be drawn into rage—may not be readily at hand (Ludwig, 2025).

Children's museums, like many youth-centered organizations, help children grow by encouraging them to take calculated risks and expand their intellectual, physical, and emotional horizons. Exhibits and programs that include child-led, intergenerational play can build decision-making muscles while building actual muscles and create internal as well as physical strength and well-being. We can help children (and adults!) learn some of those life skills through play, friendship, and community. Let's continue to help all children assess and mitigate risks and make good decisions, even when the

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stakes are high, so they can do what we really want them to do: become happy, healthy, competent adults.

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Play, Spiritual Development, Spiritual Flourishing

Deborah Schein, PhD

Introduction

Understanding the relationship between play and Spirituality in early life is essential, as it informs the role of play in development. The concept of play resonates across all ages. However, questions remain regarding how infants engage in play, what they experience during play, and how play and spirituality interact. Most importantly, it is necessary to consider why this relationship matters.

Conclusion

Parents and educators serve as models of Spirituality and create environments where children can experience their own joys. This approach involves being present with children without interrupting, overshadowing, or directing their actions, observations, or inquiries. The emphasis is on sharing in children's self-discovered moments. Adults are also responsible for providing environments, materials, and tools that support children's spiritual exploration and interactions. Achieving this requires a deep understanding of each child's disposition and what resonates with them (Holman & Schein, 2024). Furthermore, adults model spirituality by experiencing and sharing their own moments of wonder, awe, joy, and inner peace with children and others.

This perspective parallels Montessori's concept of the *absorbent mind,* wherein children rapidly and effortlessly assimilate experiences from their environment. Through this process, children construct their identities (Montessori, 1949 as cited in Claremont, 1967). From birth, children possess the capacity to absorb information from their surroundings (Prowant, 2023). It is essential to recognize that children are not simply undeveloped adults; they possess unique skills and intrinsic abilities that warrant acknowledgment and respect.

Contemporary neurological research demonstrates that young children can perceive and recall minute details due to the active role of dendrites in processing new information from both immediate experiences and the environment (Carlson, 2006; Gopnik et al., 2001; NAEYC, 2005; Shonkoff & Phillips, 2000; Siegel & Hartzell, 2003;

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Vygotsky, 1962). Research in Spirituality further supports these neurological findings, indicating that all humans possess an innate spiritual self from birth, which must be recognized and nurtured throughout life to enable flourishing (Miller, 2021).

Parents and educators should consider these findings, as they are responsible for creating experiences and environments that foster meaningful spiritual moments and opportunities for play. It is important to reflect on what children are actually absorbing from their surroundings. In the context of the digital age and increased technology use among young children, parents and teachers should critically evaluate the value and relevance of screen-based learning for children's spiritual development.

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How Reggio-Inspired Teachers Enact Playful Learning: Characteristics of the Reggio Emilia Philosophy in Practice

Autumn E. Smith, MEd & Cynthia F. DiCarlo, PhD
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Introduction

The Reggio Emilia approach is an educational philosophy that originated in the city of Reggio Emilia, Italy. Developed by Loris Malaguzzi and described as "a philosophical approach focused on listening and respecting children and their potential by witnessing their actions towards reformulating everyday practices, ideas and projects" (Santín & Torruella, 2017, p. 50). The first Reggio school, established in 1963, placed great emphasis on nurturing relationships between adults and children while fostering environments rich in opportunities for play, exploration, and discovery. Santín and Torruella (2017) note that arts education models in Reggio schools support self-expression, communication, and critical thinking—often expressed through playful interaction. In contrast to more rigid early childhood programs, the Reggio philosophy views the child as an artist, scientist, and active participant, without limiting creative or playful processes.

The philosophy, guided by eight core tenets, the philosophy integrates child-led play.

1. **The Environment as the Third Teacher** – Spaces are intentionally designed to invite playful exploration, experimentation, and creativity, allowing the environment itself to partner with play-based learning.
2. **100 Languages of Children** – Children communicate and make meaning through many forms of play: dramatic play, building, drawing, dance, music, storytelling, and scientific exploration.
3. **Long-Term Projects** – Often emerging from children's play interests, these projects allow extended engagement in imaginative narratives, problem-solving, and collaborative construction.

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4. **Teacher-Researcher** – Teachers observe and participate in children's play to better understand their thinking, interests, and learning processes, using play as a key context for inquiry.
5. **Image of the Child** – Children are viewed as capable, curious, and resourceful, with play seen as a powerful medium for demonstrating competence and agency.
6. **Negotiated Learning** – Learning goals and play themes are co-constructed between children and adults, allowing for shared ownership and direction of the play experience.
7. **Documentation** – Photographs, transcripts, and artifacts of children's play are collected and displayed, making learning through play visible to children, educators, and families.
8. **Social Relations** – Play is recognized as a social act that builds relationships and shared understanding among children, families, and educators.

Together, these tenets position play not as a separate activity but as the foundation of learning in Reggio-inspired environments. By integrating play into all aspects of curriculum and interaction, the approach affirms both developmental research and Article 31 of the United Nations Convention on the Rights of the Child, which asserts that every child has the right to rest, leisure, and play.

Conclusion

This case study aimed to identify characteristics of the Reggio Emilia philosophy in practice. Participating educators described this philosophical approach in their own words. Overall, the themes determined from the participants' responses largely mirrored the tenets of the approach as described by Santín and Torruella (2017), with many responses underscoring the role of play as a central mode of learning and interaction in Reggio-inspired classrooms.

The most prevalent theme generated from the coded responses was **Child-centered**. We recorded 40 instances of codes contributing to this theme, including *child interests*, *respect for the child*, *support for the child*, and the *child is*

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competent/capable. The codes recorded under this theme reflect the fifth tenet of the Reggio Emilia philosophy, *Image of the Child*. According to Santín and Torruella's (2017) definition, the child is a "powerful, competent, creative, curious, full of potential and ambitious entity" (p. 53). This view positions children as active agents who shape their own play experiences, using play to explore ideas and construct knowledge. As Dodd-Nufrio (2011) notes, the Reggio Emilia classroom is "an environment that allows the child to be a producer of culture and knowledge – the child is a knowledge maker" (p. 236). Participants described play, particularly self-directed play, as a key avenue for children to express agency, test ideas, and engage deeply with peers and materials.

Another theme participants identified was **Learning from the environment**, with 16 code instances. Codes included *'natural environment' and 'environment' as the third teacher*. This theme corresponds with the first tenet of the Reggio Emilia philosophy, *The Environment as the Third Teacher*, which holds that "teachers organize the space in a way that is inviting for students to explore, experiment and investigate" (Santín & Torruella, 2017, p. 53). In practice, this often translates into environments designed for open-ended, playful exploration—such as loose parts, natural materials, and outdoor spaces that invite imaginative play and collaboration. The philosophy's socio-constructivist foundation supports this connection, emphasizing that "both children and adults co-construct their knowledge through interactions with people and the environment" (Dodd-Nufrio, 2011, pp. 235–236). Nature-based play, in particular, was seen as promoting belonging and community connection (Omidvar et al., 2019).

The third theme, **Documentation**, included 10 instances of codes such as *Documentation* and *reflection*. This theme aligns with the seventh tenet of the Reggio Emilia philosophy, where Documentation serves as a way to "present and represent the experiences, thoughts and ideas of the students and to showcase their learning processes" (Santín & Torruella, 2017, p. 53). Participants often described documenting children's play as a way to deepen learning—using photographs, transcripts, and artifacts from play episodes to revisit ideas, extend narratives, and make children's thinking visible. Hart (2006) emphasizes that in the Reggio approach, Documentation not only records the history of a project but also guides play-rich learning experiences.

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Inquiry, the fourth theme, had nine code instances (*inquiry/inquiry-based* and *explore and experiment*). These playful investigations often began as spontaneous interactions with materials or environments and evolved into structured explorations or collaborative problem-solving. Inan, Trundle, and Kantor (2010) confirm that the Reggio approach is "grounded in inquiry, values play, embraces a constructivist and social-constructivist approach to teaching and learning" (p. 1187–1188). Play provided a natural context for posing questions, testing hypotheses, and refining ideas through trial and error.

The fifth theme, **Observation**, emerged from codes such as *'observation'* and *'teacher-researcher'*. This theme corresponds with the fourth tenet of the Reggio approach, which emphasizes that "the teachers' role is not reduced only to provide information to students, but to listen, observe and to document the work of children" (Santín & Torruella, 2017, p. 53). In participants' descriptions, Observation often took place during play, as teachers used children's play behaviors, conversations, and problem-solving strategies to understand their thinking and plan future experiences. This data aligns with Hart's (2006) framing of Observation as part of a reflective process that is integral to supporting rich, playful learning environments.

The sixth theme, **Collaboration**, was associated with codes such as *learning with others* and *communication*. This theme reflects the eighth tenet, *Social Relations*, which positions children as active social actors in co-constructing knowledge (Santín & Torruella, 2017). Participants described play as a powerful context for collaboration, from negotiating game rules to building a shared structure or acting out a story together. Such collaborative play fosters communication, empathy, and teamwork—skills essential for lifelong learning.

Finally, **Community**, the seventh theme, was associated with *community involvement* and *cooperation among teachers, children, and families*. This data aligns with the Reggio view of education as a community-based philosophy (Hart, 2006). Participants noted that play-based projects often incorporated family and community engagement, blurring the lines between classroom and home and reinforcing learning as a shared, relational process. Involving families in children's play experiences also

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reflects the philosophy's emphasis on respect for parents as partners in the educational journey (Altan, 2019; Yıldız & Durmuşoğlu, 2018).

Across all themes, participants' descriptions reinforced that play was not an optional activity but an integral process in Reggio-inspired environments—an avenue through which children explore, question, collaborate, and connect with others. These findings affirm that play in Reggio contexts is deeply purposeful, blending joy, creativity, and inquiry to support holistic development while honoring children's rights under Article 31 of the United Nations Convention on the Rights of the Child.

This study addressed the research question, "How do Reggio practitioners define the Reggio-inspired approach?" An analysis of the participants' descriptions of the Reggio Emilia approach revealed seven distinct themes. These themes are *Child-centered*, *Learning from the environment*, *Documentation*, *Inquiry*, *Observation*, *Collaboration*, and *Community*. While each theme relates to one of the eight core tenets of the Reggio approach (Santín & Torruella, 2017), three tenets were not represented in the participants' responses. The tenets of the Reggio Emilia philosophy not expressed in these final themes were *100 Languages of Children*, *Long-Term Projects*, and *Negotiated Learning*. Future research could explore why these three tenets were absent from participants' descriptions of their Reggio-inspired practices and whether Reggio-inspired educators understand or implement them less consistently.

Limitations

One limitation of this study is that the collected demographic data did not include participating teachers' locations. Although the questionnaire was designed in English, this does not mean participants teach in English-speaking schools. Because it was disseminated online, the questionnaire may have been accessible to an international audience. Additionally, the demographic data did not capture the ages of the participating teachers. Collecting this demographic information could have shown the prevalence of the Reggio-inspired approach across age groups, education level, years of experience, and regions.

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Clinical Implications

This study aimed to identify teachers' perspectives on the Reggio Emilia philosophy and examine how they enact this approach in practice. Seven key characteristics emerged—Child-centered learning, Learning from the Environment, Documentation, Inquiry, Observation, Collaboration, and Community—each reflecting play's central role in exploration, meaning-making, and relationship-building.

The findings provide a practical framework for educators, administrators, and teacher trainers seeking to design and sustain environments that honor children's right to play. By recognizing play as the primary context for Reggio-inspired learning, educators can intentionally create spaces and experiences that support autonomy, creativity, and collaboration. Documentation and Observation of play can guide curriculum decisions, while environments rich in natural, open-ended materials can extend opportunities for inquiry and imagination.

For professional development, these results highlight the importance of preparing educators to facilitate play-based learning that is child-led yet skillfully scaffolded, ensuring that play retains its integrity as a joyful, self-motivated process. Beyond the classroom, the study underscores the need for policy-level advocacy to protect and promote children's right to play, as articulated in Article 31 of the United Nations Convention on the Rights of the Child.

In alignment with the International Play Association's mission, these findings reinforce that play is not an "extra" but an essential component of quality early childhood education. Embedding play deeply into practice is both an educational imperative and a matter of upholding children's rights.

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Phenomena-Based Play in the Outdoors

Brian A. Stone, EdD

Introduction

Outdoor play is essential to a healthy, well-balanced life. When children have regular opportunities to explore, wonder, create, imagine, and authentically play in outdoor settings, they benefit across multiple domains, including physical health, social interaction, emotional regulation, executive functioning, and sustained attention (Yogman et al., 2018). Much of the research suggests that time outdoors tends to increase physical activity, build imagination and creativity, and support whole-child development. However, today's competing indoor/screen routines often displace or diminish those gains (Larson et al., 2019).

A key advantage of outdoor play is the meaningful opportunity it provides to interact with real-world phenomena, events, or patterns that students can observe and explain (e.g., water flowing downhill, shadows shifting, ice melting, leaves falling, insects foraging, or wind moving objects). The Next Generation Science Standards (NGSS) define *phenomena* as occurrences in the natural or designed world that students can explain or predict using scientific knowledge (NGSS Lead States, 2013). Anchoring learning in such phenomena is central to three-dimensional science because it invites sense-making through practices, core ideas, and crosscutting concepts (Achieve & Next Gen Science Storylines, 2016).

This paper uses the term Phenomenon-Based Play to describe child-led, unstructured outdoor play that naturally centers on such phenomena without adult-imposed objectives. In contrast to classroom-based Phenomenon-Based Learning (PhBL), where a teacher selects an anchoring phenomenon to guide instruction, Phenomenon-Based Play relies on discovery and the child's curiosity to drive observation, prediction, testing, and revision of ideas. Research on anchoring phenomena underscores why play provides a critical opportunity for children to engage with the world around them. Authentic anchors are observable, compelling, too complex to explain in a single step, and rich enough to elicit children's questions and investigations (Penuel & Bell, 2016). These are properties that are abundant in everyday

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outdoor contexts. Children need plenty of time and exposure to these "anchors" through their play.

Phenomenon-Based Play represents a powerful, practical response to an overly digital world. By protecting unstructured time outside and resisting the urge to push adult objectives, we preserve children's innate curiosity to meet a world rich with observable phenomena. The result is playful inquiry that builds scientific sense-making while simultaneously supporting the whole child in fostering children who are physically active, socially connected, emotionally resilient, and deeply interested in how the world works.

Conclusion/ Recommendations

Children need less screen time and more play time. They need frequent, sustained time outdoors. They need less direct instruction and more self-generation of knowledge through experience. Teachers will always have a role. Children are not going to "discover" or "self-generate" terminology, but that transmission of knowledge can always come after or alongside experiences as they are built by children. Curiosity is a powerful driving force shared across humanity. Adults need to value this force and provide time for children to explore through their play.

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Design for Play in Early Years

Mugdha Thakurdesai, MArch

Introduction

Curriculum-driven planning has led many schools to adopt conventional classroom-based layouts as a standard architectural response for all age groups, including early years education. This one-size-fits-all approach overlooks the unique developmental and psychological requirements of children aged 0–6. Learning environments that rely heavily on enclosed classrooms and rigid spatial definitions often inhibit play, exploration, and movement, thereby reducing their effectiveness in supporting holistic development. There is a clear need to move away from static, classroom-centric models towards learning environments that are flexible, mobile, and responsive—spaces that enable young children to navigate, explore, and engage with their surroundings as integral parts of the learning process.

Conclusion

The design of early childhood learning environments must be fundamentally reoriented towards play-based learning as the primary spatial and pedagogical framework. Early years facilities should move away from rigid, classroom-centric models and adopt flexible, landscape-based learning environments that support movement, exploration, and child agency. Prioritize integrating semi-outdoor and transitional spaces to ensure climatic responsiveness and year-round usability, particularly in dense urban contexts.

Design frameworks must draw from indigenous spatial typologies, embed nature and sensory experiences as integral learning tools, and allow for adaptability across varying site constraints. Importantly, early years environments should balance safety with opportunities for risk-based play, enabling holistic physical, cognitive, and socio-emotional development. Aligning these design approaches with national education priorities will ensure that early childhood learning environments are scalable, culturally grounded, and developmentally appropriate, laying a strong foundation for lifelong learning.

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Similarly, folk and fairy tales are often pushed from the early childhood environment. These ancient stories of using skill, wit, and courage to overcome adversity are sometimes seen as too fraught with danger and fear to share with children. Neuroscience, however, offers an alternative view: that stories of imagined risk and challenge are exactly what our brains need to prepare us to combat the very real stressors we experience.

Children seem to intuitively know what their brains need, in both make-believe play and in the stories that fuel it. They are drawn to themes of "trouble," even as well-meaning adults try to protect them from it. As play scholar David Kuschner describes it,

"Children's fascination with trouble includes such themes as power, the grappling with good and evil, overcoming adversity and confronting the monsters, real and imaginary, in your world." (Kuschner, 2019, p. 132).

In both their play and in the stories we share with them, we owe it to children to honor this fascination with trouble and risk. Even in settings where opportunities for physically risky play are few, every child can vicariously race down the beanstalk with Jack as he escapes from the angry giant. Beyond inspiring wild, joyful play, folk and fairy tales can set the stage for the neurodevelopmental blossoming of each child's adaptive capacity for resilience. However, this resilience gives every child the best chance of defeating the inevitable dragons they will encounter in life and living happily-ever-after in our challenging, ever-changing world.

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1001 Pathways to Learning Through LEGO® Play Pedagogy
Play as a Vessel for Justice and Belonging

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Introduction

Play is the oldest, most enduring, and most generative learning relationship humans establish with the world. For this reason, play should not be reduced to an activity squeezed into "free time"; rather, it is the child's (and indeed the human being's) way of making meaning of the world, building relationships, structuring thought through trial and error, and expressing the self. This perspective requires that we treat play not merely as a pedagogical method, but as a foundational ground for the nature of learning itself (Tuğrul, 2017, 2019, 2024).

Children's play is recognized internationally as a right. Article 31 of the United Nations Convention on the Rights of the Child guarantees the child's right to rest, leisure, play, and to participate in age-appropriate recreational activities (United Nations, 1989). This framework reminds us that the right to play is connected not only to well-being, but also directly to learning, development, and participation. At the same time, it positions play as inseparable from creativity, imagination, self-regulation, social negotiation, and participation in cultural life (NAEYC, 2022). Key frameworks in early childhood literature and child health strongly emphasize play's role in cognitive, socio-emotional, and self-regulation development (Ginsburg, 2007). Clinical reports from the American Academy of Pediatrics further demonstrate that play deprivation poses risks to children's health, attachment relationships, and motivation to learn. Play is indispensable for healthy child development (Yogman et al., 2018).

This White Paper approaches the pedagogical value of play through the lens of LEGO® Play Pedagogy (Learning through Play) and argues that play is not the opposite of learning, but learning itself. Within this approach, the educator's role is redefined not as "managing" but as opening space; assessment is understood not as measuring products, but as making thinking processes visible. The text offers concrete examples of how this becomes possible through an approach that generates many possibilities with a

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limited number of materials. In doing so, play is addressed not merely as a classroom preference, but as part of how school and learning are positioned-and as part of broader debates on justice and access.

Conclusions and Recommendations

The primary recommendation is the re-legitimization of play in education systems—at both formal and cultural levels-as the language of learning rather than the opposite of learning. This is not merely a change in discourse; it requires redesigning time, space, and assessment mechanisms. The right to play and play-based learning should be positioned as a measurable priority in early childhood policies.

The second recommendation is to treat "accompanying play" as a distinct area of expertise within pre-service teacher education and in-service professional development. Rather than trying to manage play flow, teachers should design safe, accessible, open-ended spaces where play becomes learning; ask questions at the right time, step back at the right time, and interpret the process through observation and documentation. These competencies are core to the sustainability of play pedagogy.

The third recommendation is to shift assessment from product-focused measurement to process-focused interpretation. Observation, documentation, and the child's own narrative should be included as ethical and pedagogical tools in standard practice repertoires to make the learning value of play visible. This enables both teachers and families to read play as an evidence-based learning space.

The fourth recommendation is to strengthen the philosophy of "building more with less" in response to childhood experiences shaped by consumer culture and digital intensity. Creating rich thinking possibilities with limited but open-ended materials (e.g., ATAÇ) can support children's capacities for contentment, deepening, focus, patience, and creative problem-solving.

The fifth recommendation is to consider scalable micro-material approaches (such as the Six Bricks pedagogy) alongside access policies in contexts of inequality. To keep play pedagogy from becoming a privilege of high-resource environments, expand low-cost, replicable models. UNESCO–UNICEF's emphasis on access, quality, and

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equity in early childhood provides a key policy-level foundation for this strategy (UNESCO & UNICEF,2024).

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White Papers



ipa CHRISTCHURCH 2026

USA ipa American Association for the Child's Right to Play

Advocating for Play with Parents and Caregivers

Press Start. Activating Family Voices to Advance Playful Solutions

Get-out-of-the-Way of Play: A Call-to-Action to Educate Parents About Their Role in Play

Indoor Play: Board and Card Games and Their Role in Parent-Supported Play

How Parents Can Support Play

Imaginary Companions as a Window into Pretend Play and Child Development



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Press Start. Activating Family Voices to Advance Playful Solutions

Jenn Beideman, MPA

Introduction

Play is fundamental for children's health, development, and overall well-being. Despite its many proven benefits, far too many children across the country still lack quality, safe, and accessible opportunities in their neighborhood (Gordon-Larsen et al., 2006). At a time of rising mental health challenges, social disconnection, and widening inequities, play is becoming increasingly critical for supporting children's overall health and well-being (Rigolon et al., 2021; Tonkin & Whitaker, 2021; International Play Association, 2020). Parents, residents, and youth living in their neighborhood know it best. Often, families know what they want to see in their neighborhood but lack the understanding to navigate complex government institutions.

Problem Statement

Access to safe, accessible play is not just a quality-of-life issue; it is a fundamental equity issue (Rigolon et al., 2018; Reuben et al., 2020). Research shows that many children have fewer opportunities to play if they live in neighborhoods with fewer high-quality play spaces and parks (Roemmich et al., 2006). Kids in low-income and racially diverse communities often lack nearby and/or quality safe places to play, and when playspaces do exist, they are smaller or in poor condition, limiting kids' time for physical, social, and creative play (Rigolon, 2016; Huang et al., 2022).

Parents, residents, and youth living in their neighborhood know it best. Often, families know what they want to see in their neighborhood but lack the understanding to navigate complex government, nonprofit, and philanthropic institutions to make it happen. The inaccessibility of institutions of power makes it challenging to achieve meaningful change for families who may not engage with those systems regularly. Despite the complexity, parent and community advocacy is critical. Local municipalities are required to get feedback from residents and community members (Nabatchi & Leighninger, 2015). These comments shape capital improvements and neighborhood improvements (Nabatchi & Leighninger, 2015). Families have power and can work

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alongside municipal leaders, public health officials, and organizations to ensure every child, regardless of their zip code, race, or income, has safe spaces to play, grow, and thrive.

Municipal governments respond to the people they serve. When parents and youth show up at council meetings, submit testimony, meet with elected officials, or partner with organizations dedicated to children's play, they demonstrate that these issues matter. Collective voices can shift priorities and unlock funding streams that directly benefit kids. Change is possible, and it is happening in communities that have mobilized for a collective vision for play.

Background

Rochester is an urban city in Western NY and home to 207,000 residents (U.S. Census Bureau, 2024). Many residents have access to parks and greenspace, with the city hosting 3,500 acres (City of Rochester, n.d.), and 84% of residents live within a 10-minute walk of a park (Trust for Public Land, 2023). Despite the access to an incredible park system, Rochester bears the marks of decades of concentrated poverty and segregation. Over a third of residents live in poverty; more than 40% of African American and Latinx residents are poor, and 20% of residents lack a high school diploma (ACT Rochester, 2023; United States Census Bureau, 2022). The loss of major employers such as Kodak has weakened the tax base, strained the school system, and driven an exodus of residents and wealth (Cowie & Heathcott, 2003; Gianniny, 2025).

Despite Rochester's wealth of green space and parks, only 65 percent of residents say they would feel safe letting their child walk to a park in their own neighborhood (Common Ground Health, 2022). Just 25.5 percent believe their neighborhood is great for children to play outdoors — a rate three times lower than that reported by suburban families (Common Ground Health, 2022; Sienkiewicz et al., 2023). In a recent study conducted by Common Ground Health and the Strong Center for Developmental Disabilities (2026), less than half (43%) of respondents in the City of Rochester agreed that where they live is a safe place for children to play outdoors, compared to 84% of respondents from the suburbs (Common Ground Health, 2026). In neighborhoods of color, the gap is even wider, reflecting the enduring consequences of racist policies,

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disinvestment, and systems that have failed to prioritize equity for generations (Hoffman et al., 2020; Rigolon, 2016; Mariner et al., 2024).

Strategies

1. Get to know your Neighborhood Administrators and Public Servants

Civil servants have authority in their government roles to make decisions. People are working every day to support the administration of services at each level of government. It is important to get to know them. They can make day-to-day decisions and oversee planning materials for key capital improvement projects, such as playgrounds. They control permits, enforcement, public-space use, and the flow of city resources. To promote change in your neighborhood, you need to understand who holds decision authority and how their process works.

In Rochester, NY, the Neighborhood Service Centers (NSC) serve as practical entry points into City Hall. The city has four NSC offices, one per quadrant. Each quadrant has an office led by an Administrator, with staff who connect residents to local government. At these offices, one can process business permits, request code enforcement, file nuisance complaints, obtain handicap parking permits, and secure garden permits for vacant lots (City of Rochester, 2026). More importantly, residents can build relationships. Lydia Rivera, a Mom, small business owner, and President of the Lyell Ave. Business Association (LABA) in Rochester, did just that. She was concerned about speeding cars around her local parks and the lack of safe places in her neighborhood. She began getting to know her NSC administrator, who connected her with the Director of Recreation and Parks Stewardship in the city's Department of Recreation and Human Services. Working alongside the Director, Lydia advocated strongly for more traffic calming around parks and play spaces and for the city to join the Trust for Public Land's 10 Minute Walk to Park commitment (13WHAM, 2018). This commitment led to the inclusion of safe routes to parks concepts in the City's Comprehensive Plan and, later, the Active Transportation Plan (City of Rochester, 2019; City of Rochester, 2023). Lydia also established a garden on her street, which she uses to host kid-friendly events like play days and movie nights.

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When city staff know you and understand your project, they can flag timing issues, identify funding streams, and introduce you to the civil servants who can approve or adapt your idea. Projects move faster when they align with administrative priorities and when decision-makers trust the people proposing them. Getting to know public servants turns a one-time request into an ongoing partnership that increases the likelihood your neighborhood improvements move from concept to reality.

2. Let your voice be heard at public meetings

Get up and get out. Municipalities must host public meetings to get feedback from residents on proposed projects. This includes street redesign, public parks, master planning documents, and comprehensive plans. These are all opportunities to transform your neighborhood into a place for play. Go to your city and county's website, look at their monthly calendar, and sign up to receive their public meeting notices. Attend the meetings and share your perspective on capital improvement projects. They collect and consider these comments as part of a project's overall design. When municipalities are creating parks master plans or comprehensive plans, these documents guide the vision for future development and investment. Share what you want to see in your neighborhood. Be specific about the barriers you see and how you would fix them.

Families can also look for opportunities to speak at their elected bodies (City Council, County Legislature, School Board). These bodies typically have "speak to council" type opportunities. Visit your municipality's website and look for those opportunities to speak; these provide you a space to share your perspective on any issue. They are typically timed, but they can open the door to further conversation with your elected official.

Arwyn Fox knew she and her siblings could not go to the park across the street from their house because of public safety concerns and speeding cars, so she raised her voice to make change happen for her block. Arwyn went to the City Council and shared her concern about speeding cars on her street. Her advocacy, alongside her siblings', has led to additional traffic-calming signage and speed traps. She has not stopped there, though; over the last 8 years, Arwyn has continued to go to speak to the City Council,

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Monroe County Legislature, and even Capitol Hill to advocate for playful opportunities for her peers.

3. Get to know your elected officials

Your elected officials work for you. They are in office to represent constituents in their district. This means that relationships are key. Call their office and learn about your elected officials' priorities. Tell them about yours and how it aligns with what they are looking to accomplish in office. This will help you move the needle in driving change. Remember to share that you are their constituent. Ask the office to set up a meeting with your elected representative, and/or invite them to an event in your neighborhood (block club party, annual festival). These meetings may be with the elected official or their staff. Do not be disheartened if staff are there at the meeting and not the official - staff are critical members of that elected official's team. When preparing for any meeting, take time to think about what you hope to accomplish. Look at whether this person can actually move your idea forward.

When preparing for your meeting, think about what you hope to accomplish. Each level of government has its own responsibilities and statutory requirements. Look at the person’s priorities and whether what you are asking for is something they can help with. For example, asking a local municipal leader to lower the speed limit on your street is a great ask, but securing additional funding for capital improvements through state grants is better suited to state officials. Be specific in your request, and always follow up after your discussion. These meetings are typically short, so practice ahead of time so you don't get lost in the weeds and miss the chance to say what you are asking them to do for you. Develop your “5 W statement”: that’s the who, what, why, where, when breakdown of what you want; and the how you will follow up (Laswell, 1948). This is an easy way to prepare for potential questions, hone your message, and communicate what you are asking for.

For example, Toyin Anderson is a Mom, parent advocate, and community leader in Rochester, New York. Concerned about the lack of safe places to play in her neighborhood, Toyin started meeting with then-City Council President Lovely Warren to express her concerns. She dreamed of bringing a spray park to her neighborhood for

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children and families to use all summer long. Toyin worked hard with staff and leadership; she did not give up; she continued to share her perspective and advocate for change in her neighborhood. After three years of advocacy, in 2016 Toyin stood beside Mayor Lovely Warren when the spray park opened in her neighborhood. Mayor Warren shared, "Toyin has been the community advocate for this project" (Spectrum News Staff, 2016). Toyin's tenacity and consistency brought her dream to light in her neighborhood.

4. Recruit your friends and neighbors

There is power in numbers. The more you show people care about what you want to see happen, the more likely they are to take action. For decades, residents of The El Camino neighborhood have banded together to advocate for change. The residents' commitment and passion for the neighborhood have led to several actions and advocacy to reclaim their space from the Open Air Drug Market. The residents partnered with local nonprofits, Ibero Action Development Corporation, Ibero American Action League, and others willing to support their advocacy. Working together, they collected signatures, built partnerships with their neighbors, and advocated for more playful opportunities for their neighbors.

The residents wanted to see vacant lots transformed into vibrant gathering places and their local playground made safe and inviting for children and their families. A group of neighbors, Ida Perez, Evette Colon, Gildred Aponte, Miguel A. Meléndez Jr., Dawn Bird, and others organized pop-up market days, play days, play streets, and piloted programming to demonstrate to municipal leaders that their neighborhood wanted these changes.

In 2020, the advocacy of residents in the El Camino neighborhood was successful and led to the development of 4 vacant lots into a new business incubator and market, "International Plaza" (Medina, 2020). The new playground at Don Samuel Torres, with the requested improvements, reopened in Spring 2021 (Medina, 2021). The work of Ida Perez, Evette Colon, Gildred Aponte, Miguel A. Meléndez Jr., Dawn Bird, and others shows that when you partner with neighbors to amplify your collective desire for your neighborhood, you can make real change happen. Their work continues as they focus on other projects to support children, families, and seniors in the El Camino neighborhood.

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5. Get involved in organizations that care about the power of play

Residents and caregivers can partner with others who care about the child's right to play (UNCRC, 1989) and to advocate for playful opportunities in their community. Organizations like the National Parent Leadership Institute (NPLI) and the International Play Association (IPA) are vital resources that can support families as they advocate for change.

For example, the National Parent Leadership Institute (NPLI) focuses on civic capacity-building, equipping caregivers who want to advocate for change with the skills and knowledge needed to navigate municipal and state government systems. By participating in their programs, you can effectively learn to navigate each level of government and become an advocate for change (National Parent Leadership Institute, 2024). Many of the caregivers highlighted throughout this paper are graduates of this program.

The International Play Association USA (IPA USA) brings together scholars, advocates, and parents to advocate for all children's right to play (International Play Association USA, 2026). When you become a member, you join a network of people dedicated to advancing the power of play across the country and the world. Aligning with IPA USA lets you leverage national advocacy best practices, connect with advocates across the country, and access resources that can bolster your local efforts. IPA USA also has several state chapters that run on-the-ground play days and other advocacy events in municipalities and states across the country. In Rochester, families and caregivers can join the IPA USA Western New York chapter. Together, we advocate for better, more accessible play spaces and support play days in our municipalities (IPA - USA - WNY Chapter, 2026).

Conclusion

Local change requires coordinated action and consistent advocacy. When families align around a shared vision for play, municipalities adjust policies, redirect resources, and formalize support for child-centered infrastructure. Families can get involved to make change in their neighborhood by getting to know neighborhood administrators and public servants; making their voices heard at public meetings; getting to know their

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elected officials; recruiting friends and neighbors; and getting involved with organizations that invest in the power of play. Progress does not occur by chance. It follows organized demand, credible data, and sustained public pressure. Parents, caregivers, and youth can mobilize effectively and consistently to transform their neighborhoods to support safe, inclusive play for everyone.

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Get-out-of-the-Way of Play: A Call-to-Action to Educate Parents About Their Role in Play

Gennie Gorback, MEd & Kate Allen Fox, MPP

Introduction

Many parents value play for their children but misunderstand their role in creating a playful environment and how best to support play. Tired, busy parents may also overlook the value of child-directed play because of perceived safety issues, concerns about mess, and misunderstandings about its inherent developmental value. Parents may feel pressured to ensure their children advance academically and equate learning with structured activities rather than child-driven play (Fisher, 2008).

While many play-focused messages target parents, most parents still feel unsure about their role in building a playful environment and creating a culture of play at home. The good news is that messaging about the value of play for children is increasing overall. Parents are hearing about the value of play from sources such as children's entertainment, their kids' teachers, and social media. Medical professionals and other stakeholders are receiving more training on play and its relationship to overall well-being, with the American Academy of Pediatrics recommending that pediatricians write "prescriptions for play" at checkups for young children (Yogman et al., 2018). While pediatricians, classroom educators, governmental agencies, and nonprofit organizations can all help increase parents' awareness of their role in play, no one sector has claimed responsibility and ownership of the issue, and parents still seem uninformed on the nuances of creating an environment for child-directed play.

A multisectoral approach is, therefore, needed to educate parents and influence cultural norms around play. Play-related sectors and play professionals should develop succinct parental education messages to communicate that the most meaningful play often occurs when parents are involved as little as possible. This white paper serves as a call-to-action for communication and coordination across sectors around play independence.

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Problem Statement

What is true play? If you ask parents to define true play, they might not know where to start. Many might describe pretend play but then stall. A few might quote *Bluey* or refer to a recent social media post. But how many would have a sense of what true play entails or that the most meaningful play probably happens when they aren't directly involved?

According to Dr. Peter Gray, a world-renowned psychologist who specializes in studying play, five key characteristics must be present for an activity to be defined as true play (Gray, 2017).

1. The activity must be *self-chosen and self-directed*, where the children decide what and how to play and are free to change the direction of the play at any time.
2. It must be *intrinsically motivated*, meaning there is no external reward for participating.
3. There must be some *mental rules* to the activity, which may not always be evident to the casual observer, but exist in the participant's mind.
4. The activity is *imaginative* in some way, which could be as overt as pretending to be superheroes or less obvious to the observer, such as a child pouring out a cup of pebbles over and over again.
5. For someone to consider a child's activity true play, the participant must be *alert and unstressed* (Gray, 2017).

Parents have a large degree of control over their children's environment. Depending on the family's norms and internal play culture, that environment can encourage play or quash it. Even parents who know that play is important may inadvertently stymie their children's natural impulses to play through consistent interruption, interjection, or overscheduling.

A well-intentioned parent, understanding the overall benefits of play, may, for example, offer to play MagnaTiles™ with his or her child and say, "Let's build a castle!" Excited to play with his or her parent, the child may start building a castle with his or her grown-up. The parent, who may have taken a college course in medieval architecture, directs the child on how to build turrets, a moat, and everything a castle

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should have. The child may have a different vision or goal for their construction and may express frustration when they feel their play is being micromanaged. Thus, according to Dr. Gray, this would not be considered "true play," as it is adult-directed rather than child-directed.

Similarly, if the child's interest shifts into throwing his or her teddy bear at the castle and making it fall, the well-meaning parent may get frustrated and say, "If you're not going to play right, I'm leaving!" Without an understanding of the nuances of following a child's lead in play, the parent's response sends unintended messages to the child about the kind of play the parent values. Really, the child could simply be exploring the trajectory schema, or maybe the child likes the sound of the tiles falling, or perhaps the child is learning about cause and effect while watching the parent's reaction to the destruction, and not intentionally "playing wrong," as the adult may have interpreted.

With the right support, many parents could change their family's practices to let true play blossom. In our parenting book, *Go Play: How Parents Can Empower Kids to Build Their Own Worlds* (Fox & Gorback, 2026), we introduce the term "get-out-of-the-way play" as a succinct reminder that the deepest play often occurs when parents let kids take the lead.

Helping parents understand their role in play and changing cultural norms will require a large, coordinated movement that begins in the play community and spreads to other professions—including educators, healthcare providers, public health agencies, and governmental and nonprofit stakeholders—that can directly reach parents.

While parents increasingly understand the value of play, thanks to the efforts of many play practitioners, educators, and others, they often misunderstand their role in play, leading to ineffective implementation of play practices in and around the home. Education is needed across sectors to reach parents, but no single group is responsible for educating parents on the issue. Additionally, the pro-play messages parents do receive can be uncoordinated or even contradictory, blunting their impact.

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Background

Extensive research suggests that play is the most valuable activity to support children's development. Ginsburg (2007), in the American Academy of Pediatrics, states, "play is essential to development because it contributes to the cognitive, physical, social, and emotional well-being of children and youth" (p. 182).

Many parents value play for their children in the abstract but misunderstand their own role. Some parents think fostering their children's play requires active participation. For example, parents may believe that their children only benefit from playtime if the parent(s) sit down on the floor, crisscross applesauce, and create an hour-long imaginary scenario where a Barbie Doll™ is missing her beloved My Little Pony ™ and needs a Troll Doll™ and a Beanie Baby™ to team up and help find it. Or, that the parent must plan an adorable handprint turkey craft for the upcoming Thanksgiving holiday.

Research shows children reap deeper benefits of play when adults are involved as little as possible. One study showed that children are less likely to identify an activity as "play" if adults are present (Howard, 2006). Another study found that parental over-involvement led to worse emotional regulation in kindergarteners (Obradović, 2021). Children require age-appropriate independence from adult interference to build autonomy and confidence. In general, a parent's role in play is to create an environment–including time, mindset, physical space–for play to occur. After that, caregivers can look for ways to "get out of the way" of play by intentionally not interrupting. This allows children the space and autonomy for true play to occur.

Parental concerns about safety and conflict avoidance, among other issues, can lead parents to direct their children's play, negating many of the potential benefits. Parental concerns can particularly curtail so-called "risky play," which helps children develop cognitive, social, and emotional skills (Steiner et al., 2023). Additionally, when children can play without adult direction, they engage in peer interactions that help them solve problems and navigate conflict. A systematic review found that "parents' perceived safety concerns are the primary barrier to children's active free play. These

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safety concerns are moderated by child-level factors (age, competence, gender) and broader social issues" (Lee, 2015, p. 1).

Parents, however, may be more likely to allow age-appropriate play independence when they perceive that other parents do as well. Parents cite potential judgment as a concern in allowing more autonomy for their children's play (Riazi et al., 2021). Additionally, if more parents allow age-appropriate independent play, children may find playmates more easily.

Another barrier to play is increased academic pressures in childhood. From the emphasis on standardized testing to the increasing rigor of kindergarten, modern children are expected to know more and do more than children of previous generations. This push toward early skill attainment has sometimes come at the expense of self-directed activities and recess (Bassok, 2016) The American Academy of Pediatrics, however, has said that recess is "crucial and necessary component of a child's development," (Murray & Ramstetter, 2013, p. 183) and further research has shown a relationship between recess, defined as a period of free play, and learning (Waite-Stupiansky, 2001).

Taken together, these factors suggest that parental education is required to change societal norms and help parents "get-out-of-the-way" of play. But who is responsible for educating parents, and what is the most effective way to do so?

Many sectors could help educate parents about play, including early childhood and elementary educators, healthcare providers, and public health organizations. None of these groups, however, have play or parental education at the core of their missions. Educators and healthcare providers, in particular, face limited time, resources, and many competing demands, so parental education around play often goes undone. Public health organizations, while recognizing the importance of play, often do not receive funding for play-specific education. They, too, face budget constraints, competing priorities, and, more recently, layoffs and budget cuts, especially at the federal level. Nonprofits, including the International Play Association, do important complementary work but lack the staffing to educate parents on a large scale.

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While no single leader exists in parental education, many groups recognize the value of play and the need to help parents support it. Even popular culture is increasing its interest in play. Play advocates on social media also increase parents' knowledge of the value of play. How can this interest and enthusiasm be translated into meaningful change?

Appropriate Approaches/Strategies

Fortunately, parental education is beginning to shift. Nonprofit organizations such as *Let Grow* provide parental education about play and independence through websites, media appearances, and grassroots campaigning. Some health organizations, such as Kaiser Permanente, also ask parents about their children's play habits, giving pediatricians an opening to start conversations about play (Ignite Healthwise, LLC Staff, 2024). Parenting books about play, including our title, also help increase parents' knowledge and skills in this area.

These efforts alone, however, are unlikely to change broader cultural norms. A larger play-based movement is needed to empower parents with the knowledge, skills, and confidence needed to facilitate true play. Because multiple sectors are involved in educating parents about play, a coordinated and succinct message may be more effective in reaching parents and changing their attitudes.

Call-to-action—Due to rising cultural interest in play, the time is ripe for play and play-adjacent professionals to coordinate on parental education. This white paper is a "call-to-action" for groups and individuals interested in educating parents on play to work together to create actionable and consistent messages for parents—thereby amplifying the messages' impact and cultural reach. Play organizations could create this messaging and then spread it more broadly to educators, healthcare providers, journalists, and others who can carry the message forward to parents.

Conclusion/ Recommendations

It is no overstatement to suggest that play is *the* most important activity in a child's life. As professionals interested in promoting true play—that is, play free from adults' over-interference—we must change cultural norms around play. Many parents

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who value play also misunderstand it, perhaps thinking that their active participation is required for meaningful play. Others fear judgment if they allow more free play or worry that their children will fall behind academically. To counteract these broader cultural norms that inhibit true play, we must work together and coordinate across sectors to reach parents with clear messages about how and why parents need to get out of the way of play. While some cultural norms work against play, interest in play is also increasing, making now an ideal time to increase public messaging to parents. Play professionals can and should capitalize on this moment, seeing it as a "call-to-action" for coordination in order to support and amplify each other's efforts.

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Indoor Play: Board and Card Games and Their Role in Parent-Supported Play

Abby Loebenberg, PhD

Introduction

Board and card games are a way to play across one's lifespan. For children and adults alike, the philosopher Gadamer (2004) argued that the back-and-forth of play, or the "to-and-fro" nature of games, is a key part of their structure. For young children, this might show up in something as simple as learning patience while taking turns, but for adults, as Boghain et al. (2019) suggest, it evokes the "ludic nature of the human being" (p. 51). From a social and cultural anthropological perspective, all societies utilize games as part of their social development. Shifts in the types of games played may mark social transitions (such as to adulthood) or gender (such as traditional games gendered for boys or girls). In any case, teaching children to play games and engage in social gaming is often central to family social connections. However, this may take many forms in contemporary Western society, ranging from traditional card and board games to shared interests with parents in video games.

This paper suggests that parents and caregivers, such as grandparents, who wish to participate in children's development should not overlook the positive value of traditional analog board and card games, and makes several concrete suggestions as to how these games work as learning tools that appropriately match the developmental level of children at various stages of early and middle childhood. Drawing on my work as an anthropologist of play and interdisciplinary perspectives from core educational theories, this paper offers concrete suggestions for appropriate games for different age groups. It also links these games to skills parents can support while playing them with their children.

Problem Statement

Indoor play is sometimes considered a substitute for outdoor play in educational settings, mostly because children spend so much time at their desks and deserve an enriching outdoor environment where they can get fresh air and engage in free play,

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including running, jumping, climbing, and other healthy outdoor activities. This paper does not diminish the importance of outdoor activities for children. However, it acknowledges that, outside of the school environment, or through specific after-school activities and programs, not all parents or caregivers can offer outdoor play. There are several reasons why this might be the case. However, the most obvious ones are the risks (real or perceived) of the outdoor environment. This could be as simple as excessive heat, a common and significant factor that affects much of the United States during the summer months. Caregiver fatigue and disability are other contributing factors that shouldn't be overlooked, as four times as many people live in multi-generational households in the United States as they did in the 1970s; 11% of those people are under the age of 18 (Pew Research, 2022). However, the opportunity for older generations to support play should not be underestimated. Lastly, children's social isolation outside of school is a consideration. While current research acknowledges that there is limited data on this topic, a recent study suggests that particularly pre-adolescents grappling with social isolation (bullying, rejection) require more support, even if they are not causing problems at home or at school (Norwalk et al., 2021).

Background

Two major educational theories commonly describe childhood development and the increasing complexity of play. Piaget (1953) introduced his work in *Origins of Intelligence in the Child*. This foundational text is still widely used, especially for active learning in educational and psychological theory. When considering manipulable objects, such as board and card games, we can directly correlate some of Piaget's stages of cognitive development and types of play. This demonstrates how a child's understanding of games evolves as they grow older. In their infant years, during the sensorimotor stage (birth to two years old), young children gain physical knowledge about game pieces by touching, grasping, or putting them in their mouth. This corresponds to Piaget's idea of functional play, or a child's repetitive actions for the sheer pleasure of movement. In the preoperational stage (two to seven years old), children learn to sort and classify objects, but struggle to follow rules. They may need help in this regard, or divert into imaginative play using game pieces. In this stage, Piaget describes play as symbolic or as fantasy, where children play make-believe and

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pretend. As children progress to the concrete operational stage (age seven and up), they develop the logical thinking needed to understand and apply rules. This enables them to learn cooperative and strategy-based games. Piaget labeled this stage of play as "games with rules," and Smilansky (1968) added "constructive play" in this age range. Children can use objects in an organized, goal-oriented way and participate in activities with pre-established boundaries. Lastly, at the formal operational stage, adolescents and adults develop abstract reasoning skills. They can think clearly about game mechanics, anticipate opponent strategies and moves, and even invent their own games and game variations.

Lev Vygotsky's work is used in education to understand interactions between teacher and student, and it can be equally applied to interactions between parents and children. His work helps parents explain games and teach children to play. If we accept that children progress through a series of developmental stages, which may differ depending on the child, it is also worthwhile to consider that the parent, or caregiver, will take on the role of expert in explaining games and authorizing rule changes. Thus, we should also consider Vygotsky's sociocultural theory of cognitive development, particularly his term "zone of proximal development," or ZPD (Vygotsky, 1978). In board and card games, the child's ZPD is the gap between what they can do independently and what they can do with support. However, they need support from a parent or teacher. The parent, or caregiver, acts as what Vygotsky calls a "more knowledgeable other" (Vygotsky, 1978). Scaffolding, or temporary help (such as extra rules, suggested moves, or explanations), helps the child succeed at playing the game. Vygotsky's theory shows how parent-supported play helps children internalize skills and eventually move toward independent concepts and strategic play. Thus, supported, collaborative play that meets the child at their current cognitive level fuels growth.

Lastly, when considering board and card games in the context of the family, and remembering Vygotsky, parents and caregivers should not be afraid to adapt the contents of a game to meet the children where they are in their development and to make up rules or adapt rules to make the game more fun for the children. In board game design, these are called "house rules." But families will often describe these types of rules as "the way we play" versus "the way it is supposed to be played." These types of

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house rules can often accommodate younger children by making a game move faster (shortening rounds), giving children more resources (like more money in Monopoly), or providing a “do-over” roll to avoid frustration. Rather than being seen as lesser, they should be seen as encouraging adaptive play that can be removed when the children are old enough not to need them, somewhat like bumper lanes when bowling, and they can discourage poor behaviors like cheating.

Appropriate Approaches

In the following tables, I recommend a list of indoor games based on practitioner observations, expert recommendations, and illustrative examples. On rare occasions, I include untested suggestions based on game designers' personal recommendations. Please remember that every child and family is different, and no list can be definitive or complete. However, I would like to offer parents and families a place to start learning of age-appropriate board and card games. I have included games from around the world and games that can be played with a simple deck of cards or a homemade board, for those who prefer not to buy commercial games, as well as a column explaining what mechanics the games emphasize. I hope this list has something for everyone. A few games are out of print at the time of writing, which I have noted. This is hopefully temporary, but many second-hand copies are likely available. Product names, game titles, trademarks, and registered trademarks are the property of their respective owners. References to commercial products in this paper are for identification and educational discussion only and do not imply endorsement by the authors or publishers.

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Table 1

Games with Minimum Player Age of 2

Game	Player Count	Time to Explain and Time to Play	Designer	Publisher	Main Mechanic	In Print (2026)
Haba My Very First Orchard	1-4	5 min (exp) 10 min (play)	Reiner Stockhausen	HABA	Cooperative, dice rolling	Yes
My First Animal Upon Animal	2-4	5 min (exp) 10 min (play)	Klaus Miltenberger	HABA	Dexterity, stacking	Yes
Here, Fishy, Fishy	2-4	5 min (exp) 15 min (play)	-	HABA	Turn-taking, dexterity	Yes

Table 2

Games with Minimum Player Age of 3

Game	Player Count	Time to Explain and Time to Play	Designer	Publisher	Main Mechanic	In Print (2026)
Candy Land	2-4	2 min (exp) 15-20 min (play)	Eleanor Abbott	Hasbro	Race to the finish, luck	Yes
Memory	2-6	2 min (exp) 10-15 min (play)	-	Traditional card game, multiple publishers	Memory, matching	Yes
Uno Junior	2-4	2 min (exp) 10-15 min (play)	Merle Robbins	Mattel	Hand management, color matching	Yes
Go Away, Monster	2-4	5 min (exp) 15 min (play)	Shanon Lyon	Peaceable Kingdom	Cooperative, memory	No
Feed the Woozle	2-5	5 min (exp) 15 min (play)	-	Peaceable Kingdom	Cooperative, language development, and dexterity	Yes

Table 3

Games with Minimum Player Age of 4

Game	Player Count	Time to Explain and Time to Play	Designer	Publisher	Main Mechanic	In Print (2026)
My First Carcassonne	2-4	5 min (exp) 15-20 min (play)	Klaus-Jürgen Wrede	Z-Man Games, Hans im Glück	Tile placement, area control	Yes
Snakes and Ladders/ Chutes and Ladders	2-4	2 min (exp) 15-20 min (play)	-	Traditional Game Multiple Publishers	Race to the finish, luck	Yes
Go Fish	2-5	2 min (exp) 10 min (play)	-	Traditional Game	Set collection, memory	Yes

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Game	Player Count	Time to Explain and Time to Play	Designer	Publisher	Main Mechanic	In Print (2026)
				Multiple Publishers		
Hoot Owl Hoot!	2-4	5 min (exp) 15 min (play)	-	Peaceable Kingdom	Cooperative, set collection	Yes
Karuba Junior	1-4	5 min (exp) 15 min (play)	Rüdiger Dorn	HABA	Cooperative, tile placement	No
My First Loteria	2-10	5 min (exp) 15 min (play)	-	Traditional Card Game Multiple Publishers	Luck, bingo	Yes
Slapjack	2-6	2 min (exp) 10 min (play)	-	Traditional Card Game	Speed, reaction, card collection	N/A
Pig	5+	2 min (exp) 5-10 min (play)	-	Traditional Card Game (Bicycle Cards)	Set Collection, Dexterity, Speed	N/A

Table 4

Games with Minimum Player Age of 5

Game	Player Count	Time to Explain and Time to Play	Designer	Publisher	Main Mechanic	In Print (2026)
Cluedo Junior/Clue Junior	2-4	5 min (exp) 20 min (play)	-	Hasbro	Deduction	Yes
Trouble	2-4	5 min (exp) 15-20 min (play)	-	Milton Bradley, Hasbro	Roll and move, luck	Yes
Outfoxed!	2-4	5-10 min (exp) 20 min (play)	-	Gamewright	Deduction, Co-operative, Grid movement	
Click Clack Lumberjack/ TacTac Jack	2-7	5 min (exp) 15 min (play)	-	Mayday Games	Dexterity, stacking	Yes
Rhino Hero	2-5	5 min (exp) 15 min (play)	-	HABA	Dexterity, stacking	Yes
Blokus/Blokus Duo/Blokus XL/Blokus Trigon	2-4	5 min (exp) 20-30 min (play)	Bernard Tavitian	Mattel	Abstract strategy, area control	Yes
Marbles	2+	5 min (exp) 10-20 min (play)	-	Traditional Game	Dexterity, aiming	N/A
Jacks	1+	5 min (exp) 10-15 min (play)	-	Traditional Game	Dexterity, hand-eye coordination	N/A
Dominoes	2-4	5 min (exp)15-20 min (play)	-	Traditional Game	Tile placement, pattern matching	N/A

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Table 5

Games with Minimum Player Age of 6

Game	Player Count	Time to Explain and Time to Play	Designer	Publisher	Main Mechanic	In Print (2026)
Catan Junior	2-4	5-10 min (exp) 20-30 min (play)	Klaus Teuber	Kosmos, Catan Studio	Resource management, area control	Yes
Connect 4	2	1 min (exp) 5-10 min (play)	Howard Wexler	Hasbro	Pattern building, spatial reasoning	Yes
Ticket to Ride: First Journey	2-4	5-10 min (exp) 15-30 min (play)	Alan R. Moon	Days of Wonder	Set collection, route building	Yes
Guess Who?	2	5 min (exp) 10-15 min (play)	Ora and Theo Coster	Hasbro	Deduction, questioning	Yes
Stratego Junior	2	5 min (exp) 15 min (play)	Jacques Johan Mogendorff	Jumbo	Deduction, spatial reasoning	Yes
Rory's Story Cubes	1+	2 min (exp) 15 min (play)	Rory O'Connor	The Creativity Hub	Storytelling, dice rolling	Yes
Checkers	2	5 min (exp) 10-30 min (play)	-	Traditional Game Multiple Publishers	Abstract strategy, elimination	Yes
Pass the Pandas	2-4	5 min (exp) 15 min (play)	-	Gamewright	Dice rolling, push your luck	Yes
Jenga	2+	1 min (exp) 10-20 min (play)	Leslie Scott	Hasbro	Dexterity, stacking	Yes
Qwirkle	2-4	5 min (exp) 30-45 min (play)	Susan McKinley Ross	MindWare	Tile placement, pattern building	Yes
Kariba	2-4	5 min (exp) 15 min (play)	Reiner Knizia	Helvetiq	Set collection, trick-taking	Yes
Mancala	2	5 min (exp) 10-20 min (play)	-	Traditional Game Multiple Publishers	Abstract strategy, counting	Yes
Charades	4+	2 min (exp) 15+ min (play)	-	Traditional Game	Acting, deduction	N/A
Ice Cool, Ice Cool 2	2-4	5-10 min (exp) 20 min (play)	Brian Gomez	Brain Games	Dexterity, flicking	Yes
Tsoro Yematatu	2	2 min (exp) 5-10 min (play)	-	Traditional Game	Abstract strategy, line creation	N/A
Morabaraba	2	5 min (exp) 10-20 min (play)	-	Traditional Game	Abstract strategy, line creation	N/A
Gomoku	2	2 min (exp) 5-10 min (play)	-	Traditional Game Multiple Publishers	Abstract strategy, line creation	Yes
Donjara	2-4	5-10 min (exp) 15-20 min (play)	-	Traditional Game	Tile drafting, set collection	N/A
Bug Hunt	2-4	5-10 min (exp) 15 min (play)	-	Ravensburger	Cooperative, dexterity	Yes

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Table 6

Games with Minimum Player Age of 7

Game	Player Count	Time to Explain and Time to Play	Designer	Publisher	Main Mechanic	In Print (2026)
Carcassonne	2-5	10-15 min (exp) 30-45 min (play)	Klaus-Jürgen Wrede	Z-Man Games, Hans im Glück	Tile placement, area control	Yes
Sequence	2-12	5 min (exp) 15-30 min (play)	Doug Reuter	Jax Ltd.	Pattern building, hand management	Yes
Potato Pirates, Potato Pirates 2, Potato Pirates 3	2-6	10-15 min (exp) 30-60 min (play)	Aditya Batura, Lim Jia Xuan	Codex Games	Programming, hand management	No

Table 7

Games with Minimum Player Age of 8

Game	Player Count	Time to Explain and Time to Play	Designer	Publisher	Main Mechanic	In Print (2026)
Machi Koro, Machi Koro 2	2-4	10 min (exp) 30 min (play)	Masao Suganuma	Pandasaurus	Dice rolling, engine building	Yes
Turing Tumble	1	5-10 min (exp) 15-30 min (play)	Paul & Alyssa Boswell	Turing Tumble LLC/Upper Story	Logic, programming	Yes
Rummy	2-6	5 min (exp) 20 min (play)	-	Traditional Card Game (Bicycle Cards)	Set collection, hand management	N/A
Loba	2-4	10 min (exp) 30-45 min (play)	-	Traditional Card Game (Bicycle Cards)	Trick-taking	N/A
Canasta	2-6	10-15 min (exp) 30-60 min (play)	-	Traditional Card Game (Bicycle Cards)	Set collection, melding	N/A
King of Tokyo	2-6	10 min (exp) 30 min (play)	Richard Garfield	IELLO	Dice rolling, push your luck, hand management	Yes
5 Minute Dungeon	2-5	5+ min (exp) 5-20 min (play)	Connor Reid	Wiggles 3D	Hand management, take that	Yes
Kingdomino	2-4	5-10 min (exp) 15-20 min (play)	Bruno Cathala	Blue Orange Games	Tile drafting, tile placement	Yes
Azul	2-4	10-15 min (exp) 30-45 min (play)	Michael Kiesling	Plan B Games	Abstract strategy, tile drafting, pattern building	Yes
Dixit	3-6	5 min (exp) 30 min (play)	Jean-Louis Roubira	Libellud	Storytelling, hand management, deduction	Yes
Men at Work	2-5	5-10 min (exp) 30 min (play)	Rita Modl	KOSMOS	Dexterity, stacking	No

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Game	Player Count	Time to Explain and Time to Play	Designer	Publisher	Main Mechanic	In Print (2026)
Klask	2	2-3 min (exp) 5-10 min (play)	Mikkel Bertelsen	Klask ApS	Dexterity, action	Yes
Qwixx	2-5	2-5 min (exp) 15 min (play)	Steffen Benndorf	Gamewright	Roll and write, push your luck	Yes
Rummikub	2-4	5-10 min (exp) 20-30 min (play)	Ephraim Hertzano	Pressman Toy	Set collection, tile placement	Yes
Tunk	2-4	5 min (exp) 15-20 min (play)	-	Traditional Card Game (Bicycle Cards)	Hand management, set collection	N/A

Table 8

Games with Minimum Player Age of 10-14

Game	Player Count	Time to Explain and Time to Play	Designer	Publisher	Main Mechanic	In Print (2026)
Castle Panic (10)	1-6	10-15 min (exp) 45-60 min (play)	Justin De Witt	Fireside Games	Cooperative, trading, dice rolling	Yes
Forbidden Series (Island, etc.) (10)	2-5	10-15 min (exp) 45 min (play)	Matt Leacock	Gamewright	Cooperative, set collection	Yes
Clans of Caledonia (12)	1-4	20-30 min (exp) 60-120 min (play)	Juma Al-Joujou	Karma Games, etc.	Worker placement, economic engine building	Yes
Tiny Epic Series (Galaxy, etc.) (14)	1-5	15-20 min (exp) 30-45 min (play)	Scott Almes	Gamelyn Games	Cooperative, worker placement, push your luck	Yes

Conclusion

In conclusion, board and card games at home are a net positive for various age groups. By choosing or adapting appropriate games for different ages and skill levels, parents and caregivers can support children's learning, social and behavioral skills, and cognitive development at home. Games for very young children (three plus) should highlight skills like turn-taking, co-operation, dice-rolling, moving pieces, matching skills and dexterity. Slightly older children (four to five years old) can focus on more complex memory games, dexterity challenges and deductive reasoning before moving on to tile placement, abstract games, set collection and construction around age eight. The oldest children, aged twelve and above, can take on the most complex family games,

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including trading mechanics, worker placement, economic engine building, and logic programming. Lastly, one should not overlook the importance of intergenerational skill building and the benefits of play across a lifetime that come from a family that plays games together regularly. In caring for our youngest, we often care for our oldest as well.

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How Parents Can Support Play

Bengi Sullu, PhD

Introduction

In my conversations with parents who are from a variety of socio-economic and cultural backgrounds about their childhood memories, I hear that they used to play *all the time*. Locations, activities, and people vary: at the lake, in the forest, in the streets with children from the neighborhood, in a hallway inside the apartment with a sibling, with the cassettes under the TV, or all alone all day. What remains across these accounts is that they played frequently. Play is universal, and in the past, it was abundant, informing the fond childhood memories of many. While almost all the parents I have spoken with lament that children do not get to play as often as they did in the past, they also frequently acknowledge that they have a role in play taking a backseat to other concerns about children (Lester & Russell, 2010). In the modern age, play has diminished due to a variety of pressures, academic demands, screen time, safety concerns, and other barriers.

Problem Statement

First, heavy academic demands on children have pushed play to the margins in favor of educational performance. Coupled with the increasingly individualized burdens of child care and enrichment that parents in the United States must shoulder, play is further diminished as parents plan their children's time and interactions. Parents and caregivers often prioritize academic skill acquisition over play, undervaluing its role in their children's academic development. Many people believe structured/enrichment activities are associated with better cognitive and socio-emotional developmental outcomes. While this may be true, these activities often reduce children's free play and exploration time. Parents also have persistent safety concerns, and the pervasiveness of digital technological tools (which prioritize structured interactions and games through apps and systems) and screen time further limit children's playtime. Funding for play programs and initiatives that prioritize free play is also limited (or unsustainable), which contributes to shrinking free time and the space where children can engage in unstructured play. Parental beliefs, combined with structural factors, can significantly

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limit the time and opportunities parents have to play with their own children. In particular, the lower value ascribed to "free" play compared to structured activities and digital technologies often creates an unbridgeable emotional gap despite physical proximity among family members, ultimately reducing the time parents can meaningfully allocate to playing with their children.

Background

As children get older, parents' emphasis shifts from play to learning, even as early as preschool (Bongiorno, 2018). This shift rests on a play-learning binary, reinforced by neoliberal education policy that manifests in accountability measures, including standardized testing, which percolates down to the preschool level (Kane, 2016). These trends are not unique to the US and have global reflections. For example, a parent from Turkey observed that the academization of preschool puts pressure on parents and teachers to show that children did much more than play. Another parent (who is also a teacher) noted the pronounced difference between constructed preschool and elementary school environments, with elementary school outdoor design appearing much less play-oriented than preschool, reflecting the underlying assumption that as children age, they no longer need play.

While research on digital technology and children often focuses on parental anxieties about the time children spend online or on screens, the inverse relationship is also noteworthy. Research demonstrates that parents' smartphone use negatively impacts children's emotional intelligence (Nabi & Wolfers, 2022). Play is an activity built on intrinsic motivation, curiosity, self-direction, autonomy, and independence (Gray, 2015). At the same time, the quality of adult involvement is an important determinant of children's play quality (Brown & Freeman, 2001; Hakkarainen et al., 2013). Parental involvement in play matters because it is linked to parents' belief that play supports children's development (DiBianca-Fasoli, 2014). By playing a facilitative role, adults can enhance children's free play (Gaviria-Loaiza et al., 2017). While the ability to facilitate play cannot be separated from the stressors that might limit the time and resources parents can allocate to play (Aldoney et al., 2022), parents can still support play in many ways.

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Appropriate Approaches/Strategies

In outlining these strategies, I want to summarize insights from conversations I had with parents and play advocates from Turkey, which I believe are useful for parents worldwide who want to support children's play. Adults can facilitate play, most easily by opening physical space for play at every opportunity. One support is to create different corners of the house for play rather than designating only rooms or specific locations for play. One parent reflected that being cognizant and respectful of children's spatial needs, just like one would be of an adult's, could make a difference.

Another strategy for play facilitation that maximizes fun and joy is to let go of the tendency to "teach" and instead let children take the lead. While it sounds easy, it takes reflection on the adult's role in children's development and on deconstructing established, normalized scripts for how to interact with children, which are generally based on a hierarchy that positions children as less developed. It takes practice to learn how something is done and to respect children's vision for their own plan, creation, and sometimes, destruction. Parents can cultivate a deeper appreciation of this vision during playtime with their child by using "joint attention" (Chawla, 2007), which helps them form a shared focus of attention in a particular moment.

Digital technology holds a ubiquitous place in children's lives, which is further solidified after the pandemic. An important strategy for parents to support play could start with reconsidering their own relationship with technology, stepping beyond the familiar complaint about children's screen time or digital technology addiction. They can assess how and when they use digital technology and screens. How often are they checking their phone? Can they put aside devices and focus on an activity for a prolonged time? This might invite children to play not through mere limitations on screen time (which can be important and necessary), but by authentically generating curiosity and a desire to be part of a process.

Conclusion

Parents can support play by staying mindful of the transformative power of small, consistent interactions. Even when one cannot change everything about how they plan their days or where they send their children, being intentional about choosing

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opportunities that emphasize free play still matters. Allowing unstructured time, resisting the urge to overdirect, or simply making space can open up meaningful possibilities for play.

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Imaginary Companions as a Window into Pretend Play and Child Development

Rebecca Wax, BA & Myae Han, PhD

Introduction

Among the many forms of play, imaginary companions - invisible characters created through a child's imagination - are often an overlooked component of pretend play. Imaginary companions, defined as constructs of a child's imagination that others cannot see or physically interact with (Armah & Landers-Potts, 2021), offer a unique contribution to the cognitive and social-emotional development of young children. Pretend play is a subset of play that involves an "as-if" stance where a player intentionally projects a mentally represented alternative into a current situation of play (Garvey, 1990; Lillard, 1993). Developmental theorists have long recognized the value of pretend play, including play with imaginary companions. Theorists such as Vygotsky (1978) believe that the pretense in pretend play is a crucial developmental goal because it helps children understand how to separate actions from reality and develop abstract thinking. Piaget (1962) also acknowledges the significance of pretend play and considers it an indicator of developmental progress. For him, pretend play around 18 months indicates the development of the semiotic function, which separates an idea from its meaning and allows one to entertain mental content separate from the physical, present reality. Research also shows that children who engage in complex forms of socio-dramatic play exhibit greater language skills than nonplayers, better social skills, increased empathy, enhanced imagination, and a more nuanced understanding of others' intentions (Miller & Almon, 2009). They also exhibit less aggression and display high levels of critical thinking. Children often practice socio-dramatic play with their imaginary companions. In all, pretend play begins a child's training in social behaviors. Children who grow up with this type of play and enjoy expressing their playfulness are likely to be more sophisticated in their social lives and more adept in their everyday social relations (Sutton-Smith, 2008, pp. 80-123). Young children's imaginary companions are not merely whimsical fantasies; they are developmentally appropriate and an important form of pretend play that supports children's cognitive, social-emotional growth. Therefore, in this white paper, we argue that adults should recognize

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the importance of children's imaginary companions and support their engagement in such play.

Problem Statement

Some parents have expressed concerns about the implications of a child having an imaginary companion and wonder whether they should adopt a supportive or discouraging role in their child's fantasy play (Taylor & Mottweiler, 2008). Play is considered a culturally constructed activity that parental beliefs, including child-rearing practices and values, can influence. This suggests that sociocultural contexts may influence the prevalence of imaginary companions (Göncü & Gaskins, 2007). Parents also facilitate pretend play based on their beliefs and attitudes about its value. Haight and colleagues (1997) propose that parents' gender roles influence their beliefs and views on pretend play. Some parents consistently perceive their daughters' fantasy levels and involvement in symbolic play as higher than their sons', which may stem from the types of recreation they deem appropriate for girls or boys (Gleason, 2005). Although parents may have more favorable views about which of their children engage in pretend play, their perspectives do not appear to differ when they hold a fixed positive or negative view of pretend play, suggesting that parents of children of any gender typically support or have concerns about pretend play for the same reasons. In the Gleason study (2005), mothers exhibited more positive attitudes toward pretend play than fathers, which may correlate with differences in parental attitudes (Langlois & Downs, 1980). Longitudinal research is necessary to determine if these views change as children progress through preschool (Gleason, 2005).

Background

A phenomenon that receives relatively little attention in early childhood development is a child's play with imaginary companions, a term usually used to explain a construct of a child's imagination that others cannot see or physically interact with (Armah & Landers-Potts, 2021), but has now been extended to include episodes of play with personified objects and extended role play where children adopt alternative personas similar to imaginary companions (Singer & Singer, 1990; Taylor, 1999; Taylor & Mottweiller, 2008). Children begin creating these companions around ages 2 to 4 and

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do not need a lengthy history of social relationships or interpersonal interactions to develop these personalities or invisible friends (Armah & Landers-Potts, 2021; Taylor & Mottweiller, 2008).

Research has reported that the prevalence of imaginary companions among children is as high as 65%. However, most studies indicate that between 20% and 35% of children have imaginary companions (Giménez-Dasí et al., 2016). Researchers who examine imaginary companion play suggest that imaginary companions may fill a void left by parents who step back and give children more independence as they transition out of preschool (Aguiar et al., 2017). They may also help improve self-esteem, provide comfort, or relieve boredom (Hoff, 2004; McLewin & Muller, 2006). Several studies demonstrate that children with imaginary companions are more likely to be firstborn or only children (Bouldin & Pratt, 1999; Gleason et al., 2000). Research indicates that most children's imaginary companions disappear as children gradually stop playing with and talking to them (Bouldin & Pratt, 1999). Other children's companions vanish after they start preschool, or after the child believes their imaginary companion left without explanation, moved away, or died.

As children develop a growing awareness of their gender roles, their beliefs and ideas are reflected in their play habits. Boys may receive less encouragement to engage in pretend play and have fewer opportunities because their parents have less positive attitudes toward this type of play (Gleason, 2005). Other studies do not suggest that girls are more inclined to engage in fantasy play; rather, boys and girls express this play differently (Carlson & Taylor, 2005). Boys tend to create imaginary companions with more masculine traits that function as ego ideals. At the same time, girls are more likely to form imaginary companions that allow them to fulfill a nurturing role. These outcomes may reflect how they conceptualize gender roles (Carlson & Taylor, 2005; Singer & Singer, 1981).

Language skills are one aspect of development correlated with imaginary companions. Preschool children with imaginary companions have been found to have more advanced vocabulary and longer utterances than children their age without imaginary companions (Singer & Singer, 1990; Taylor, 2010). The more complex and

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diverse language children with imaginary companions use enhances communication with others (Bouldin et al., 2002; Lin et al., 2018; Roby & Kidd, 2008). Research shows that children with imaginary companions can create richer narratives when telling stories about both fictional and personally experienced events (Trionfi & Reese, 2009). Although a link exists between imaginary companions and richer narratives, the reason for the link is uncertain. Researchers speculate that the correlation stems from the practice children gain through decontextualized conversations, both during interactions with their imaginary companions and when they tell others about them (Trionfi & Reese, 2009). Success in referential communication tasks requires substantial metacognitive functioning, and researchers also postulate that children with imaginary companions show better metacognition because they can engage in activities that help them understand others' mental lives (Roby & Kidd, 2008).

Researchers suggest that children with imaginary companions demonstrate creative skills, such as forming new concepts (Brann, 1991). They are more likely to concoct stories, engage in fantasy play, participate in creative activities, and express ideas fluently (Bouldin & Pratt, 1999; Hoff, 2005). Imaginary companions are unique in terms of creativity because this type of imaginary play allows children to use and communicate symbols in hypothetical situations. Childhood imaginary companions are associated with more creative personalities and occupations in adulthood (Kidd et al., 2010; Taylor et al., 2003). Research shows that adults with childhood imaginary companions are more likely to excel at complex, detailed scenes than those without (Firth et al., 2015).

> Studies also show that children with imaginary companions do not perceive themselves as less competent than peers without imaginary companions (Taylor et al., 2004). These individuals generally enjoy companionship and receive more opportunities to practice interacting with others, making them more likely to seek out both real and imaginary friendships (Gleason, 2017; Roby & Kidd, 2008). Self-regulation of behavior in coordination with others' needs and desires is crucial for successful social interactions in adulthood, and playing with imaginary companions offers a wider range of social situations and experiences than typical play (Gleason, 2017). Playing with imaginary companions might help a child

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relate to and manage overwhelming negative emotions. Children's interactions with their imaginary companions allow them to practice the social skills they wish to apply and avoid those they do not, without the negative implications that could arise from practicing conflict resolution with a real peer (Gleason, 2017). Practicing friendship skills risk-free helps prepare a child for the early childhood task of creating and managing friendships.

Appropriate Approaches and Strategies

Not all children discuss their imaginary companions with their parents, but those who do may hold significant conversations about their play (Taylor & Carlson, 1997). Parents who know about their children's imaginary companions often talk with their children about them, but their children are less likely to allow them to speak directly to the companions (Gleason & White, 2005). This illustrates that children's imaginary companion play occurs, at least in part, within the parent–child relationship. Children's imaginary companion play with parents can help them navigate social roles and manage emotionally charged situations. Unlike other parent-child interactions, a child leads the way and establishes the boundaries during imaginary companion play. Parents must respect that imaginary companions are solely the child's creation (Klein, 1985). According to the literature, failing to acknowledge a child's expertise about their imaginary companions can negatively affect this play (Gleason, 2017). This can lead to situations in which the child no longer interacts with their imaginary companions, the dynamics of play change, or children become frustrated with their parents' lack of understanding of the imaginary situation. Adults must understand that children need the freedom to accept or reject their suggestions and opportunities to engage in diverse forms of play. Here are some strategies parents can use when they see children playing with imaginary companions.

- Parents should recognize and appreciate a child's imaginary companion.
- Let children introduce their imaginary companions to their parents if they allow it, but do not force it.
- Respectfully follow your child's lead during play with their imaginary companion, supporting their creativity while maintaining healthy boundaries.

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- If you can, ask questions about the imaginary companion's thoughts and reactions in various situations to prompt creativity and deeper thinking in children.
- Ensure your child understands the difference between fantasy and reality in play and in different situations.

Conclusion

In summary, adults need a thorough understanding of play and must recognize when and how to facilitate it properly. Otherwise, they risk disrupting or even harming children's play. By clearly linking imaginary companions to developmental strengths, we can help parents see the important role this type of play plays in their child's growth. By validating and supporting a child's imaginary companion and pretend play tendencies, parents can foster children who are emotionally balanced, creative, and more socially skilled. Further research is necessary to determine how, if at all, parents' perceptions of their children's pretend play, including imaginary companions, change or evolve as their children move through preschool (Gleason, 2005). More research is also needed to better understand the connection between language skills and imaginary companions, as well as the relationship between neurodivergent children and their use of imaginary companions (Armah & Landers-Potts, 2021; Lillard & Kavanaugh, 2014).

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It’s A Child’s Right

Recess and the Value of Choice in the School Environment

Adolescents Need Adventure Too: Making Room for Play in Year 7
Educated by Nature

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Around Disabled and Neurodivergent Children's Perspectives on Play

The Power of Outdoor Play Partnerships for Inclusion and Accessibility

How Parents Can Advocate for a Playful Childhood that Prioritizes Joy



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Recess and the Value of Choice in the School Environment

Charlene Woodham Brickman, PhD

Introduction

Today's Kindergarten through Grade 5 environment is not as "elementary" as one might think. In today's culture of high-stakes assessment, the buzzwords are rigor and academic expectations. These expectations are often explicitly stated, highly scripted, and generally not developmentally aligned for their intended audience. To meet these lofty academic goals, behavioral expectations often fall out of step with students' chronological and developmental ages, creating an unrealistic bar and an ultra-serious atmosphere for children who should be participating in recess, collaborating with peers, learning through play, and experiencing joy in learning.

Problem Statement

Historically, recess was the one guaranteed break in the school day. While recess should be an unstructured break of at least 20 minutes during the school day, outdoors when weather allows and indoors in inclement weather (National Association for Sport and Physical Education, 2006), in today's classroom, it is often used as classroom currency for both academic and behavioral consequences.

Recess is a student's right and must be protected (Jarrett & Waite-Stupiansky, 2009; Rhea, 2016); unfortunately, in many of our educational settings, it is used to control and discipline students. Recess deprivation deprives a child of the movement, socialization, and breaks needed during an otherwise overly structured day (Murray & Ramstetter, 2013). More broadly, the deprivation of play and/or recess negates a child's fundamental right to play, which is essential to the well-being of the "whole child" (Zosh et al., 2022).

Other obvious control scenarios include assigned seating and hallway transitions where students are required to line up in number order, place an invisible "bubble" in their mouths, or place their hands behind their backs in a "ducktail" position. All while keeping themselves to the right side of the hallway in a resemblance of "prison" (Adair & Colegrove, 2021). Where are they going? Are they going to lunch where they are

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required to sit in assigned seats away from a friend(s) and often, as a behavioral consequence, have to eat in silence (Hooser & McClain, 2023)? Are they going to a Special, where an adult directs them, and compliance is expected?

A larger part of the problem is that compliance is most often a conversation in schools serving children of color and/or from low-income backgrounds (Winn, 2018). These marginalized populations are often stereotyped as harboring behavioral issues or needing remedial interventions, with the antidote often packaged as Social-Emotional Learning curricula (Humphries et al., 2018), with little focus on the child as a whole person but an increased focus on simple compliance.

Any of these elements of control restricts a child's ability to make individual choices, learn self-control, and have agency over self. When multiple layers of this control are the norm in our current educational settings, when is the appropriate time in the day for a child to express an opinion, extend a hypothesis, and/or make personal choices?

Background

Brooks and Murray (2016) raised concerns about the perceived epidemic of the shift toward prescribed curricula and the prioritization of academics over a child-centered pedagogy. The prioritization of academics is a developmentally *misplaced* approach (Ring & O'Sullivan, 2018) that drives a culture of compliance (Adair & Colegrove, 2021), in an attempt to strengthen literacy and math skills while negating other assets the child needs to acquire (Woodhead & Moss, 2007; Ring & O'Sullivan, 2018). This trend has been termed "schoolification" (Bassock et al., 2016) because it prioritizes a culture of compliance over engagement (Ryan & Deci, 2020). This process denies both students and educators choice and can create a hostile environment for true learning. "Schoolification" emphasizes classroom compliance by removing agency from both students and educators, sacrificing intrinsic motivation and meaningful engagement (Ryan & Deci, 2020).

Classrooms of compliance may forfeit *meaningful experiences* that connect prior knowledge in many ways. In classrooms where compliance is not the goal, both teachers

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and students have choice, and promoting children's agency is critical to equitable, empowered learning (National Association for the Education of Young Children, 2019).

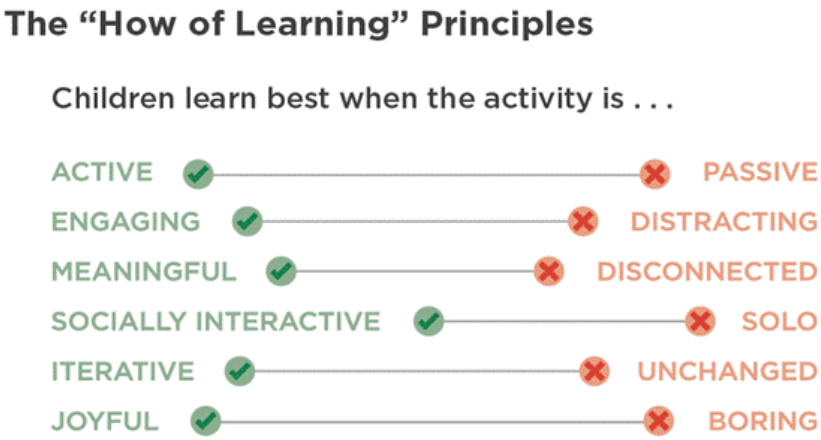
When policymakers, superintendents, principals, and teachers place undue emphasis on greater academic accountability for young children, it can actually negatively impact children's academic achievement and socioemotional development (Abry et al., 2015). The "push down" of academic expectations on young learners can have negative consequences for children's literacy development when the primary focus is on preparing them for standardized tests (Copple & Bredekamp, 2009).

Appropriate Strategies

When schools prioritize student agency over compliance, children can draw on their culture, community, interests, and lived experiences as meaningful resources for learning. These choices help students develop empowered identities because they can explore ideas connected to their own interests and values, which can deepen engagement and support learning (Adair & Colegrove, 2021). When teachers understand children's interests and curiosities, they can use them to drive instruction and experiences. One such example is choosing classroom reading materials based on instructional interest rather than simply on the classroom average (or target) reading level (Adair & Colegrove, 2021).

Imagine the difference in children's confidence, self-esteem, attention, interest, motivation, and self-control if we incorporated the six learning principles, recognized as the foundation of how children learn. These six principles include classrooms that incorporate active, engaging, meaningful, socially interactive, iterative, and joyful learning (Blinkoff et al., 2023). Under these six learning principles, a*ctive learning experiences* far outweigh "sit and get" passive experiences. Further, *engaging* learning is not distracting; rather, it holds students' attention. The give-and-take of *socially interactive* learning is the opposite of solitary learning, and the give-and-take of iterative learning is the opposite of closed-ended learning, allowing room for mistakes and learning through trial and error. Lastly, a joyful classroom supports expression and learning (Zosh et al., 2022; Hirsh-Pasek et al., 2022).

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(Blinkoff et al., 2023)

In addition to the graphic above, research identifies the 6 Cs: collaboration, communication, content, critical thinking, creative innovation, and confidence (Anggraeni, P., Sunendar, D., Maftuh, B., Sopandi, W., & Puspita, R. D., 2022). Rather than meeting isolated academic standards, this approach draws on research on what supports personal fulfillment (Golinkoff & Hirsh-Pasek, 2016; Hirsh-Pasek et al., 2022). One solution is to offer all students the chance to build transferable skills that support the diverse strengths needed to function in society.

Other strategies include beginning with students' prior learning, funds of knowledge, or background knowledge. This strategy can tap into resources that might otherwise go unused (Blinkoff et al., 2023). Viewing assessment more broadly than technology-based platforms allow builds a more comprehensive picture of your students' abilities and needs (Jones et al., 2023).

Conclusion

Our children need more than silence in the hallways and multiple-choice assessments. Our children are preparing for challenges that will require more than compliance. Students can acquire literacy and numeracy without losing their personhood. In the 21st Century, collaboration and creativity, initiative, problem-solving, critical thinking, and communication skills are needed for success in life and the workplace. It is time to recognize that the current schoolification has never been the

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solution. Change is needed; educators and parents should no longer passively comply with the harmful practices children are experiencing in primary classrooms.

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Adolescents Need Adventure Too: Making Room for Play in Year 7 Educated by Nature

Daniel Burton, BEd & Jonny Neen, PhD Candidate

Introduction

In a space between a two-storey classroom block and the basketball court, a group of Year 7 students began with pallets, timber offcuts, saws, hammers and power drills. Their structures took shape slowly, with a couch appearing first, then a kitchen, and later a double-storey house. Materials like old pallets and sticks were assigned new meanings, players' roles were negotiated, and tools moved from hand to hand. From a distance, the activity could have looked rough, noisy, and unfinished. From within the space, a shared domestic world and its community were emerging.

Some of these students were often noticed first when their energy rubbed against school expectations. Here, the same energy became construction, humour, cooperation and sociodramatic play. We found ourselves wondering what else becomes visible when adults pause long enough to look beneath the first impression. What needs might sit within the behaviour? What might the materials be inviting? What becomes possible when a young person feels trusted, capable and seen?

Year 7 is a threshold. For many Australian students, it marks the beginning of secondary school, with new timetables, teachers, uniforms, expectations and social worlds. Childhood continues through this transition, although the language surrounding it changes. Play is often renamed as sport, recreation, socialising, an extracurricular activity or a break. Each has value. The broader, self-directed forms of play that involve imagining, building, moving, tinkering, retreating, taking manageable risks and transforming a place can become harder to find.

The Year 7 Self-Build Play Space at Guildford Grammar School grew out of this wondering. Inspired by adventure playgrounds, junk playgrounds, loose-parts play and Playwork-informed practice, it offers a supervised environment where students use real tools, reclaimed materials and natural features to create their own play culture. The program has helped us notice that adolescents continue to seek adventure. They also

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seek places where they can gather, make, test, belong, and be alone. Their play has matured with them, and it remains part of childhood.

Problem Statement: When Play Becomes Harder to See

Many secondary schools provide courtyards, lawns, ovals, courts, verandas and benches. These places support conversation, rest, observation and friendship. Organised sport offers movement, shared purpose and belonging for many students. Alongside these valuable provisions, young people may have few places where they can alter the environment, invent its purpose, use loose materials, create a shelter, explore impact or follow an idea with no predetermined finish.

This narrowing is often unintentional. Secondary schools have complex responsibilities for safety, schedules, learning, maintenance, and supervision. Improvised structures can look untidy. Loud or physical play can be difficult to read. Tools, climbing, and deconstruction can activate adult concern. Formal uniforms can quietly limit kneeling, carrying, climbing, crawling, painting, or even sitting on the ground (let alone in a tree). Peer culture can also make young people wary of anything that appears 'childish'.

Digital play is part of many adolescents' social and creative lives. Many young people use online environments to alter and invent worlds, gather resources and explore. Physical, outdoor and material play belongs there too. A broad ecology of play allows young people to move between conversation and action, solitude and community, digital worlds and places they can touch and change.

We noticed playful impulses continuing through jokes, invented roles, roughness, collecting, making, private rituals and boundary-testing. These expressions were sometimes recognised as play only after we moved closer. A student striking a pallet may have been seeking impact, sound and physical release. A group gathering discarded objects may have been building a shop. A half-enclosed structure may have been a place for conversation, retreat, or belonging.

Break time carries particular weight in secondary school. The American Academy of Pediatrics' 2026 policy statement recommends daily, quality recess for students from

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kindergarten through Grade 12. It describes recess as a pause in academic effort and a setting for peer engagement, negotiation, emotional self-control, communication, and conflict resolution (Murray et al., 2026). For older students, a meaningful break can hold rest and social connection, self-directed activity and movement.

Background: A Right That Grows With the Child

Article 31 of the United Nations Convention on the Rights of the Child recognises the right of every child to rest, leisure, play and recreation, and to participate freely in cultural life and the arts. The Convention generally defines a child as a person under 18, thereby placing adolescents clearly within its protection.

General Comment No. 17 explains how this right changes as children grow. Older children increasingly seek opportunities to socialise with peers, spend time alone, explore independence, and encounter progressively more challenge and risk. These experiences contribute to identity and belonging. The guidance also identifies academic pressure, heavily programmed schedules, restricted school play, loss of contact with nature, and adult intolerance of noisy or messy play as barriers to the right (United Nations Committee on the Rights of the Child, 2013).

Naomi Lott's framework for bringing the right to play into daily life identifies four interconnected conditions: space, time, acceptance, and a rights-informed approach (Lott, 2025). This helped us understand why an oval or a free lunchtime may still leave some play needs unmet. A young person can have time without a place that invites them, or a place without materials and agency. They can have both while sensing that their actual way of playing is unwelcome. Acceptance asks adults to value play as it appears, including forms that are loud, changeable, strange, or unfinished.

The language of permission can still place control in the hands of the adult who grants it. Acceptance begins from the understanding that the right already belongs to the child. Adults continue to carry responsibility for care, safety, and the rights of others. Their role includes creating conditions, removing unreasonable hazards, listening to young people and responding in ways that honour their evolving capacities.

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Challenge, Uncertainty and Judgment

Risky play research offers language for some of what we saw at Guildford. Sandseter (2007) described forms including height, speed, tools, dangerous elements, rough-and-tumble play and opportunities to move beyond adult sight. Kleppe et al. (2017) later proposed play with impact and vicarious risk in research with very young children. These categories were developed largely through early childhood research, so they are best used as descriptive lenses rather than direct evidence about adolescents.

The same caution applies to the review by Brussoni et al. (2015), which examined children aged three to twelve. It reported overall positive associations between risky outdoor play and several health indicators and behaviours, while rating the evidence from very low to moderate quality. Its distinction between risk and hazard remains useful. A risk is a challenge a child can perceive and weigh. A hazard is a source of harm the child is unlikely to recognise or manage.

The United Nations guidance speaks more directly to adolescents. It states that some degree of risk and challenge is integral to play and calls for a balance between reducing unacceptable hazards and equipping children to strengthen their own safety (United Nations Committee on the Rights of the Child, 2013). At Guildford, this could be seen when a student tested a structure, reconsidered a brace, noticed a hot screw, or asked a peer to hold timber steady. Safety became a shared practice of awareness and judgment.

Appropriate Approaches and Strategies: Holding a Self Build Play Space

Begin with time, space, and acceptance

The Self Build Play Space depends on regular access. Repeated sessions allow students to return to an idea, deepen relationships, and see the space change through collective use. Trust also develops through repetition. Students learn what adults will hold firmly, where choice is available, and how their actions affect others.

The setting allows several kinds of play to coexist. One group may build, while another may paint a sign, dismantle a pallet, sit inside a shelter, or talk while watching. Some students move quickly into the centre. Others remain at the edge until a material,

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person, or invitation offers a way in. A varied environment respects these different rhythms.

Acceptance is visible in what adults allow to remain. Half-built structures, crooked signs, and temporary worlds can look unfinished through an adult lens. For students, these traces hold memory and meaning. Keeping the space alive asks adults to tolerate some visual disorder while continuing to attend to access, hazards, and shared agreements.

Offer real materials and real responsibility.

Reclaimed timber, pallets, rope, tyres, paint and found objects can become many things. Hammers, saws, drills, impact drivers, sanders and measuring tools extend what is possible. Real tools communicate trust and bring real responsibility.

Early sessions include clear instruction in tool use, protective equipment, body positioning, material securing and storage. Facilitators check weather, materials, structures, first-aid readiness, and the site at the end of each session. These practices form the space's containing edge. Within that edge, students make meaningful decisions.



Timber resists. Screws heat. Structures wobble. Adults can quickly make these problems disappear by taking over. We have learned to pause and ask a question first: What are you noticing? How might you strengthen that? Who else will use this? This leaves the thinking with the young person while keeping adult care close at hand.

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This kind of play space is not about the finished building product; the value is in the process. A structure may remain crooked or be dismantled the following week.





The experience can still hold cooperation, persistence, humour, repair and the sense that an idea can take physical form.

Notice the Need before Responding to the Behaviour

Some students arrive with energy that seeks force, noise, repetition and impact. In a conventional setting, striking or breaking materials may be read quickly as aggression or damage. We began asking what this energy was communicating, what the students' bodies or minds might need, and how the environment could safely meet those needs.

A dedicated deconstruction area emerged, known informally as the "Smash Zone" or "Smashy Smashy Zone". Students could dismantle selected pallets, recover timber, remove nails, explore how materials were joined, and experience the bodily satisfaction of impact. Shared structures remained protected, and students feeling threatened by this energy could stay away. Tool expectations, personal space, and material checks still applied.

The zone helped adults hold two truths together. High-energy deconstruction can create hazards and affect others. It can also be purposeful play. With a clear place, suitable materials, and attentive adults, smashing could shift toward curiosity, resource

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recovery, and a new project. For some students, deconstruction was the doorway into deeper participation.

The kitchen and couch offered a similar lesson. Students who were often noticed for boundary-testing moments revealed another part of themselves when the environment shifted. Their play held domestic storytelling, humour and cooperation. The experience reminded us to track before teaching, and to look for needs before settling on a meaning for behaviour.

Practise Risk Together

The space is carefully held. Adults remove hazards that students cannot reasonably identify, set boundaries around tools and materials, and step in when the likely consequence exceeds what the group can manage. Some structures wobble and are intentionally left in place so students can assess the structures' safety and decide how to respond.

Students consider load, balance, fall space, sharp edges, hot fixings, rope loops, weather, heavy lifting, and the effect of their choices on others. A facilitator may move closer, ask a question, demonstrate a technique, or pause an activity. At another moment, the same facilitator may step back and allow a student to test and adjust.

This movement of proximity is part of the craft. When adults are anxious or rushed, they may stop play earlier. When they are grounded and attentive, they can read eyes, body position, speed, sound, skill, and group dynamics. Shared language about risk, hazard, play cues, and adult response helps a team act more consistently and with greater care.

Risk-benefit thinking supports this balance by weighing the value of a challenging activity against the likelihood and severity of harm (Brussoni et al., 2012). The aim is a setting where young people can practise judgment within a community that remains alert and responsive.

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Let Clothing Support Participation

Uniform became an unexpected part of play provision. Formal clothing and footwear can make climbing, kneeling, carrying timber, painting, digging or sitting on the ground uncomfortable. For girls wearing skirts, dresses or restrictive garments, movement may also carry concerns about exposure and social judgment.

At Guildford, access to sports uniforms on Self Build Play Space days signalled that bodies were expected to move, carry, build and get dusty. The change was practical and cultural.

The research base is still developing. An Australian cluster randomised trial identified impractical uniforms as a barrier to physical activity, particularly for girls. However, the one-day uniform change did not produce a significant increase in girls' moderate-to-vigorous activity (Nathan et al., 2021). A 2025 systematic review found that sports uniforms were generally associated with increased physical activity, playtime, and some fitness indicators, with particularly visible benefits for girls. Only five studies met its criteria, and the authors noted limitations in quality and consistency (Olivares-Arancibia et al., 2025).

For schools, the practical question is immediate: can students move comfortably and participate with dignity in the experiences being offered? Clothing, footwear, storage and acceptance of mess all shape the answer.

Build Belonging and Leave Room for Many Forms.

The Self Build Play Space provides Year 7 students with a visible way to contribute to the broader school culture. A sign, shelter, repaired structure or shared joke can remain for the next group. Other students may add to, alter, or dismantle it. The place becomes a record of participation and relationship.

A self-build space is one expression of adolescent play provision. Other schools may offer loose-parts areas, outdoor studios, digging and growing spaces, nature-rich retreats, maker areas that extend outdoors, or open ground where students can invent temporary uses. The deeper invitation is to provide more than one way to belong. Some

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young people seek speed and impact. Others seek a small enclosure, a conversation, a material to work with, or a place to watch before joining.

Conclusion and Recommendations

The Guildford Grammar School experience has helped us see adolescence as a continuation of childhood with its own forms of play. Year 7 students may have greater physical capacity, sharper social awareness and a strong desire for independence. They also continue to imagine, make, test, retreat, laugh, take risks and build worlds together.

Their right to play is lived through relationships. It is shaped by the time schools protect, the places they make available, the types of materials they value and provide, the clothing students wear, the way adults interpret behaviour and the degree to which young people can influence decisions. A well-held play space combines freedom and care. Adults remain responsible, while young people experience real agency.

Secondary schools can begin with the following actions:

1. Recognise adolescents as children with a continuing right to play. Include Article 31 in whole-school conversations about wellbeing, break time, student voice and the design of the school day.
2. Protect regular and meaningful break time. Offer time free from academic demands, with opportunities for rest, friendship, movement, imagination and self-directed activity.
3. Create varied and adaptable places. Provide spaces for active, social, constructive, sensory, imaginative and quiet play, including materials young people can move and transform.
4. Listen to young people and share ownership. Invite students to shape the uses, agreements, materials and future development of their play spaces, and give their views genuine weight.
5. Use risk-benefit thinking. Remove unreasonable hazards while preserving age-appropriate challenge, uncertainty and opportunities to practise judgment.

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6. Prepare adults to notice before responding. Build shared language around play, behaviour, energy, risk, proximity and care so staff can step closer or further away with intention.
7. Review practical barriers to participation. Consider uniform, footwear, storage, mess, maintenance, accessibility, gender and cultural safety as part of play provision.
8. Make play part of the culture. Repeated access allows relationships, confidence, skills, shared memory, and a sense of belonging to grow.

Adolescents need adventure too. Our hope is that secondary schools will remain curious about what play looks like as children grow, and willing to create conditions where it can remain visible, accepted, and alive.

Note: At this time, classrooms with Year 7 students can access and use the space once per week. Daniel continues to work with school administration to increase access.

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Unheard Voices, Unseen Play: Addressing the Research Silence Around Disabled and Neurodivergent Children's Perspectives on Play

Sarah Jayne Meyer, MSc

Introduction

Play is a universal and essential part of childhood. It supports physical, cognitive, emotional, and social development, and it is recognised as a fundamental right under the United Nations Convention on the Rights of the Child UNCRC (UNICEF, 1989). Three articles are particularly relevant when considering disabled and neurodivergent children's participation in play research. Article 31 recognises the right of every child to rest, leisure, and play appropriate to their age. Article 23 affirms that a child with a disability has the right to live a full and decent life with dignity, independence, and active participation in their community. Article 12 states that every child has the right to express their views, feelings, and wishes in all matters affecting them, and to have those views taken seriously.

Despite these protections, disabled and neurodivergent children often experience restricted access to play and limited opportunities to participate in research about their own lives.

The Problem with Current Play Research

Although Scotland has enshrined the UNCRC in law (Scottish Government, 2024), disabled and neurodivergent children's rights to play and research participation remain unevenly upheld. Systematic exclusion from research, especially research that claims to represent children's experiences of play, persists. This gap undermines children's rights, limits their opportunities for development, and perpetuates inequities in policy and practice. If the gap continues to be ignored, the opportunities of play for disabled and neurodivergent children will continue to diminish.

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Background and Context

The Importance of Play

Play is widely understood as the "work" of early childhood, providing a foundation for motor development, emotional regulation, spatial awareness, and executive functioning. As children grow older, however, play is often devalued and treated as a reward rather than a right.

For disabled and neurodivergent children, play is even more critical. Yet they are frequently excluded due to:

- fears of injury
- concerns about bullying
- misunderstandings about what their play looks like
- discomfort with behaviours that fall outside neurotypical norms

For example, authentic autistic play can differ significantly from neurotypical play, often leading to misinterpretation or exclusion when peers do not understand the "rules" or rhythms of autistic play (Guthrie Stirling, 2025). Adults, too, may inadvertently isolate autistic children when they do not recognise or value these differences.

Parents report significant barriers in public play spaces, including inadequate facilities, safety concerns, and fear of judgment (Scope UK, 2023). These barriers are particularly concerning given evidence linking play to reduced anxiety and improved mental health (Dodd et al., 2023), and the heightened mental health risks faced by disabled and neurodivergent children (Heslon et al., 2024). This reduced access to free and outdoor play can exacerbate existing inequalities for these children.

Are we Listening to All Children?

Despite growing interest in children's voices, disabled and neurodivergent children remain under-represented in research and, in particular, play research. Many studies rely heavily on adult proxies, even when claiming to foreground children's experiences. A large international study on disabled children's play, for example, presented "children's experiences" almost entirely through parents', teachers' and

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carers' accounts, with parents often asserting that their child could not communicate their preferences (Barron et al., 2007).

This reliance on adult interpretation reflects:

- deficit-based assumptions about communication
- methodological inflexibility
- the medical model of disability (Oliver, 1990)

Adult perspectives can complement children's accounts, but they cannot replace them, as their lived experiences differ profoundly. It also raises a fundamental question: Why do we assume adults can speak for disabled and neurodivergent children when we would not accept adults speaking for neurotypical children?

Research recruitment often, intentionally or not, favours children who are compliant, verbal, and easy to engage (Hackett et al., 2024). Schools may select "good" children to participate, while children who are dysregulated, non-verbal, or labelled "challenging" are excluded. Parents often act as gatekeepers by completing or not completing consent forms. These patterns disproportionately silence disabled and neurodivergent children.

The social model of disability offers a corrective: when tools and environments are adapted, disabled and neurodivergent children's perspectives can be captured with validity and reliability (Kramer et al., 2009).

Approaches and Strategies for Inclusive Research

Embracing the Messiness of Research with Children

Children are unpredictable. A talkative child may fall silent in an interview; carefully prepared activity sheets may become paper aeroplanes. Rather than resisting this unpredictability, researchers should embrace it. A paper aeroplane can serve as a tool, decorated with symbols, drawings, or words that answer the research question.

Flexibility is not a methodological weakness; it is a requirement for ethical, child-centred research.

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Allowing the Data, and the Child, to Lead

Ryu (2022) illustrates that children's priorities do not always align with researchers' assumptions about what is important. Through a critical inquiry of their own methodology, the researchers recognised that even with sustained reflexivity, moments of dissonance emerged between their interpretations and the perspectives of participating children. Yet it was precisely this reflexive, responsive stance that enabled the research to follow the children's lead, even when their interests diverged from the original study design. By allowing the data to guide the inquiry rather than adhering to predetermined researcher expectations, the study achieved genuinely child-led research.

Adapting Methods to the Child

The mosaic approach (Clark and Moss, 2011) offers a flexible, multi-modal framework that enables children to participate in research without relying on reading or writing. By combining observations, interviews, and a range of participatory tools, the approach constructs a "mosaic" of children's perspectives, drawing on diverse forms of expression. Although originally developed for use with pre-school children, the Mosaic approach has since been successfully adapted for research with children who have disabilities and additional support needs, demonstrating its capacity to accommodate varied communication styles and developmental profiles. The use of photovoice and child-led tours is a common mosaic method, but illustrations, video diary rooms, and puppet shows are other data collection possibilities.

Inclusive research requires a diverse communication as well as methodological "toolbox," including but not limited to:

- Braille for blind or partially sighted children
- Makaton signing, Picture Exchange Communication System, or Augmented and Alternative Communication for non- or pre-verbal children
- Visual prompts, objects, or sensory materials
- Movement-based or play-based methods

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Listening to Silence

Listening to silence is as important as listening to speech. As Hackett et al. (2024) argue, researchers must attend to why children choose not to participate and resist the temptation to dismiss silence as irrelevant or "off-topic" during early analysis. Silence is a meaningful form of communication and may reflect not a child's choice, but the consequences of the researcher's actions, assumptions, or the dynamics of the research setting (Bucknall, 2014). During observations and focus groups, silence should be documented alongside body language, facial expressions, and the emotional tone of the interaction, whether the silence appears comfortable, hesitant, or resistant. Researchers should avoid prematurely filling silences; instead, children can be reassured that they may take their time. Flewitt (2005) suggests offering cards that allow children to indicate reasons for not answering, recognising that peer pressure, group dynamics, and disability-related barriers can all silence a child's voice. Some children may choose not to speak out to avoid standing out, to avoid contradicting dominant peers, or to avoid challenging group norms.

Silence is not only in the domain of verbal data collection, but it may also appear as skipped questions or patterned non-responses in surveys. Examining these patterns can provide insight into discomfort, misunderstanding, or disengagement. Focus groups, too, can inadvertently silence participants through intimidation, dominance by more vocal peers, or the desire to conform. Disabilities may also silence children, whether through non- or pre-verbal communication needs or through deliberate exclusion from participation. Recognising these dynamics is essential to ensuring that silence is interpreted as data, rather than absence, thereby deepening understanding and challenging assumptions about who is "able" to participate.

Accepting Discomfort

Inclusive research is time-consuming and analytically complex. It requires researchers to sit with ambiguity, adapt methods, and challenge their own assumptions. But discomfort does not justify exclusion. If we are committed to hearing all children's voices, we must be willing to step outside our comfort boundaries. This includes embracing the analytical challenges that arise when working with diverse forms of data,

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drawings, gestures, silence, movement, digital artefacts, or co-created objects. Each mode demands different interpretive lenses and often resists neat categorisation.

Some researchers have found value in physically engaging with data to deepen immersion. For example, Smith (2014) cut out speech bubbles with data printed on them to organise and reorganise topics during analysis, demonstrating how tactile methods can support memory, thematic mapping, and the handling of overlapping ideas. Approaches like this highlight the importance of working with data in ways that honour its form rather than forcing it into conventional analytic structures. Researchers must therefore navigate contradictions, partial narratives, and fragmented insights, recognising that complexity is inherent to authentic child-centred research. Accepting this discomfort is essential to producing analysis that reflects the richness of children's lived experiences rather than simplifying them to fit traditional methodological expectations.

Recommendations and Conclusions

Ensuring that disabled and neurodivergent children are meaningfully included in play research requires a coordinated commitment across research, education, and policy. The evidence presented demonstrates that exclusion is rarely the result of children's abilities and far more often a consequence of structural, methodological, and attitudinal barriers. Addressing these barriers demands a shift toward research practices that are flexible, reflexive, and grounded in children's rights.

Researchers must adopt approaches that recognise the diversity of children's communication styles and lived experiences. This includes developing multi-modal, child-centred methodologies that allow children to express themselves in ways that feel natural and accessible to them. A robust methodological "toolbox" should incorporate visual, sensory and alternative communication systems, ensuring that participation is not limited to those who can engage verbally or in writing. Researchers also need to cultivate a reflexive stance, one that acknowledges the power dynamics inherent in research and remains open to following children's priorities, even when they diverge from initial research plans. Silence, hesitation, and non-verbal communication must be

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treated as meaningful data rather than absence, and researchers should be prepared to invest the time and interpretive care required to understand these forms of expression.

Schools and educators also play a critical role in ensuring that all children, not only those who are compliant, confident, or easy to engage, are offered opportunities to participate in research. This includes actively challenging cultures that reward "good behaviour" with participation and inadvertently silence children who are dysregulated, anxious, or misunderstood.

Policymakers, too, have a responsibility to embed all children's voices within the systems that shape their lives. This involves funding accessible play spaces, supporting inclusive research initiatives, and ensuring that policy development processes actively seek out and respond to the perspectives of disabled and neurodivergent children. Compliance with UNCRC Articles 12, 23, and 31 must be monitored and applied in practice, not simply acknowledged in principle.

Ultimately, the inclusion of disabled and neurodivergent children in play research is not a methodological preference but a rights-based imperative. When children's voices are excluded, whether through inaccessible methods, adult assumptions, or structural barriers, the resulting policies and practices fail to reflect their lived realities. By committing to inclusive, adaptive, and ethically grounded research practices, we can begin to close the gap between rights and reality. Listening to disabled and neurodivergent children directly, respectfully, and on their own terms is essential for creating environments in which every child can play, participate, and thrive.

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The Power of Outdoor Play Partnerships for Inclusion and Accessibility

Angela Rekers, PhD

Introduction

Playing outdoors across a variety of terrains has been shown to contribute to children's cognitive, emotional, social, and physical development and well-being (Fyfe-Johnson et al., 2021; Schutte et al., 2017). While research clearly shows the benefits of outdoor play across a variety of terrains, children also have fewer opportunities for outdoor physical activity (WHO, 2019). This trend is wide-ranging, affecting children of all ages and abilities across all demographics.

Contributing to these trends are increasingly sedentary lifestyles and adults' concerns about safety that are limiting opportunities for outdoor play (Gray et al., 2015); even in educational settings, children and young people (CYP) are afforded fewer opportunities to move, play, and explore (Jerebine et al., 2022). Affordances for independent and/or risky play are likely to be especially constrained for young people and children with additional needs (Gately et. al., 2023). Given the well-documented research on the multiple holistic benefits of such play, these constraints may contribute to developmental challenges across physical, cognitive, social, and emotional domains.

This paper argues that collaboration and partnership among families, communities, not-for-profit organizations, playworkers, forest school leaders, schools, specialist therapists, and others can create intentional opportunities to promote and support outdoor play for children and young people, especially those with traditionally limited access. Specialist services typically include health-sciences therapists, such as occupational therapists. Introducing outdoor play specialists could benefit everyone. An outdoor play collaboration in Wales, United Kingdom (UK), is used here to demonstrate the benefits of a forest school program for youth with disabilities.

Issues

Parents/carers, teachers, and specialist practitioners, such as occupational therapists, who value the right to play for *every* child and young person, as argued in Article 31 of the United Nations Convention on the Rights of the Child (IPA, 2026;

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UNCRC, 2013), may find their intentions frustrated by institutional expectations and daily demands. Children's play repertoires at school are often limited to adult-chosen, adult-initiated, and adult-motivated opportunities for meeting measurable 'learning and development' milestones. While play-based activities may support these milestones, schools and therapeutic settings often provide too few play opportunities defined as 'freely chosen, intrinsically motivated, and personally directed' (PPSG, 2015). While recess allows children to play with fewer adult-initiated demands, the beneficial, available affordances (Gibson, 1979/2025), or social and physical opportunities, of the schoolyard may be limited for diverse children (Balesley et al., 2013); they are often non-existent for secondary school-aged young people.

Furthermore, inclusive playgrounds and spaces may still perpetuate a 'deficit' perspective of children and young people with diverse abilities, thus limiting the types of social and material interactions. Play is shaped not only by sets of affordances, in which the capabilities and intentions of the individual meet their social and material environment (Gibson 1979/2015), but also by sociocultural mediating forces, such as policy, playground design, the curriculum and timetable, teachers' skills, etc. As children's play opportunities decline outside school hours, perhaps it is time to make room for more un*adult*erated outdoor play during the school week through collaborative play partnerships.

Background

Lack of confidence and safety fears are often cited as barriers to facilitating outdoor play, and these concerns are well founded. Referring to the interactivity between the individual as perceiver, their capabilities, and the properties of that which they encounter, be they social or material, Gibson (1979/2015) stressed that affordances may be beneficial or harmful, offering 'benefit or injury, life or death' (p. 134). For teachers to suddenly become playworkers or for specialist therapists to add outdoor risk assessments to their daily tasks may not be realistic.

There is a need, therefore, to highlight the importance of a collaborative 'third space', on or off school grounds, in which children, young people, teaching staff and specialist practitioners can be supported by trained forest school or outdoor play leaders

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to access the benefits of joint playfulness offered by an alternative or more 'wild' pedagogy. Trained outdoor practitioners have the perception, capabilities, and resources to provide safe, inclusive outdoor play opportunities tailored to each client group and every individual within it. Such a space gives children and young people the opportunity to make independent play choices and engage in risky play, which is often denied to those with diverse abilities (Morgenthaler et al., 2023). Essentially, for practitioners, third space partnerships can provide both formal and informal opportunities for teachers and specialist practitioners to observe, learn from, and respond to children and young people's play; reap the benefits of being outdoors themselves; and even join in as a 'play partner' to shed typical school-based adult/child power hierarchies (Rekers & McCree, 2022).

In the United Kingdom, outdoor play is often facilitated by forest school programs delivered off-site in local woodlands or parks; these programs are run by independent forest school practitioners external to the school or education association staff, although school staff also attend. Rather than being limited to early childhood provision or private nature preschools, forest school programs are delivered to a wide range of beneficiaries through long-term, weekly sessions (see FSA, 2011/2026). Children, young people, and adults with additional needs, or in special circumstances with organizational support, such as a self-contained special needs classroom or a women's domestic violence or refugee support non-profit organization, are often able to access forest school provision through grant funding. This equitable access for a range of beneficiaries is even more sustainable when practitioners and teaching staff complete their own forest school training and develop confidence in working with their groups outside.

Much of the grant funding is possible due to the commitment of governmental legislation and policies, such as those of the Welsh Government (WG), underpinned by the country's adoption in 2004 of the United Nations Committee on the Rights of the Child as the foundation for policymaking in relation to children and young people (WG, 2022). Subsequent legislation, such as the Wellbeing of Future Generations Act (Wales) 2015 and the Social Services and Well-being Act (Wales) 2015, highlights the value of play opportunities for mental and physical health and encourages outdoor activity

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across the health, social, education, and childcare sectors. Indeed, the Children and Families (Wales) Measure 2010 includes mandates for Local Authorities to provide diverse play opportunities for children of all ages and abilities; and, The Play Sufficiency Assessment (Wales) Regulations 2012 outlines statutory guidance that includes safeguarding, developing a play workforce, equitable access, types of physical spaces, and community engagement, overseen by the Ministerial Review of Play Implementation Board (PRIB).

In this paper, I refer to forest school sessions delivered by a not-for-profit forest school charity that has been running short- and long-term programs across South Wales since 2001; its funding streams have relied primarily on Wales' commitment to outdoor play and to mitigating the impact of multiple disadvantages, such as poverty and disability.

An Environmental Affordance Perspective Approach to Analyzing Play

The benefits of forest school provision, funded and delivered outside the school environment, supports play opportunities for children and young people with additional needs (Friedman, et al., 2022) School-based provision is often focused on 'normative' interventions; forest school and outdoor play can provide a 'lower -demand environment', which can widen the range of affordances for children's social interactions as well as their interactions with materials (Friedman et al., 2022). Studies show that the features and resources of outdoor play settings matter, as do play partners and adult facilitation in such play spaces (Rekers, 2026; Rekers & McCree, 2026; Waters, 2017). An environmental affordance perspective can be used to consider these physical, material, and social influences on outdoor play (Bang, 2009; Rekers, 2026). This perspective layers cultural historical activity theory with affordance theory to analyze children's interactions with what they encounter and with whom they interact in everyday activities and settings. It highlights material and social affordances that are available, promoted, and constrained, as well as the child/young person's individual motive orientation and agency in responding to perceived affordances.

> Perceiving is an individual achievement… It is keeping in touch with the world, an experiencing of things rather than a having of experiences. It involves

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> awareness-of instead of just awareness…The continuous act of perceiving involves the co-perceiving of the self (Gibson, 1979/2015, pp. 228-229).

An environmental affordance perspective uses Bang's (2009) analysis of children's activity in everyday settings according to the affordances of features, materials, and artifacts or *things*; affordances of social others; and affordances of self-experience:

Affordances of Things – what is available & utilized, when & why, how that contributes to the ongoing activities, the child's participation & experience

Affordances of Social Others – the child learns about 'who am I?' in relation to social others & expectations in the setting. Comes to know what is important in different activity settings. How to be an individual within a collective experience.

Affordances of Self-Experience – the child experiences their agency (first-person perspective) as well as possible/available cultural positions (third- person perspective), *phenomenological double-ness of participation: 'Who am I /Who am I becoming? Is this valued? Do I value this?'*

From this perspective, consider the following forest school session delivered off school grounds in which young people with additional needs participate:

> Along with a teacher and paraeducator, eight 14- and 15-year-olds from a specialist autism school attend Forest School weekly throughout the school year. The bus drops them at the nature reserve car park, where two Forest School leaders meet them; together they walk 1/8 mile to the Forest School site. The young people are not rushed, and there are many things to observe along the way, including a pond with tadpoles.
>
> When the path opens into a grassy clearing, the group has to cross to reach the wooded Forest School site; one 14-year-old boy, John, starts to walk-run, racing to the site. As he moves quickly over the uneven ground, John often falls but laughs, gets back up, and keeps rushing. One of the teachers says to a Forest School leader: 'His mother was telling us how much he loves Forest School and talks about it all the time. He never really gets the opportunity to be off

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> pavement, so we were worried. He has to use a walker a lot at school. However, here he cannot wait to run and race everyone! Luckily, this field is a soft landing spot!'

The affordances of the uneven but soft ground provide opportunities for running and racing, as well as for falling; and the affordances of the teaching and forest school staff, as well as peers, provide opportunities for safeguarding, risk assessment, cheering, racing, and beating in a race. The affordances of self-experience, therefore, include being-watched-able, being-running-able, being-falling-able, being-getting-up-able, being-raced-able, being-winning-able…

When John gets to the site, the usual adult-facilitated 'circle time' begins, where the leaders settle the students and remind them of the rules: "take care of yourself, take care of each other, take care with the woods and its creatures". They ask if the young people want to play a game together first, and they choose to play '1, 2, 3, where are you?', a hide-and-seek game that reinforces the boundaries and lets them explore beyond the basecamp area. The young people hiding first cover themselves with a camouflage tarp down a path behind alder trees, giggling and shushing each other. The 'finders' group shouts, '1, 2, 3, where are you?' Those hiding shout, "1, 2, 3, we are over here!" and peek out from underneath their shelter. There is much shrieking when the hiders are found.

The affordances of hiding, finding, giggling, and being 'good-scared' are less likely in a classroom or even playground setting for this group of young people. Because so many adults are there to support the students and each other, they can monitor for safety and join in as play partners.

After this game, the students choose from activities that are facilitated and/or supported by the leaders, such as sawing wood for the fire, using loppers to cut bracken, lying or crawling in a net hammock, making a hazel-branch fence, cooking breakfast over the fire, doing craft activities, swinging, working on the den they add to each week, hiding woodland puppets from each other in a puppet hide and seek game, or just hanging out drinking hot chocolate observing their classmates and chatting to adults. John and his best friend seem to like climbing trees best of all. The forest school site is

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enclosed on two sides by an ancient hedge created by previously coppiced trees, along with oak and ash trees. These, along with built-up soil, provide a 'natural' berm that enables the boys to climb up and into the trees. They spend hours here, dragging tarps up to make a den, having their snack in its shelter, throwing acorns and mouse-nibbled hazelnut shells.

Using an environmental affordance perspective to analyze tree-climbing activity, for example, highlights the tree's actualized affordances: climbing, crawling, watching from a height, balancing, resting, etc. The social affordances John takes up include watching, sharing, helping, and hanging out. Harmful affordances, such as falling from height, are present; however, adults' presence and the natural features of the horizontal tree limbs mitigate them, and the boys have discovered that these features afford the perfect challenge. They have self-selected this spot for tree climbing as they have perceived its affordances in relation to their intentions and capabilities. Therefore, the affordances for self-experience include: being both watched- and watchable, being both helped-able and helping-able, being tree-climbing-able, being making-independent-choices-able, among others.

These affordances are shaped by collaboration among teaching staff, forest school leaders, forest school site features, and the young people's choices. They offer opportunities to see which activities motivate the children, as well as to show how they can self-define their capabilities. Adding specialist staff, such as occupational therapists, who work with young people at school would provide a more natural, student-motivated field of experience in which specialists can deliver supportive interventions.

Conclusion/ Recommendations

For children and young people with diverse abilities in particular, an interdisciplinary approach to outdoor play provision can provide multiple benefits, including an enhanced sense of competence and ability. Chawla and Heft (2002) argue that the physical and social affordances available to children contribute to their development of competencies. Because over 22 percent of occupational therapists (OTs) in the United States work in early intervention centers or schools (AOTA, 2023), multidisciplinary partnerships and collaborations are commonplace indoors. Expanding

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this provision outdoors may provide additional benefits for adults, children, and young people. Adding nature therapists, play workers, or forest school leaders would ensure that children and young people with additional needs who may not be able to access play opportunities without added support can engage with a wider range of outdoor affordances.

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How Parents Can Advocate for a Playful Childhood that Prioritizes Joy

Linnea Westerlind, MSocSc

Introduction

Parents and caregivers, we are raising kids in a challenging era. With rapidly changing, addictive technologies competing for our children's time—and let's be honest, our own time, too—it's never been harder to ensure kids get enough physical activity and time outdoors.

The good news is that, despite modern challenges, kids are still wired to play because play is biological and instinctive. As parents and caregivers, we can influence our children's access to play in nearly every area of their lives.

We know play is essential to a healthy and happy childhood. By sharing strategies and ideas for cultivating a culture of play within our families and communities, we can advocate for a playful childhood that prioritizes joy.

Problem Statement

According to the Centers for Disease Control and Prevention (2025), school-age kids need at least 60 minutes of physical activity every day, and preschoolers need even more. In reality, most kids don't meet those minimums (Child and Adolescent Health Measurement Initiative, 2023).

Recess gives kids a chance to socialize, play, and be physically active during the school day. Unfortunately, American children get less recess than previous generations and much less than children in countries like Finland, Uganda, and Japan (Jarrett, 2019).

While sports are another good opportunity for play, today's youth are increasingly being funneled into select and travel teams, which are expensive and highly competitive. This has also exacerbated disparities between children from wealthier families, who can afford these programs, and those from families who cannot (Project Play, 2025). An Aspen Institute study found that 22% of parents believe their child will play at the college level, and 11% believe their child could go pro (Dorsch & Blazo, 2025).

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This unrealistic viewpoint and the focus on extreme achievement and competition in sports cause us to lose sight of sports' purpose.

Background

Today's children also spend more time on screens and, consequently, less time being physically active and engaged in play than any previous generation (American College of Pediatricians, 2025; Guthold et al., 2020).

Not all parents and caregivers have the time or bandwidth to do advocacy work, and access to play has societal complexities that are inequitable and not easily solved.

Appropriate Strategies

Here are some suggestions for how parents and caregivers can advocate for and prioritize play in their children's lives.

Play in Schools

Kids spend a significant portion of their waking hours at school, so the quality and quantity of play at school is an important piece of the play puzzle. How much recess time does your child receive if they are in elementary school? Ask their teacher for the daily schedule and check the number of recess breaks and the total minutes. If recess is lacking at your child's school, talk to the teacher and principal about the importance of recess for your child's physical, mental, and social health. Many states mandate minimum recess times to ensure kids have access to this essential time for play (The Sports Institute, n.d.). Find out whether your state has a recess mandate and whether your child's school is following it.

Are the outdoor spaces at your child's school "green" with trees, native plants, and natural elements available for play? If you have capacity, get involved with your school's PTA and volunteer to help fundraise for a greener schoolyard environment. Schoolyards with green elements promote health, wellbeing, and learning (Stevenson et al., 2020).

Middle and high school kids also need time for movement. Does your child's school offer breaks beyond just passing periods? Do they provide a variety of Physical

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Education classes? Are there non-competitive club sports available? You can talk to other parents and advocate together for changes that benefit your tweens and teens.

Play in Sports

High-quality sports programs with trained coaches can bolster academic engagement, promote resilience, and support mental and physical health (*Bengtsson et al., 2025*). Sports are also a great way for kids to play throughout childhood and adolescence. Most kids want to play sports because they are fun and they can spend time with friends. Parents and caregivers can encourage their kids to avoid early specialization, which can lead to overuse injuries and burnout, and to prioritize fun (Luo et al., 2025). Let kids play a wide variety of sports and try new ones.

Play in Parks

Our local parks are an excellent place to engage in outdoor play. Return regularly to a favorite park to become intimately familiar with every nook and cranny or find a new one each time to explore. Let your child lead and catch yourself before you say, "be careful" or "don't get dirty." Kids need to find and test their own limits, so don't hold them back from climbing a tree (to a reasonable height) or getting their feet muddy in the stream.

You can also help shape your community's parks. Attend info sessions and give feedback on new parks or the redevelopment of parks in your neighborhood. Advocate for park elements that encourage play—climbing features, skate elements, and child- and teen-friendly spaces. Skateboarding is not a criminal activity; it's a sport.

Playful Community Organizations

Organizations like the YMCA, Boys & Girls Clubs, and local parks and recreation programs are hubs of active play. Look for after-school and summer camp opportunities that prioritize physical activity and outdoor time over screens and technology. Some organizations offer sports sampling camps where kids can try a wide variety of sports. If you can, support these organizations financially or with your volunteer time so they can keep thriving.

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Playful Family Time

This is the most important area—parents have more control over how their kids spend their time at home than anywhere else. We have the chance to sculpt this period of their lives, so let's make it playful and joyful! There are lots of free and easy ways to spend time together.

Close to home, you can watch the sunset from the tallest hill you can find in your neighborhood. Lie on your backs and look at the clouds. On a cloud-free night, watch the stars come out together. Make s'mores in the microwave and go for an evening flashlight walk. Great family games and activities that require minimal equipment include kickball, bocce ball, pickleball, hide-and-seek, and hula hooping.

Exploring further afield, hiking is inexpensive and encourages a sense of adventure and discovery. Bring hot cocoa for a mid-hike treat. Listen for bird calls or look for signs of insects. Give your child the unforgettable experience of an overnight in nature. If you're new to camping, try a state park close to home and ask other parents for tips and advice. To save money on gear, check used kids' clothing stores, online trading networks, and swapping with other families.

And, parents, let's rethink screens. They are unavoidable in children's and teens' lives today, but you can set clear boundaries and model healthy habits. Aim to have screen-free time as a family every day. Assure yourself that it's OK for kids to be bored. Resist the urge to offer a screen every time your child complains. Young kids who use screens in their stroller during a walk miss the chance to see and absorb the surrounding nature.

Conclusion

Parents across the U.S. are advocating for systemic change in recess policies, youth sports oversight, and physical activity legislation. More than 20 U.S. states now have physical activity and recess laws in place, often thanks to parent advocacy (*U.W. Sports Institute | Youth sports and physical activity legislation tracker*, n.d.). You can start locally by getting involved with your school's PTA and joining its legislative advocacy committee. Find organizations in your region that are doing systems change

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work and get involved. Contact your state legislators and ask for a meeting; talk about what matters to you regarding play, even if you do not know the policy solution.

Parents *can* and *do* make a difference in bolstering play in their own child's life—and in creating societal changes that benefit all kids.

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Leading for Play

Press Play: A Story of Play, Inquiry, and Systems Change

Play IS Readiness: Rethinking What Prepares Children for Kindergarten

Reimagining Readiness: The Transformative Power of Play in Language and Literacy

Kids Deserve More Than Just Change — They Deserve Justice

Time, Space, and Permission: Critical Ingredients for Integrating Play in Public Schools

Celebrating Play in Early Intervention: Every Child Deserves a Playful Journey

Realising the Right to Play through Pedagogy: A Scottish Perspective on Systemic Change in Education

The Power of Play: Why Unstructured Time Matters in Primary School

Ready or Not, Here I Come: Redefining Kindergarten Readiness to Meet Children Where They Are Upon Arrival

Reimagining the Educational Ecosystem: Modeling Play, Choice, and Community Partnership for Holistic Development

Strengthening Child, Teacher, and Parent Relationships Through Play

Ready for Me: A DEY Campaign to Change the Narrative About Going to Kindergarten

Play as a Biological Necessity: The Importance of Attractive and Playable Outdoor Play Spaces for the Healthy Development of All Children

Unstructured Outdoor Play is Essential for Sport Readiness

Restoring Time and Space for Play in Taiwan



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USA ipa American Association for the Child's Right to Play

Press Play: A Story of Play, Inquiry, and Systems Change

Kim Adams, MA, Leadership, Play Advocate, and Consultant

Introduction

The Gap Between Play Policy and Classroom Practice

In recent years, California has introduced a program called Transitional Kindergarten (TK), designed to provide every four-year-old child in the state with a "high-quality, play-based learning experience" the year before kindergarten (Saucedo, 2025). TK is intended to align with the California Preschool and Transitional Kindergarten Learning Foundations (PTKLF; California Department of Education, 2025a), emphasizing a developmental approach in which play is integral to the curriculum. The rollout of TK has been problematic due to inconsistent quality.

Expanding a program for four-year-olds into elementary school settings posed curriculum-development and facilities-related challenges (PPIC, 2025). Rapid program expansion meant schools could waive teacher requirements. In a survey conducted by the California Department of Education and analyzed by the Learning Policy Institute, only 52% of TK teachers statewide in 2023–24 had 24 units of early childhood education or child development (Watanabe, 2025). Despite California policy and guidance clearly positioning TK as developmentally appropriate, many TK classrooms look and feel like kindergarten classrooms, with developmentally inappropriate content, adherence to misaligned standards, and the use of report cards.

Though the California Department of Education uses the term Developmentally Appropriate Practice, a growing body of early childhood experts are leaning towards terms such as developmentally focused or developmentally effective. The rationale behind this change in terminology is to place greater focus on child development than on the term "appropriate" (Lawrence, 2026).

Problem Statement

Play is critical to healthy human development (Cankaya et al., 2023; Copple Bredekamp, 2009; Ginsburg, 2007; Ginsburg, 2018; Nicholson, 2021; Pyle & Danniels, 2017; Ryan & Northy-Berg, 2014). Unfortunately, play has increasingly disappeared

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from classrooms in response to the academic pushdown that is taking place in the United States education system. Correlations with the decrease in the amount of time children have for free play can be drawn to well-meaning yet flawed initiatives such as No Child Left Behind, the Every Student Succeeds Act, and Race to the Top. These initiatives link funding to standardized test scores, resulting in a dramatic decrease in time for play within the school day (Bernt-Santy, 2024). Child advocates are raising the alarm as rates of childhood obesity continue to rise (Centers for Disease Control and Prevention, 2026). Concerns about children's mental health have also increased, with rising rates of anxiety and depression among children and adolescents (Gray, 2011).

According to a 2020 UNICEF report, children in the United States rank 32nd among 38 developed nations in well-being (UNICEF Innocenti, 2020). Gray (2011) argues that the most straightforward explanation for these trends is that, as a society, we have increasingly forced children into settings that make them unhappy and anxious while depriving them of the activities that make them happy.

Despite the realities of correlational data linking negative childhood outcomes to insufficient time for play, teachers have continued to prioritize academics over developmentally focused practices. Even educators who studied theorists such as Jean Piaget and Lev Vygotsky, who identified play as a driving force in development, are doubling down on academic rigor as a cornerstone of education for our youngest learners (Taylor & Boyer, 2020). The California Department of Education published a document titled *The Powerful Role of Play in Early Learning* (Nicholson, 2021), in which the State Superintendent of Public Instruction stated that, despite decades of research highlighting its benefits, play is disappearing from early childhood classrooms across the nation. Unfortunately, children's opportunities to learn through play are increasingly being replaced by teacher-directed instruction and developmentally inappropriate content—changes that are not supported by developmental science (p. ix).

Background

Nancy Adler remarked in an interview, "There's no question to me that the 21st century is the century of learning. Moreover, what has become most important is learning how to learn, not learning any specific content" (Kawamura & Eisler, 2013, p.

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12). This emphasis on learning how to learn shifts the focus from acquiring specific academic content to developing the dispositions needed to engage with content in meaningful ways. Dispositions such as initiative, agency, attention maintenance, self-control, and curiosity emerge in our earliest years in and through play. Additionally, play prepares the central nervous system for learning and is the process by which humans (and many animals) build prosocial brains. "The experience of play changes the connections of the neurons at the front end of your brain," says Sergio Pellis, heard on Morning Edition. "And without play experience, those neurons are not changed" (Hamilton, 2014). One framework that resonates with me asks, "How do learners experience choice, wonder, and delight?" (Baker & Ryan, 2021). This question shifts the focus of learning from simply acquiring information to fostering curiosity and agency, enabling both children and adults to explore and discover knowledge in ways that bring joy and enthusiasm.

Furthermore, play is identified as a legitimate right of childhood by the United Nations Convention on the Rights of the Child (UNCRC). However, play is still disappearing from childhood. The question is, how can schools, districts, and educational systems create the conditions necessary for play to thrive? Before we can answer that question, we must consider what we mean by "play." Peter Gray (2017, p. 218) identifies five characteristics of play that help distinguish it from other activities: it is *self-directed, intrinsically motivated, guided by rules that emerge from participants' minds, imaginative, and conducted in an active yet relatively stress-free frame of mind*. Understanding these qualities will help adults who make decisions for children to distinguish between play and adult-directed activities that may be playful but are ultimately controlled by adults and do not offer the same developmental benefits.

Over the past several years, my work in early education has expanded beyond the classroom as I have become a voice for elevating play in early learning by providing workshops and keynotes. I have, however, wondered if one-off workshops or keynotes make a significant difference in shifting the systems in place that have displaced play as the primary mode of development for young children. Inspiration matters, but change is iterative. The following is the story of one school district in California moving the dial on

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embracing play in early learning through iterative cycles of challenge, inquiry, experimentation, adaptation, and reflection.

Strategies

From One Workshop to Systems Change

What started as a one-time professional learning event for Fremont Unified School District (FUSD) has expanded into an over-two-year (and counting) process of learning, inquiry, discovery, and intentional shifts that bring about real systems-level change. The district's interest in play did not begin with that first workshop. District leaders had already begun asking questions about developmentally focused practice in TK. The workshop became a catalyst in a system ready for change.

The energy in the room was high. People were engaged, asking questions, and beginning to reconsider the role of play in teaching and learning. Educators began thinking differently about what they offered young children, but the question about how to make the shifts necessary to embrace play as pedagogy remained. This provided an opportunity for FUSD to engage in a creative problem-solving session to address the question, "What is moving us forward, and what is holding us back from embracing play as pedagogy?"

Following the initial professional learning event, I was invited back to facilitate a creative problem-solving session that brought together multiple perspectives: TK teachers, school principals, and district leaders. What emerged from this first creative problem-solving session was not a request for a new curriculum or program. People wanted more opportunities to learn together. This became the catalyst for more professional development and inquiry focused on play. The district made a significant commitment to the work, providing multiple full-day professional learning opportunities and releasing teachers from their classrooms to participate. A focus group was also launched for educators who wanted to engage in deeper reflection and inquiry.

Professional learning focused on play as pedagogy, observation and documentation, typical development, and the role of relationships in learning. Teachers made meaningful shifts in their curriculum and classrooms, but roadblocks remained.

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When Assessment Became the Barrier

One such roadblock emerged during a second large-group creative Problem-solving session. Throughout this paper, I present quotations from participants in professional learning events anonymously to protect confidentiality. "We are working with a report card that does not reflect a pedagogy of play" (Anonymous participant, 2024).

Teachers could modify schedules, classroom offerings, and environments, but if they were expected to report on developmentally focused milestones rather than standards, their efforts would be undermined. District leadership heard the concern and responded by creating a work group of TK teachers to create an alternative to the existing report card. The work group wrestled with questions like: How do we make learning through play visible? How do we communicate growth to families? How do our assessment tools align with what we value? Those conversations eventually led to the development of Growing and Learning Reflections (GLR). The GLR became a “family-facing” tool created by Educators for educators. It replaced traditional standards-based ratings with narrative observations grounded in the California Preschool and TK Learning Foundations (PTKLF 2025a) and Desired Results Developmental Profile (DRDP, 2025b). The guidebook describes the purpose of GLR: In our classrooms, authentic observation is not just a method of assessment. It is the foundation for planning curriculum, guiding instruction, and forming strong connections with children. The GLR is how we share this learning with families (Fremont Unified School District, 2025). A group of teachers piloted the GLR during the 2024–25 school year. Based on feedback from teachers and families, the tool was refined and adopted districtwide during the 2025–26 school year.

Inquiry in Practice

The formation of a focus group became the vehicle for an action research project. A group of nine TK teachers met over the school year. Teachers identified questions about their practice, made small changes, reflected on the results, and used those reflections to guide further inquiry. These small shifts over time led to changes in schedules, classroom environments, and teacher/child interactions. The focus group

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provided a space for teachers to reflect, experiment, learn from one another, and build community. Participants described feeling less isolated and more confident advocating for play-responsive practices. As these teachers changed, they noticed a ripple effect at their school sites. While the purpose of the focus group was to support individual growth, an unexpected outcome was the emergence of teacher leadership. The district created a stipended TK Lead position for each attendance area, and these roles were primarily filled by those teachers who participated in the focus group.

Building Internal Capacity

It became apparent that supporting TK teachers would need to extend well beyond my contracted time with FUSD, so I met again with district leadership and proposed a TK Leads facilitation training. The goal became to create conditions in which the work could continue without my leading it. The workshop introduced the TK Leads to a Facilitation Arc, a framework designed to help groups move through conversation, inquiry, and problem-solving in purposeful ways (Wolf, 2024). To support the effort, I developed a facilitation field guide (Adams, 2026b) grounded in the idea that facilitation creates the conditions for people to think, learn, and work together (Heron, 1999).

Rather than positioning the TK Leads as experts with answers, the goal was to help them become facilitators of learning within their own attendance areas. In doing so, the district began building internal capacity to sustain the work long after any single professional development series had ended. I wanted to teach the very thing I was trying to do…help a group move forward without carrying the work for them.

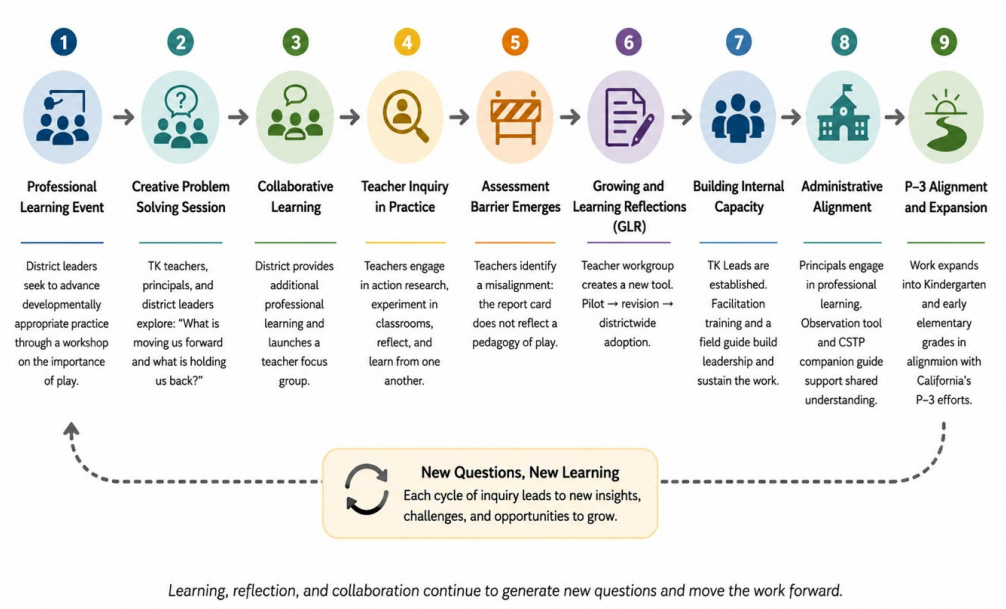
TK Leads are uniquely positioned as classroom teachers who advocate for their peers and serve as a bridge among teachers, principals, and district leadership. They facilitate learning, support reflection, and provide teacher-requested opportunities for collaboration. Having TK leads in place provides leadership at a critical level of the system.

Bringing Principals Into the Work

As the work to embrace play continued, other challenges emerged. One such challenge surfaced at a professional development day: "We are working hard to provide

developmentally focused activities and environments, and then our principals come in to observe and evaluate us, and we are marked down for not providing academic support" (Anonymous participant, 2025). Teachers were feeling the pull to apply a traditional elementary school model to four-year-olds. Teachers felt they could not fully embrace play as pedagogy if those evaluating their practice viewed play as a lack of teaching. Again, the district heard the concern and responded by providing professional learning opportunities for all district elementary school administrators. Principals responded positively as they saw firsthand through site visits what a developmentally focused, play-forward environment looked and felt like. Coupled with the professional learning, I created an observation tool and a companion guide for principals to use in interpreting and applying the California Standards for the Teaching Profession (CSTPs) through a developmental lens in TK. The tool is designed to support shared understanding, accountability, and collective support for developmentally focused, play-responsive teaching in TK. It is aligned with California early learning frameworks, informed by practitioner inquiry, and intended to defend the intentional use of play as the primary context for learning (Adams, 2026a). With the principals sharing a common understanding of developmentally focused practice, play in TK became a shared value at multiple levels of the district system.

Figure 1 ***Key Milestones in the FUSD Play Journey***



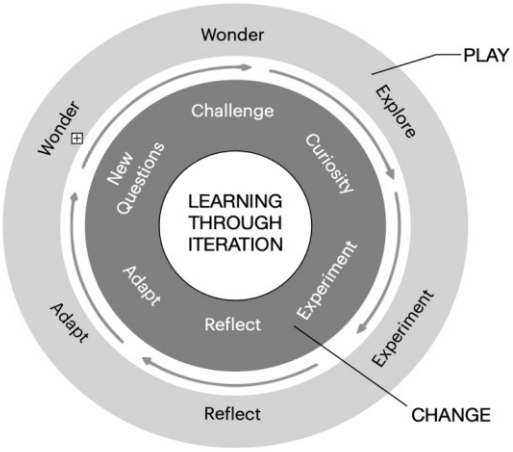
See Appendix for long description of Figure 1

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Lessons from the Journey

Looking back across this journey, several lessons emerge about what it takes to create meaningful systems change around play. The first is that meaningful change was not mandated; change emerged through inquiry, collaboration, and experimentation rather than through top-down directives. Each time a challenge arose, the group asked important questions, developed solutions, and bravely tried new ideas. Looking back, the process itself mirrored many of the principles found in creative problem-solving, action research, and the Facilitation Arc. A challenge would emerge; stakeholders would come together around a question; ideas would be generated and tested; feedback would be gathered; and solutions would be refined. Each answer led to new questions and new opportunities for growth.

Figure 2: ***Play and Change as Iterative Processes***



See Appendix for long description of Figure 2

Play and Change as Iterative Processes

This conceptual model emerged from the FUSD experience. It is offered as a way to visualize the iterative processes described in this paper and the parallels observed between children's play and organizational change. The model draws on concepts from play, action inquiry (Torbert, 2004), creative problem-solving, and the Facilitation Arc (Wolf, 2024).

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Perhaps most interestingly, the process mirrored the way children play. Children embrace wonder, experiment with possibilities, observe what happens, adapt their thinking, and try again. The district's journey unfolded in much the same way. The process often began with curiosity about a challenge and a willingness to wonder what might be possible. Progress was not linear. It was iterative. As Adrienne Marie Brown (2017, p. 105) writes in *Emergent Strategy*, "Transformation does not happen in a linear way, at least not one we can always track. It happens in cycles, convergences, explosions."

Learning together mattered, teacher voice mattered, inquiry mattered, developing leadership mattered, and sustainability mattered. Change was necessary, but it was not always moving forward in a predictable way. A second lesson is that sustainable change requires leadership at multiple levels of the system. No single person or group could have moved this work forward alone. Children were not passive recipients of the change. Their interests, questions, play themes, and developmental needs increasingly became the source of curriculum and informed teacher decision-making. Teachers made meaningful shifts to their practice and increasingly embraced play as central to learning, observation, assessment, and relationships. District leaders listened deeply, committed resources, and supported innovative and untested ideas. Families provided feedback that helped refine new tools and approaches. Principals began developing a shared understanding of developmentally focused practice and became important advocates for TK within the broader elementary school system. The emergence of TK Leads created additional capacity to sustain and deepen the work over time. Sustainable change emerged not from any single initiative, but from the collective efforts of people across the system working toward a shared vision.

Conclusion: The Work Continues

The iterative process of change toward embracing play is ongoing. For it to be sustainable, it must continue to evolve. Entering the 2026–27 school year, FUSD has decided to continue its work by providing more professional learning for principals to deepen their understanding of developmentally focused practice in early learning and to provide access to and training on observation tools. This next phase of the work

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coincides with California's growing emphasis on Preschool through Third Grade (P–3) alignment. As districts across the state work to create more coherent early learning experiences for children, questions about developmentally focused practice become increasingly important beyond TK. The conversations that began in TK about play, observation, assessment, relationships, and child development are now expanding into Kindergarten and the early elementary grades. As part of this next phase of the work, I have been invited to begin a similar process with Kindergarten teachers during the 2026–27 school year, exploring how play and developmentally focused practice are imperative for all children.

In many ways, the district's journey began when it decided to "press play." Even before the first workshop, district leaders were asking questions about developmentally focused practice and how to best support four-year-olds. The workshop helped turn curiosity into action within a system that was ready for change. What began as a single professional learning event evolved into a process of collective inquiry, shared leadership, and systems change. In the children's book The End Is Just the Beginning (Bender, 2021), readers are reminded that endings often mark the start of something new. That idea captures the cyclical nature of both play and change. Each shift answered some questions and revealed new ones. While tools and structures will evolve, the commitment remains the same: supporting teachers in creating developmentally focused learning environments where children can learn and grow through play.

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Appendix

Long Description for Figure 1

This visual infographic details a 9-step professional learning and implementation model designed to integrate play-based pedagogy across a school district. The process forms a continuous feedback loop connecting early learning workshops to district-wide alignment.

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Process Steps

1. **Professional Learning Event -** District leaders seek to advance developmentally appropriate practice through a workshop on the importance of play.
2. **Creative Problem Solving Session -** TK (Transitional Kindergarten) teachers, principals, and district leaders explore: *"What is moving us forward and what is holding us back?"*
3. **Collaborative Learning -** District provides additional professional learning and launches a teacher focus group.
4. **Teacher Inquiry in Practice -** Teachers engage in action research, experiment in classrooms, reflect, and learn from one another.
5. **Assessment Barrier Emerges -** Teachers identify a misalignment: the report card does not reflect a pedagogy of play.
6. **Growing and Learning Reflections (GLR) -** Teacher workgroup creates a new tool. Pilot → revision → districtwide adoption.
7. **Building Internal Capacity -** TK Leads are established. Facilitation training and a field guide build leadership and sustain the work.
8. **Administrative Alignment -** Principals engage in professional learning. Observation tool and CSTP companion guide support shared understanding.
9. **P-3 Alignment and Expansion -** Work expands into Kindergarten and early elementary grades in alignment with California's P-3 efforts.

Continuous Learning Loop - A dashed arrow loops back from **Step 9** to **Step 1**, anchored by a central callout box:

- **New Questions, New Learning:** Each cycle of inquiry leads to new insights, challenges, and opportunities to grow.

Footer Statement: *Learning, reflection, and collaboration continue to generate new questions and move the work forward.*

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Long Description for Figure 2

This diagram depicts an iterative learning model structured as concentric circles with a central core, showing how play and change interact continuously.

Center Core

- **Central Text:** "LEARNING THROUGH ITERATION" set inside a white circle.

Inner Ring (Dark Gray — Labeled "CHANGE")

Immediately surrounding the center core is a dark gray ring labeled **CHANGE** via a callout line. It includes six internal mindset drivers arranged around the circle:

- **Top:** Challenge
- **Top Right:** Curiosity
- **Bottom Right:** Experiment
- **Bottom:** Reflect
- **Bottom Left:** Adapt
- **Top Left:** New Questions

Transition Ring

Separating the inner and outer rings is a thin white track featuring continuous clockwise arrows, signifying a recurring cyclic flow.

Outer Ring (Light Gray — Labeled "PLAY")

The outermost band is shaded light gray and labeled **PLAY** via a callout line. It outlines five actionable phases matching the cycle:

- **Top / Top-Left:** Wonder
- **Right:** Explore
- **Bottom-Right:** Experiment
- **Bottom:** Reflect
- **Bottom-Left:** Adapt

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Play IS Readiness: Rethinking What Prepares Children for Kindergarten

Jennifer L. Berube, PhD

Introduction

In a preschool classroom, four-year-olds Marcus and Sofia have transformed the dramatic play corner into a veterinary clinic. Marcus, wearing a too-large white button-down, holds a toy stethoscope to the chest of a stuffed dog while Sofia stands nearby with a clipboard. “This puppy is very sick,” Marcus announces. “She needs medicine.” Sofia shakes her head. “First you have to check her temperature. That is what doctors do first.” Marcus considers this, then nods and reaches for a plastic thermometer.

What are we watching here? On the surface, it looks like dramatic play, something we might dismiss as a break from “real learning.” Instead, look more closely. Marcus is holding an imaginary scenario in mind while regulating his impulses to follow the play scenario’s internal logic. When Sofia redirects him, he adjusts without arguing. Sofia is coordinating her behavior with his, monitoring the shared story they are building together. Both children are using language to negotiate meaning, taking turns, managing mild frustration, and sustaining focus on a shared goal.

These skills are not trivial. They are the very capacities that decades of research have identified as the strongest predictors of school success: stronger than knowing letters, stronger than counting, stronger than any of the academic content we have become so anxious for young children to master (Spiegel et al., 2021; McClelland et al., 2014).

We have been asking the wrong question. We ask, "Is this child ready for school?" As if readiness is a threshold to cross. Readiness is not a state children achieve before learning begins. It is a practice. The capacities that predict school success do not sit dormant, waiting to be deployed. They exist only in their exercise. Play is where they are exercised. Play does not build readiness, as if readiness lives somewhere else. Play IS readiness, because readiness is nothing other than these capacities in action. When we remove play, we remove readiness itself.

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Throughout this paper, I deliberately use the word "capacities" rather than "competencies". The words carry different assumptions. Capacity (from the Latin *capacitas*, the ability to hold or contain) emphasizes potential, something dynamic that grows and expands through use. Competency (from *competere*, to be sufficient) emphasizes demonstrated skill, something static that can be measured and checked off. Competency is the language of standards-based education and assessment frameworks. It fits a model of readiness as a threshold: children either have the competencies, or they lack them. Capacity fits a different model. Capacities are not proven once and possessed forever. They exist in their exercise. If readiness is a set of competencies, it is a checklist. If readiness is a set of capacities, it is a practice. Play is practice.

Problem Statement

Between 1998 and 2010, American kindergarten underwent a dramatic transformation. Bassok and colleagues (2016) documented these changes in detail: time devoted to teacher-directed instruction in literacy and mathematics increased substantially, while time for play, art, music, and child-initiated activity declined. Kindergarten teachers in 2010 reported beliefs and practices more closely resembling those of first-grade teachers from a decade earlier. The kindergarten that nurtures imagination, with block corners, sand tables, and dramatic play areas, has been steadily replaced by something that increasingly resembles the elementary school classrooms once reserved for older children.

Then the cascade began. As kindergarten became more academic, preschool and preK programs felt pressure to follow suit, to “get kids ready” for this new, more demanding kindergarten. If kindergarteners were expected to read, then four-year-olds needed to learn their letters. If kindergarteners were doing worksheets, then preschoolers needed to practice sitting still. The logic seemed irrefutable: if we do not prepare them, they will fall behind.

Notice what this logic assumes. It assumes that the academic kindergarten is the fixed point, the thing we must prepare children for, rather than asking whether that kindergarten itself is appropriate. It creates a vicious cycle: each level reshapes itself to prepare children for an overly academic level above it. This paper challenges that entire

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premise. The question is not, How do we prepare children for academic kindergarten? The question is: What do children actually need to thrive, and are our preschools and kindergartens providing it?

The middle school movement named this principle decades ago: education should be developmentally responsive, using the distinctive nature of children -who they are, what they need, how they learn- as the foundation upon which all decisions are made (NMSA, 1995). The term differs importantly from the more familiar "developmentally appropriate practice." Developmentally appropriate practice (NAEYC) asks: What practices are appropriate given this developmental stage? It is about matching teaching to development and avoiding inappropriate practices. Developmentally responsive (AMLE, formerly NMSA) asks: Are we actively responding to who these children actually are? It places the responsibility on the school to respond to children, not on children to meet the school's expectations.

A veteran kindergarten teacher, reflecting on how expectations have changed over her career, put it simply: "We're asking them to do so much more than we've ever asked five-year-olds to do. And their needs are still the same. They still need a hug. They still need to tie their shoe… They just want to know that someone's there to take care of them and love them and they are safe" (New Hampshire kindergarten teacher, personal communication, January 29, 2026). The expectations have changed. The children have not.

We now have evidence that academic instruction in the preschool and kindergarten years does not produce lasting benefits and may cause harm. In Tennessee's randomized controlled trial of state pre-K, children who attended preschool showed initial gains but, by sixth grade, were performing worse than the control group on achievement tests, with more disciplinary infractions and more special education referrals (Durkin et al., 2022). Marcon (2002) found that children from academically directed preschools showed lower achievement by fourth grade than children from play-based programs. Studies have documented higher stress behaviors (nail-biting, stomachaches) in kindergarteners whose classrooms feature more worksheets and less play (Burts et al., 1992). Conversely, the American Academy of Pediatrics reports that

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play helps children manage stress: preschoolers randomly assigned to play showed a twofold decrease in anxiety compared to those who listened to a story, and children in play-rich classrooms show lower cortisol levels throughout the day (Yogman et al., 2018). However, even as this evidence accumulates, many kindergarten classrooms continue in the opposite direction.

When a kindergarten teacher describes her work as "bringing playful learning into a school that does not protect childhood" (Massachusetts kindergarten teacher, personal communication, January 29, 2026), something has gone wrong. The system designed to serve children now requires teachers to carve out space for children's needs despite institutional pressure.

Background

The human brain is not born ready. It is built, connection by connection, through experience. In the first few years, more than one million new neural connections form every second (Center on the Developing Child, 2023). Which connections strengthen and which fade depends on which circuits are used. The architecture that will support all later learning is under construction, and the materials come from the child's daily experiences.

At the front of the brain sits the prefrontal cortex, where executive function resides. Executive function includes working memory (holding information in mind while using it), inhibitory control (resisting impulses and staying focused), and cognitive flexibility (shifting when circumstances change). The Harvard Center on the Developing Child describes executive function as an "air traffic control system," managing multiple demands at once (Center on the Developing Child, 2011, p.1). When the system struggles, small frustrations can become meltdowns, and classroom demands can feel overwhelming.

The preschool years are critical: the prefrontal cortex develops rapidly and is exquisitely sensitive to experience during this period. Neuroimaging research confirms that the prefrontal cortex is already functionally active in four-year-olds (Moriguchi & Hiraki, 2013) but continues to develop for another two decades. Play-based programs for three- to five-year-olds have shown improvements in executive function, language,

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and motor skills (Gibb et al., 2021). The experiences children have during these early years shape the neural architecture on which all later executive function depends.

Why does executive function matter for school readiness? It matters because it is one of the strongest predictors of academic success, stronger than the academic content knowledge we have become so anxious to teach. A meta-analysis of 305 studies found that executive function components (working memory, inhibitory control, cognitive flexibility) predicted reading, math, and language outcomes across elementary school (Spiegel et al., 2021). McClelland and colleagues (2014) found that children's ability to regulate attention at age four predicted reading and math achievement through second grade, even after accounting for early academic skills. The children who arrived knowing the most letters were not necessarily those who learned to read most successfully; the children who could manage their attention were.

Vygotsky (1978) proposed that pretend play is the "leading activity" (p. 102) of the preschool years, the experience through which children develop their highest capacities for abstract thinking and self-regulation. He observed that pretend play is inherently rule-governed: if a child is pretending to be a mother, she must act as mothers act. The rules emerge from the play itself, and children willingly submit to them, regulating their behavior not because an adult told them to, but because the play requires it. "In play," Vygotsky wrote, "the child always behaves above his average age, above his daily behavior" (p. 102). In play, children do things they cannot yet do reliably in other contexts.

Let us return to Marcus and Sofia. When Sofia redirects Marcus, he must hold the play scenario in working memory while processing new information. He must inhibit his initial impulse (to give medicine) in favor of a different action (take the puppy's temperature). He must flexibly shift his plan. All three components of executive function are working together here. In many contexts, a four-year-old who was told he was doing something wrong might argue or cry. However, in his play with Sofia, Marcus adjusts smoothly. He wants to be a good doctor, and the rules of being one emerge from within the play.

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Appropriate Approaches and Strategies

If play builds the capacities that matter most for school success, what does this mean for teaching practice? The answer is not to abandon all instruction, but to recognize that play and learning are not opposites. The most promising approaches honor both children's developmental needs and educators' instructional goals through what researchers call guided play.

Guided play occupies the middle ground between free play and teacher-created, teacher-directed play (DuBois-Garofalo et al., 2026). Adults set up environments with learning goals in mind, introduce materials and provocations, and engage with children's play in ways that extend thinking. Meanwhile, children retain agency and direct the play. The adult is a play facilitator, not a director. Research suggests that guided play can be more effective than direct instruction for certain learning goals, particularly those involving deeper understanding and transfer (Weisberg et al., 2016).

Tools of the Mind, a curriculum grounded in Vygotsky's theories, centers mature make-believe play in the kindergarten day. Mature play is sustained, rule-governed pretend play in which children take on roles, use props symbolically, and negotiate scenarios with peers (Bodrova & Leong, 2007). Children engage in extended sociodramatic play with teacher support rather than teacher direction. Randomized controlled trials have found that children in Tools of the Mind kindergarten classrooms showed gains in executive function, reading, and writing, and that both children and teachers experienced more joy in school (Diamond et al., 2019). The curriculum works because it treats executive-function development as foundational.

The key insight is that executive function develops through meaningful practice in contexts that matter to the child. Play provides this meaningfulness. Children retain information longer when learning is playful and emotionally engaging (Wang & Aamodt, 2012). When Marcus inhibits his impulse to give medicine immediately, he does so because he wants to be a good doctor, not because an adult told him to wait. The motivation is intrinsic. This allows the practice to be repeated hundreds of times without becoming tedious, and allows skills developed in play to become genuinely internalized.

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Contrast this with a worksheet asking children to circle only triangles. The child may complete it correctly, but she is doing so because the teacher said to, not because she has any investment in the outcome. The practice is thin and unmotivated, and the learning rarely sticks. What is worse: much of what academic pushdown prioritizes are constrained skills (Paris, 2005): skills like letter names that have a ceiling. Once a child knows all 26 letters, she is done. At the same time, the capacities that matter most for long-term success- vocabulary, comprehension, self-regulation- are unconstrained. They keep growing, and they grow through play.

Conclusion and Recommendations

The research is unequivocal; the capacities that predict school success are the capacities children exercise in play. When we remove play from preschool and kindergarten classrooms in order to "prepare" children for academic demands, we remove the very context in which readiness lives. We have created a tragic mismatch: children with rich play experiences arrive at kindergarten with the very capacities that predict success, only to find classrooms that have dismantled the practices that would sustain them.

What would it mean to take a developmentally responsive kindergarten seriously? It would mean starting, not from standards, not from what first grade will demand, but from the children themselves. Who are five-year-olds? What do they need? What are they capable of, and under what conditions? A developmentally responsive kindergarten would treat these questions as foundational.

This is not a call to lower expectations. It is a call to align expectations with development and recognize that the capacities we most want children to have are capacities they exercise in play, in relationship, and in active engagement with materials and peers. They do not develop through worksheets or direct instruction in skills children are not yet ready to master.

A developmentally responsive kindergarten would be play-rich, relationship-centered, and designed around what we know about how young children learn. It would have dramatic play corners, block areas, and time to explore. It would have teachers who deeply understand child development and see their role as supporting the whole child. It

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would assess children in ways that inform teaching, not ranking and sorting. Moreover, it would trust that children who are thriving (curious, engaged, regulated, connected) are ready to learn.

A developmentally responsive kindergarten would not require teachers to protect childhood against the institution. The institution would protect childhood.

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Reimagining Readiness: The Transformative Power of Play in Language and Literacy

Tori K. Flint, PhD & Myae Han, PhD

Introduction

Play is often described as the work of children (Paley, 2009). Yet, in many contemporary early childhood classrooms, play is treated as enrichment or a reward rather than as foundational to children's reading readiness and broader language and literacy development (Roskos & Christie, 2011). Children's play is not simply a "break from learning," but a primary context in which they experiment with sounds, words, texts, and identities as readers, writers, and speakers (Vygotsky, 1978; Wohlwend, 2011). In imaginative play, children negotiate roles, invent narratives, and draw on their community and cultural funds of knowledge, creating rich opportunities for vocabulary growth, oral language practice, and reading and writing development (Flint, 2016; Souto-Manning et al., 2024).

Neuroscience perspectives further underscore why playful experiences matter for school readiness. Play helps shape neural circuits associated with flexibility, emotional regulation, and complex social communication, which are implicated in language learning and literacy development (Pellis & Pellis, 2010). When children repeatedly engage in varied forms of play, they rehearse the cognitive and social processes that undergird decoding, comprehension, and written expression (Roskos & Christie, 2011). As such, play is not an optional "add-on" to language and literacy instruction but part of the neural training ground through which young children build capacities for engaging with words, print, symbols, and meaning-making (Pellis & Pellis, 2010).

Despite this evidence, policy and curricular reforms framed around reductionist notions of school readiness have increasingly organized language and literacy as discrete skills to be mastered in advance of "real" reading, writing, and language use (Neuman et al., 2007). This paper offers an alternative vision of readiness as a holistic construct that emerges at the intersection of children's bodies, emotions, relationships, language, and symbol systems and is cultivated through high-quality play (Ehret et al., 2023; Roskos & Christie, 2011). Reimagining readiness in this way positions play as a transformative

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force that enables young children to become powerful readers, writers, and speakers, and affirms play as a fundamental right of all children.

Problem Statement

Readiness as a Multidimensional Construct

Despite widespread recognition that school readiness is a multidimensional construct encompassing cognitive, language, social-emotional, physical, and self-regulatory development, early childhood education policy and practice continue to emphasize narrow, skills-based indicators of readiness, particularly early academic outcomes (Snow, 2006; Wohlwend, 2011). Such approaches often frame readiness as a fixed set of competencies children must demonstrate prior to school entry, placing disproportionate responsibility on children and families while overlooking the role of educational systems and learning environments in shaping readiness. This reductionist view risks marginalizing children whose developmental pathways do not align with standardized expectations and may undermine equitable access to high-quality early learning experiences.

Scholars have challenged this child-deficit framing of readiness, arguing that readiness is socially constructed and context-dependent, shaped by cultural norms, institutional practices, and policy decisions rather than residing solely within the child (Graue, 2006). The National Education Goals Panel (1995) similarly conceptualized readiness as an ecological system involving children's readiness for school, schools' readiness for children, and family and community supports. However, despite these conceptual advances, a persistent gap remains between theory and practice, as many early childhood programs continue to prioritize discrete academic skills over integrated developmental competencies.

Research demonstrates that early language development, executive functioning, and social-emotional skills—particularly self-regulation—are robust predictors of later academic achievement and school adjustment (Duncan et al., 2007). Yet instructional approaches that support these domains, such as **play-based learning**, are often undervalued or inconsistently implemented in early childhood settings. Play has been shown to support physical, cognitive, linguistic, and social-emotional development

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simultaneously (Hirsh-Pasek et al., 2009; Johnson et al., 2005), positioning it as a critical mechanism for promoting holistic school readiness. The problem, therefore, lies in the misalignment between prevailing expectations of readiness and evidence-based, developmentally focused practices.

Misreading the "Science of Reading"

One of the most influential forces shaping this misalignment between evidence and practice is the recent policy turn to the "science of reading." In recent years, the "science of reading" has been taken up in ways that marginalize play and has been mobilized to justify highly structured literacy programs that foreground explicit, sequential instruction in phonological awareness, phonics, fluency, vocabulary, and comprehension. Although this research details component skills, its policy translation often recasts reading readiness as a decontextualized technical proficiency made up of isolated subskills, presumed to be best developed through tightly scripted lessons and rapid-paced practice (Duke & Cartwright, 2021). This interpretation constrains expectations for early childhood classrooms, crowding out play-based experiences in favor of teacher-centered whole-group instruction, seatwork, and worksheets (Roskos & Christie, 2011). These shifts mirror what researchers describe as the squeezing out of imaginative play in favor of practices framed as more rigorous and efficient (Burnett & Merchant, 2020; Mannard, 2023).

Such implementations misread both the science and the child by privileging discrete decoding skills over meaning-making, language use, and engagement, which are foundational to early language and literacy development (Flint & Han, 2026). When reading is framed primarily as accurate decoding and recall, play is easily dismissed as extraneous or inefficient. Yet, young children's play is a *primary* site where phonological, semantic, and syntactic knowledge are woven together within meaningful, emotionally rich activities (Wohlwend, 2011). Within imagined stores, construction sites, or superhero narratives, children improvise written artifacts, negotiate storylines, and engage with peers and print-rich spaces, integrating reading, writing, listening, and speaking with comprehension and composition (Roskos & Christie, 2011; Thiel, 2015).

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Accordingly, this paper argues that play must be centered as the primary engine of readiness. Reframing "science of reading" conversations through a play lens foregrounds play as essential for early reading, writing, and language development (Burnett & Merchant, 2020; Wargo, 2025; Wohlwend, 2011; Yoon, 2019).

Background

Within play-rich early childhood environments that provide space, materials, and time for self-directed activity, children construct foundations of reading, writing, and language by creating texts through talk, drawing, movement, and imaginative enactment, integrating oral language, early writing, and narrative in socially meaningful ways (Han, 2021; Wohlwend, 2011). Playful literacies support creativity and meaning-making as children negotiate identities as capable authors and readers and experiment with vocabulary, story language, and written representations that matter to them (Yoon, 2019). Across ages and spaces, this work converges on play as a 'literacy of possibilities' that stretches how learners participate within and across modes of representation (Kuby et al., 2015).

From this perspective, play functions as a powerful site where children exercise expertise and agency in language and literacy. In classrooms designed for multimodal engagement, children draw on images, movement, talk, and print to create meaning together, seamlessly blending play, language, and literacy as they read, enact, and construct shared texts with peers (Brownell, 2023; Kuby et al., 2015; Rowsell & Wohlwend, 2016). Through these multimodal practices, children learn that meaning is not confined to words on a page but can be shaped through gesture, sound, image, and material action. Imaginative play further foregrounds embodied language and literacy as children compose 'live-action texts' with their bodies, voices, and materials, expanding narrative and interpretive repertoires (Thiel, 2015; Wohlwend, 2011). As play extends into digital spaces, new possibilities emerge for multimodal composing, with young learners remixing texts, images, and gestures across physical and virtual environments (Flint & Adams, 2024; Wargo, 2025).

Research on conventional literacy outcomes links these playful experiences to alphabet knowledge, print awareness, and comprehension (Neuman et al., 2007). When

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environmental print and writing materials are integrated into play spaces, children recognize letters and words and dictate, draw, and write messages that strengthen sound-symbol connections (Roskos & Christie, 2011). Research also shows that professional development that supports teachers in designing and sustaining play increases the likelihood that classrooms embed rich materials and opportunities for emergent reading, writing, and speaking into instructional practices, connecting imaginative activity with measurable gains in language and literacy (Han, 2021; Han et al., 2023).

Studies of sociodramatic play deepen this picture by showing how shared imaginary scenarios and evolving storyworlds nurture the language, narrative, and symbolic abilities that support early reading and writing (Flint, 2025; Rowe, 2012; Wohlwend et al., 2019). As children play or act out stories together, they develop plots and characters through movement, dialogue, and shared imagination. These embodied storylines often inspire children to record or extend their play beyond the moment, using marks, drawings, and emergent writing to represent key events or ideas. Through this shift from action to symbol, children transform lived episodes into written and visual texts (Han, 2021; Vygotsky, 1978). In this way, playful storyworlds serve as a bridge between collaborative storytelling and emerging composing practices that weave together play, talk, and print.

Across this body of research, play consistently appears as a key driver of language and literacy development. When children have sustained opportunities for self-directed and guided play, they develop alphabetic knowledge, print awareness, vocabulary, narrative competence, comprehension, language skills, interpretive flexibility, and literate identities (Han, 2021; Roskos & Christie, 2011; Neuman et al., 2007). These findings challenge restrictive conceptions of readiness and invite educators and policymakers to recognize play as a central mechanism through which language and literacy flourish in the early years (Burnett & Merchant, 2020; Kuby et al., 2015; Mannard, 2023).

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Strategies and Approaches

Teaching Language and Literacy Through Play

Play-based learning is an empirically supported approach for fostering early language and literacy development (Han et al., 2010). A growing body of research demonstrates that young children acquire foundational literacy skills most effectively when learning occurs in meaningful, playful, and socially interactive contexts (Hirsh-Pasek et al., 2009; Neuman et al., 2007). Importantly, empirical studies have addressed the critical question of whether play makes a measurable difference in children's learning outcomes. Han et al. (2010) found that play-based learning environments positively influenced young children's language and literacy development, providing strong evidence that play is not merely enjoyable but instructionally powerful. These findings underscore the importance of intentionally designed play experiences that integrate language and literacy learning within child-centered practice.

Based on this evidence, we recommend several practical strategies for supporting language and literacy development through play in early childhood classrooms. First, educators should **develop literacy-enriched dramatic play settings** by embedding print materials such as labels, signs, posters, and other forms of environmental print within play areas. When children engage in pretend scenarios—such as grocery stores, doctor's offices, or family roles—they naturally incorporate functional reading and writing behaviors, including making lists, reading signs, and storytelling. These experiences support print awareness and help children understand the purposeful use of literacy in everyday contexts.

Second, teachers should **intentionally support oral language through guided play**. Oral language and vocabulary development are central to literacy learning, and play provides authentic opportunities for extended conversations, negotiation, explanation, and narrative construction. Educators can enhance these interactions by planning vocabulary aligned with play themes, modeling rich and varied language, and encouraging children to repeat and apply new words during play. Such intentional scaffolding strengthens expressive language and comprehension.

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Third, **alphabet knowledge can be taught through playful, multisensory games**. Activities such as letter-matching games, memory games, rhyming games, and sorting tasks promote letter recognition and sound-symbol connections. Songs, movement, and embodied learning—such as forming letters with body movements—further support engagement and retention by integrating physical activity with cognitive learning.

Fourth, **teachers can incorporate movement-based phonological awareness activities** through chanting, singing, puppet play, and sound-based games. These playful experiences help children attend to, manipulate, and discriminate sounds in words, laying the foundation for later decoding skills.

Fifth, **readers' theater and reader response activities** offer opportunities to deepen comprehension and engagement. During interactive read-alouds, children can dramatize stories, retell narratives using props, or express responses through drawing and discussion. Such playful responses position children as active meaning-makers and foster positive dispositions toward reading (Flint, 2016, 2025; Rosenblatt, 1994).

Finally, **integrate playful writing experiences** across play contexts. Writing menus, signs, messages, and stories allows children to experiment with marks, letters, and words in meaningful ways, supporting fine motor development and early spelling knowledge (Bodrova & Leong, 2007).

In conclusion, research clearly shows that play makes a difference. Teaching literacy through play supports alphabet knowledge, phonological awareness, comprehension, writing, and oral language development while promoting motivation and engagement. When thoughtfully designed and intentionally guided, play-based literacy instruction offers a powerful, evidence-based approach to early childhood education.

Conclusion and Recommendations

This paper has argued that play is not peripheral to language and literacy learning but a transformative and essential context through which young children develop the cognitive, linguistic, social-emotional, and embodied capacities that support

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school readiness. Drawing on interdisciplinary research, the paper challenges prescriptive, technical conceptions of readiness and critiques policy-driven interpretations of the "science of reading" that privilege discrete, decontextualized skills over meaning-making, engagement, and holistic child development. Across the literature, a consistent pattern emerges: when children engage in sustained, socially rich, and materially supported play, they develop foundational language and literacy competencies—including vocabulary, narrative skill, print awareness, phonological sensitivity, and emergent writing—alongside agency, motivation, and resilient literate identities.

Despite this evidence, play has been increasingly diminished in kindergarten classrooms. Heightened academic pressures, accountability demands, and misconceptions about rigor have reduced time, space, and support for play, often replacing it with extended whole-group instruction, worksheets, and scripted curricula. This erosion of play is particularly concerning given that kindergarten serves as a critical bridge between early childhood and formal schooling. The lack of play in kindergarten not only constrains children's opportunities to integrate language, literacy, and social interaction, but also risks undermining self-regulation, engagement, and long-term learning trajectories. Bringing play back to kindergarten is therefore not a nostalgic gesture, but a research-based imperative.

Reframing readiness as a holistic and ecological construct positions play as a central instructional practice rather than an optional enrichment activity. To support this shift, this paper offers several recommendations. First, kindergarten classrooms should intentionally reintroduce extended, high-quality play that integrates print, writing tools, and multimodal materials. Second, professional development must equip teachers to sustain play while explicitly linking playful activity to language and literacy goals. Third, policymakers and curriculum designers should reconsider readiness expectations and accountability systems that marginalize play. Finally, future research should continue to document how play-based literacy practices support diverse learners across cultural, linguistic, and institutional contexts.

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Restoring play to kindergarten affirms children's rights as learners and meaning makers and offers a more just, ecologically grounded vision for early language and literacy education.

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Kids Deserve More Than Just Change — They Deserve Justice

Mark Jackson, BS, Criminal Justice

Introduction

Policies influence nearly every part of a child's life—from where they live and go to school, to whether they have safe places to play. That's why policy reform is about more than just laws or government plans—it's about real children and real families. When a policy causes change, people often assume that's a good thing. But change doesn't always equal progress, especially if the changes leave out or hurt certain groups.

After Hurricane Katrina hit New Orleans, many government systems were overhauled quickly. Public housing was demolished, schools were closed or turned into charter schools, and more police were brought into communities. These changes had significant effects, but they didn't always help families—especially Black families and low-income residents. Thousands were displaced and couldn't return. Children were uprooted from their homes and schools with no clear plan to help them feel safe or rebuild their lives (Gotham, 2007).

Kids in disasters don't just lose homes—they lose routines, friendships, and safe spaces to play and process what's happened. If we don't reform the policies that caused these harms, we risk repeating the same mistakes in future crises.

Problem Statement

When Change Hurts Instead of Helps

In Delaware today, a housing crisis is unfolding. Rent is going up, affordable housing is limited, and many families are struggling to find stable shelter. Shelters are overcrowded and underfunded. As of 2024, over 1,000 people in Delaware experience homelessness on a given night, and many of them are children (National Alliance to End Homelessness, 2024).

Children who are homeless face enormous barriers. They may move frequently, miss school, or struggle with anxiety and trauma. Often, they don't have any safe place to play. But play is not optional for children. It helps them manage stress, build social

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connections, and make sense of their world. It's how they learn to cooperate, create, and heal.

Policies that fail to protect children's housing and well-being make it impossible for play to thrive. When families are just trying to survive, play gets pushed aside—even though it's essential for child development. That's why reform is necessary. Policies need to support safe, stable homes, community spaces, and unstructured time for kids to be kids.

Background

Reform Means Listening to Kids and Their Communities

One of the biggest problems with many policies is that they are written without input from the people most affected. When families and communities are left out of decision-making, policies often reflect the priorities of powerful groups, not the needs of everyday people.

Reform means inviting voices that have been excluded. It means asking parents what support they need and asking kids what makes them feel safe, happy, and free to play. It also means shifting from policies that control children—through over-policing, excessive testing, or rigid discipline—toward policies that nurture them.

For example, many schools have cut back on recess and play time to focus more on academics. But research shows that children concentrate better, learn faster, and behave more positively when they have time to move, imagine, and explore (Ginsburg, 2007). Reforming education policy to prioritize recess, physical education, and play-based learning would benefit children in every part of their lives.

We must also recognize that play equity is not the same for all children. Children in affluent neighborhoods may have access to parks, playgrounds, extracurriculars, and safe streets. Children in under-resourced areas often have none of these, reflecting long-standing patterns of concentrated poverty and unequal community investment (Wilson, 1987). Reform means closing that gap—not by giving kids permission to play, but by giving them the resources and environments to do so.

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Reform Is a Sign That We Care

It's not always easy to admit when something isn't working. But being willing to reform old systems shows that we are paying attention and that we care about the outcomes. Children's lives are shaped by the systems adults create—whether it's housing, education, or healthcare. When those systems fail, children feel it first. We don't have to accept outdated policies as permanent placements. Reform allows us to update policies to reflect new research, modern realities, and community voices. It allows us to say: "We've learned from the past. We can do better."

Reform also builds public trust. When families see that governments are willing to change harmful policies, they are more likely to engage, participate, and believe in those institutions again. That's especially important for communities that have experienced long histories of neglect, racism, or exclusion.

Appropriate Strategies

Policy Recommendations: Building a System That Honors Childhood

If we want a society that supports children's well-being, we must start by making room for joy, imagination, and rest in children's daily lives. Here are some key reforms that can help create a system where play is not only protected—but encouraged:

1. **Restore and Expand Recess and Play in Schools**
   All children should have multiple opportunities during the school day for unstructured, outdoor play. Research from the American Academy of Pediatrics shows that recess improves attention, mood, and social development (Ginsburg, 2007). Schools should be required to provide a minimum amount of daily playtime, especially in early childhood and elementary grades.
2. **Create Safe, Accessible Community Play Spaces**
   Local governments must prioritize funding for parks, playgrounds, and recreational programs—especially in low-income neighborhoods. Equity in play starts with access. Municipal planning should ensure that every child can reach a safe play area within walking distance of home.

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3. **Invest in Trauma-Informed Systems**
   In the wake of disasters or family crises, children need trauma-informed support. Policies that provide mental health services in schools, train teachers in social-emotional learning, and reduce punitive discipline help children feel safe enough to play again.

4. **Increase Affordable Housing and Family Stability**
   A child cannot thrive if their basic needs are not met. Housing policies must ensure long-term affordability and stability. This includes support for transitional housing, rental assistance, and programs that prevent eviction and displacement.

5. **Include Families and Youth in Policymaking**
   Children may not vote, but their voices matter. Policy design should include input from families, educators, and even young people themselves. Participatory budgeting and school councils are two ways to bring community perspectives into policy reform.

Case Study: What Happens When Play Is Prioritized

In the city of Boston, the Parks and Recreation Department worked with child development experts and community members to create a "Play Space Equity Initiative." This plan involved mapping underserved neighborhoods and using feedback to design new, culturally inclusive play areas. The result? A measurable increase in outdoor activity and a stronger sense of neighborhood pride among children and parents alike.

This is just one example of how intentional reform, driven by equity and participation, leads to better outcomes. We can't simply assume policies will trickle down to help children. We must design them with children in mind from the start.

The Role of Play in Racial and Social Justice

Play is not a separate issue from justice—it reflects it. When children of color are overpoliced, underhoused, and deprived of green spaces, their opportunities for play are stripped away. These disparities are connected to broader systems of racial inequality and social control that disproportionately affect Black communities (Alexander, 2010).

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When children in poverty are denied safe afterschool programs or live in unsafe neighborhoods, their freedom to imagine and explore disappears.

A study by Playworks (2023) and the Robert Wood Johnson Foundation found that students of color and students in low-income schools are less likely to have access to quality recess environments. That inequity has long-term effects on learning, social skills, and emotional health. It reinforces cycles of disadvantage.

Reform must not only protect play—it must correct the structural racism and classism that limits who gets to enjoy childhood. Reform should challenge practices that over-discipline Black students, criminalize play in public spaces, or defund community programs in underserved areas. Play is a justice issue because it reflects whether we believe all children are equally worthy of joy.

Democracy and the Right to Joy

Reforming policy is about more than fixing mistakes—it's about renewing our values. In a democratic society, policy should be a tool for the people. That means it should respond to the voices of those it affects—especially children, who are so often spoken about but rarely heard.

Letting kids play isn't just about leisure—it's about creating the kind of society we want to live in. A place where joy is normal, where safety is shared, and where every child can grow with freedom and dignity. A society that defends a child's right to play is a society that takes democracy seriously.

Conclusion

Children are not just the future—they're the present. And their needs must guide how we build and rebuild our systems. Reform matters because justice is ongoing. Because play is power. Because children deserve more than resilience—they deserve joy.

When we reform policy to reflect that truth, we're not just improving laws. We're improving lives. And we're making space for every child to grow up in a world that makes room for their laughter, rest, questions, and play.

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Time, Space, and Permission: Critical Ingredients for Integrating Play in Public Schools

Denisha Jones, PhD, JD

Introduction

Despite the mounds of research that documents how child-led free play supports self-regulation/executive functioning (Colliver et al., 2022; Barker et al., 2014); strengthens peer relationships and social competence, increases physical activity (Flanders et al., 2009; Jaggy et al., 2023; Razak et al., 2018); is associated with gains in cognitive flexibility and problem solving, richer oral language and narrative skills, and stronger social-emotional competence (Nicolopoulou et al., 2015; Pellegrini & Smith, 1998) play continues to disappear from kindergarten and is almost non-existent in first through third grade (Hofferth & Sandberg, 2001; Thompson et al., 2023). Increased pressure to improve standardized test scores and to prove that students are meeting state and national standards has had far-reaching negative impacts on early childhood education. The pushdown of academics into kindergarten resulted in less time for child-led free play. Dubbed a crisis in kindergarten (Miller & Almon, 2009), this troubling trend has prompted early childhood educators and researchers to sound the alarm. However, after the COVID-19 pandemic, claims of widespread learning loss fueled continued pressure to push academics earlier.

This article summarizes findings from a yearlong study involving three teachers who participated in the Hatch Partners in Play cohort in Pittsburgh, PA. Two first-grade teachers and a kindergarten teacher in a public school piloted the PlayLab program, which included dedicated time for play with high-quality, open-ended materials three to five times a week. Data collected from initial interviews, two observations, and a final focus group reveal a shift in teachers' beliefs about play and learning and in their role in supporting play, leading to increased children's access to play. This shift revealed three critical ingredients for integrating play in public school early childhood classrooms: time, space, and permission. Next, I will review barriers to play in public schools, then explore how Playlab removed them by addressing three critical ingredients.

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Problem Statement

Barriers to Play in Early Childhood Classrooms

Early childhood education covers ages birth through 8 and overlaps with public schools for kindergarten through 3rd grade. As kindergarten emphasis shifted to school readiness and test scores, early childhood teachers reported less time for play (Fowler, 2018; Levin & Van Horn, 2016). Moreover, once schools removed play from kindergarten and replaced it with learning centers, it never returned in first through third grade. Recess, which was used to ensure that all children in elementary and middle schools had free time to engage in physical activities, has also declined in public schools (Thompson et al., 2023).

As mentioned earlier, increased demand for accountability through improved test scores has contributed to the decline in play. However, other factors also create barriers to play. Teachers' beliefs about play have been documented as a barrier to increasing play in early childhood classrooms (Lynch, 2015; Ta, 2021). Though many early childhood teachers value play as the leading activity in development, some are unwilling to embrace it as pedagogy, or they face scrutiny from colleagues who lack training in early childhood education (Lynch, 2015). In her study of kindergarten teachers' online posts about play, Lynch (2015) noted that some acknowledged feeling pressure to engage in more academic instruction, or that they were judged negatively if their students were seen playing. The pressure from first-grade teachers who believe free play is wasted time makes it difficult for many kindergarten teachers to set aside time for play. Kindergarten teachers, now expected to teach kids how to read and write, tend to criticize play-based preschools because the children are not ready for academics. The push to downplay academics based on erroneous beliefs about school readiness (see Jones et al. in this volume) often forces teachers to abandon play under pressure to focus on academics. At this rate, should we expect 2-year-olds and 3-year-olds to play less so they can be ready for preschool?

Beliefs about play from parents and school administrators can also create barriers to play. Some parents do not see play as learning and worry their child will fall behind or struggle to keep up, so they request more academic instruction in preschool

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and kindergarten. Kane (2016) studied parental beliefs about play and found that parents viewed play and learning as mutually exclusive, with play considered less important than developing literacy and math skills. Teachers can subscribe to the play-learning binary (three teachers in this study did so before instituting Playlab), and many administrators also fail to understand play and learning as mutually inclusive (play is learning). When parents and administrators fail to value play, early childhood teachers who believe in play are often pressured to reduce the time devoted to it (Holly & Dyke, 2026).

Other barriers to play in early childhood classrooms stem from school reform measures that claim to help low-income children of color achieve academic success. Levin and Van Horn (2016) interviewed 34 experienced early childhood teachers in schools serving low-income children affected by neoliberal school reform efforts. The teachers shared how these reforms actually harmed the children they were supposed to serve by increasing classroom test preparation, focusing on narrow skills, and reducing time for child-led play. The academic pushdown or schoolification of early childhood (Kane, 2016) is often included in reforms targeting children who are marginalized by their race and social class. Instead of supporting early childhood teachers in implementing culturally responsive practices and building their capabilities through agency and autonomy, these children receive a high dose of prescribed rote learning that restricts their movement and limits their development of critical thinking skills. Children born into wealthy white families can opt out of schoolification by paying for preschools and private schools that focus on developing soft skills and executive functioning and include ample time for child-led free play (Farran, 2025).

Ta (2021) argues that a lack of professional development to support early childhood teachers in developing a play pedagogy is another barrier. With the emphasis on academic learning, most teacher training focuses on introducing new curricula and instructional strategies to improve test scores. Many early childhood teachers lack the skills to embrace play as pedagogy. In my research on teachers' roles in play-led environments, I was surprised when one of the most experienced teachers of young children asked me what they should be doing while the kids were playing. Though early childhood teachers often value play as a much-needed break from learning, they are not

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prepared to use play as pedagogy. As we see many states, such as California, New York, and New Mexico, expand access to early childhood education and care, we must ensure that teachers are prepared to lead with play if we do not want to see it disappear.

Background

Hatch Partners in Play and Playlab

Partners in Play was piloted in 2021 to build a space for equitable, true play experiences in public schools. Inspired by the Anji Play philosophy and approach created by Cheng Xueqin in Anji, China, true play is the right of all children to engage deeply and uninterruptedly in an activity of their choosing. Troubled by the decline of play in public school classrooms, Shannon (Hatch Founder) and Dahlia (Program Director) founded Partners in Play as an equity-based strategy to bring play back into public schools. The initial cohort included 10 teachers from 3 schools who participated in monthly workshops on true play. Three teachers from a Title 1 school serving a predominantly Black, low-income community piloted Playlab during that initial year.

Playlab is defined as

> "protected, extended periods of child-led free play—outside of recess and specials—with an intentional focus on exploration of materials, collaboration, socio-emotional learning (SEL), storytelling, and problem-solving. Playlab offers children high-quality, open-ended materials and invites them to explore freely, collaborate with others, or work independently, guiding their own experiences." (Hatch Partners in Play, n.d.)

As a research partner, I was invited to study the initial Partners in Play Cohort as part of my research on teachers' roles in play-led environments. Eight teachers from three locations (see Table 1) participated in the initial interviews to explore their current practices, focusing on classroom play and beliefs about it. We conducted observations in March and May. In March, we visited all three sites, but observed only a few teachers. In May, observations were conducted at a single location with three teachers. We conducted an exit focus group with the three teachers who participated in the second observation.

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Table 1 Partners in Play Initial Pilot 2021-2022

Teacher	School	Grade	Initial Interview	Observation
SA	Fox (private)	Kindergarten	Yes	March
FK	Fox	1st	Yes	March
DD	Fox	Kindergarten	Yes	None
CK	HES Community School (public)	1st	Yes*	March and May
MJ	HES Community School	1st	Yes*	March and May
CR	HES Community School	Kindergarten	Yes*	March and May
FJ	Lower School (charter)	Kindergarten	No	None
BC	Lower School	Primary ELA	No	None
VA	Lower School	Primary Math	Yes	None
LL	Lower School	Kindergarten	Yes	March

*Participated in exit focus group

Approaches

Playlab began as a one-hour, two- to three-days-a-week play invitation led by Shannon and Dahlia. Each week, they facilitated Playlab in three classrooms at HES Community School. Each playlab introduced new open-ended materials and loose parts, allowing children to explore however they wanted. Two essential guidelines were provided: playlab was a protected space and could not be withheld as punishment, and a child could not be removed from playlab for any reason. This made sure that all children experienced playlab. At the end of playlab, children were given their journals and asked to reflect on their play. Playlab facilitators and teachers wrote down the students' dictated reflections. Shannon and Dahlia also reflected on the play they observed by crafting play stories, which they reviewed with the children. Gradually, each teacher began facilitating their own playlab each day and writing play stories (Rao & Merenstein, 2025). By the second observation, Playlab was increased to 60-90 minutes. When asked why Playlab was longer, they noted how the benefits of Playlab made it easier to teach the curriculum. More importantly, they noted that Playlab fostered a stronger sense of community, leading to a decrease in challenging behaviors.

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Teachers and Children Need Time, Space, and Permission to Play

At the end of the pilot year, the three teachers who implemented Playlab became Ambassadors for the Hatch Partners in Play program. Based on the positive experiences they noted in their classroom, including a strengthened sense of community and gains in literacy skills, they recognized that protected time to play benefited all students. As a result, they advocated expanding Playlab to all kindergarten and first-grade classrooms, as well as establishing a dedicated Playlab classroom. Each teacher went on to present their experience and the benefits of Playlab in public elementary schools.

Data analysis of observations and interviews revealed three critical ingredients for Playlab's success: time, space, and permission. Finding time in any classroom for a new activity is not easy. Teachers are under tremendous pressure to meet benchmarks, assess student learning, and ensure students meet standards. Thus, asking teachers to make time for play seems impossible. Nonetheless, because these teachers were in the cohort and wanted to learn more about Playlab, they made the time. Shannon and Dahlia began slowly, allowing the teachers and students to become familiar with Playlab. As the original Playlab facilitators, they also gave the teachers time to observe.

During my first observation, I noticed that the children in CK's classroom appeared less engaged during Playlab. They sat quietly in small groups playing but did not have the same energy as the kids in MJ's class. By the second observation, there had been a noticeable change, and all three classes were actively engaged in a variety of play experiences. One key difference was time. As the children had more time to get used to Playlab, their engagement deepened. As they recognized that this was their protected time to play, their play changed. Time is a key factor in integrating play in public schools. Teachers need to make time for play, and students need time to play. Building Playlab into the daily routine ensures time.

Space is also a critical ingredient for integrating play in public schools. During my initial visit, it was still cold and snowy, so Playlab took place in the classrooms. During my second visit, it was held both indoors and outdoors. The outdoor Playlab space was held in a corridor between two buildings, not in the playground. The teachers were adamant that Playlab be distinguished from recess. They felt that if others saw Playlab

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as another form of recess, it would not be valued. So, they brought materials outside and created a new play space.

Whether in the classroom or outdoors, children need space to play. Space includes full access to the physical location and materials. Though the children spent every day in their classroom, during Playlab, they had greater access to the room. As they spent more time in Playlab, they began to explore the room more and select materials they had not used before. Each week, they were introduced to new open-ended materials that also allowed them to deepen their play. Many of the play stories Shannon and Dahlia wrote demonstrated how the students engaged with new materials. The combination of indoor and outdoor spaces, along with easy access to play materials, supported both the teacher and the children as they engaged in Playlab.

Given that negative beliefs about play create barriers to play-led teaching and learning, teachers need permission to lead with play. Shannon and Dahlia met with the administrators at HES Community School to create buy-in for Playlab. They also worked with a district-level contact to ensure Playlab would be supported. One of three teachers, CR, shared that her principal did not think Playlab was a good idea. Her kindergarten class had the lowest scores on the literacy assessment, and he thought they should spend more time reinforcing literacy skills rather than playing. CR decided to stick with Playlab, though she was concerned she might not be able to, given the pushback she was receiving. MJ and CK, who had more seniority at the school, used their power to encourage CR to remain committed to Playlab. They gave her permission to challenge her principal and keep Playlab in her classroom. In my second observation, I was informed that her class had achieved the highest literacy score of any kindergarten class. Now she had all the permission she needed to continue with Playlab.

Children also need permission to play. At the beginning of Playlab, I noticed that the teachers were more controlling. During the first observation, I noted that each teacher issued 15-20 controlling directives during play. They said things like, “do not do that”, “do not go there”, “that is not how you use that”, and “this is not recess, make a better choice”. They put limits on students' play to ensure it was "productive”. During the second observation, I only heard 2-3 controlling directives during Playlab. The

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students had more permission to play. In MJ's classroom, the children hopped up on the desks and began playing a game with the hollow blocks. They did not ask first; they just did it. This would not have been allowed to happen during the first visit, but MJ did not interfere. He observed them but let them walk around on top of the desks. As he began to trust the children's ability to play, he permitted them to play as they chose.

Conclusion

We know that play is vital for children's development and that play is learning. Nonetheless, children spend less time playing in school today, and this growing play deficit may contribute to a decline in children's mental health (Gray et al., 2023). As early childhood educators, we have a responsibility to advocate for what we know young children need. We must resist the pressure to separate play from learning and inform parents, other teachers, and administrators about the benefits of play.

Playlab is a tool for ensuring all students have access to play. It provides teachers with a structure for integrating play into the classroom. Playlab creates the time, space, and permission for teachers to observe children playing and witness the power of play. Playlab gave students time, space, and permission to demonstrate their capabilities through child-led free play. As teachers saw how protected playtime supported students' academic learning, they shifted their beliefs about play. They advocated for more students to access Playlab and served as mentors to other teachers. They also shared Playlab with parents, inviting them to the school to observe their children playing and read their play stories. They reassured families that time for play was a worthwhile investment.

This study sought to understand the teacher's role in play-led environments. What do teachers do differently when they lead with play? These teachers observed, directed, guided, and learned from play. However, most importantly, they became play advocates. As they witnessed play's power to boost children's confidence, language skills, cooperation, and problem-solving, they embraced play as essential to academic learning. They took the time, space, and permission needed to remove the barriers to play.

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Celebrating Play in Early Intervention: Every Child Deserves a Playful Journey

Lucinda Jones, Early Interventionist and Key Worker

Introduction

Every child has a right to a playful journey throughout childhood, regardless of ability, strengths, identity, or areas of growth. In Bathurst, New South Wales (NSW), Australia, a small yet impactful early intervention service uses its voice to advocate for and celebrate the unique and wonderful play of children with developmental delay, children with disability, and neurodivergent children. Bathurst Early Childhood Intervention Service (BECIS) views play not only as a child's right, but also as a source of joy, belonging, agency, connection, and participation. Joy and play are a powerful combination at the heart of its early intervention approach.

As an author who does not have a disability, careful consideration has been given to the language used throughout this paper. Language choices can influence societal attitudes and understandings of disability (People with Disability Australia, 2019). This paper adopts a disability-affirming and neuro-affirming approach informed by the social model of disability, while recognising that language preferences are individual. For the purposes of this discussion, person-first and identity-first language will be used. For children without a diagnosis but with developmental delay or concern, the term *children with developmental delay* will be used, consistent with terminology currently adopted by Australia's National Disability Insurance Scheme (National Disability Insurance Scheme, 2025).

Currently, Australia's early intervention bodies are reviewing the use of the term *intervention* (Moore et al., 2025). While best practice increasingly recognizes that the term may not be disability-affirming or neuro-affirming, consensus regarding alternative terminology is still emerging. Therefore, this paper will use the term *early intervention* throughout.

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The Issues

Play in Jeopardy

Play is a fundamental human right. Article 31 of the United Nations Convention on the Rights of the Child (United Nations, 1989) states that children have the right to rest, leisure, play, and recreational activities. This right belongs to every child, regardless of race, gender, language, culture, religion, nationality, disability, or any other aspect of identity. The United Nations Convention on the Rights of Persons with Disabilities further reinforces that children who have disability have the right to play (United Nations, 2006). Casey (2021) argues that realising the right to play for children with disability requires active efforts to remove barriers and create inclusive play opportunities.

Despite these international commitments, children do not experience play opportunities equally. Research suggests that children with developmental delay, children with disability, and neurodivergent children frequently encounter barriers to meaningful play participation. An international study by Moore et al. (2023) found that children with disability often have fewer opportunities for play than children without disabilities. Societal attitudes, inaccessible environments, limited inclusive opportunities, and adult assumptions about what counts as "appropriate" play can restrict children's playful experiences. When adults view play through a deficit lens or see it primarily as something to improve, manage, measure, or control, they can diminish children's right to play. Brown (2024) describes this broader societal trend as contributing to play deprivation and highlights its potential consequences for children's wellbeing and development.

Play should be fun, self-directed, flexible, challenging, and freely chosen (United Nations Committee on the Rights of the Child, 2013). It does not depend on productivity or adult-defined outcomes. Yet the play of children with developmental delay, children with disability, and neurodivergent children is often scrutinized, interrupted, or judged against normative expectations. As a result, the joy, agency, and diversity inherent in their play may go unrecognised. Protecting the right to play requires a shift away from

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adult agendas and toward recognising and valuing children's own ways of engaging with the world.

Play is in jeopardy and must be addressed. The right to play for children with developmental delay, children with disability, and neurodivergent children must be actively promoted within early intervention and within society more broadly.

Background

BECIS is committed to promoting, advocating for, and celebrating all children's play. Small in size yet ambitious in purpose, the service works alongside children, families, professionals, and the wider community to elevate the importance of play and the joy it brings. BECIS champions every child's playful journey and believes that advocacy for play is a shared responsibility.

Bathurst Early Childhood Intervention Service (BECIS)

Located in Bathurst, New South Wales, BECIS sits among Australian native flora and fauna. The environment reflects the service's philosophy of belonging, acceptance, and connection. Families frequently describe BECIS as a place where they feel safe, welcomed, and celebrated. It is a place where children and families can be themselves without judgment, where diversity is recognised as a strength, and where play is valued in all its forms.

Established in 1981, BECIS was the first early childhood intervention service west of the Blue Mountains in New South Wales. Over the decades, it has evolved in response to changing evidence, policy, community needs, and understandings of disability and child development. The service remains a not-for-profit charitable organization governed by a volunteer board and supported by a dedicated community.

BECIS employs a team of highly skilled early childhood specialists, speech pathologists, allied health assistants, educators, administration staff, and leaders. Together they bring extensive expertise in child development, family-centered practice, and inclusive education. While their professional knowledge is considerable, their commitment to children, families, and play drives their daily practice.

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The sounds of children's play fill the BECIS environment. Sometimes play is energetic and loud. Sometimes it is rhythmic, imaginative, quiet, sensory, or wonderfully chaotic. Each form of play is valued and celebrated as an authentic expression of childhood.

BECIS draws upon the principles of the *National Best Practice Framework for Early Intervention* (Moore et al., 2025). The service supports approximately 200 children and their families each year, partnering with them to build participation, belonging, agency, and capability across home, community, early childhood education, and school settings. This work is grounded in a commitment to human rights, strengths-based practice, and the recognition that disability reflects human diversity rather than a deficit (Australian Human Rights Commission, 2025).

Appropriate Approaches and Strategies

When a human rights approach guides early intervention, play becomes essential, not optional. Because play is a child's right, protecting and promoting opportunities for play must be a core responsibility of services that support children and families. Play is not simply a mechanism for achieving developmental outcomes. It has inherent value and meaning for children, and protecting that value is fundamental to rights-based practice.

General Comment No. 17 on Article 31 of the UNCRC defines play as a behaviour, activity, or process initiated, controlled, and structured by children themselves (United Nations Committee on the Rights of the Child, 2013). Play is intrinsically motivated, undertaken for its own sake, and arises whenever and wherever opportunities exist. Play allows children to experience autonomy, enjoyment, challenge, flexibility, creativity, and exploration. It contributes to physical, social, emotional, cognitive, and spiritual well-being and development.

Gray (2013) further supports this understanding. Gray describes play as self-chosen, self-directed, intrinsically motivated, imaginative, and relatively stress-free. Play helps children practise and build essential physical, social, emotional, and intellectual skills while nurturing curiosity, confidence, and resilience. Gray argues that play is a

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biological necessity and a vital pathway through which children learn about themselves, others, and the world around them.

BECIS uses this understanding of play to shape its early intervention approach. Families are supported to recognise that every child is born with curiosity, playfulness, and a powerful capacity to learn through play. When families understand that play is not merely entertainment but a biological and developmental necessity, they become stronger advocates for their child's right to play and for recognising their child's unique ways of engaging with the world.

Play is inherently diverse. What motivates one child may not motivate another. Children's interests, sensory experiences, communication styles, imaginations, and ways of interacting with their environments differ considerably. The play of children with developmental delay, children with disability, and neurodivergent children may not always align with dominant expectations of play, yet it remains authentic, meaningful, and valuable. A strengths-based perspective requires adults to recognise and celebrate this diversity rather than seek to change it.

At BECIS, we view all play as valid. We understand children's play as an expression of identity, agency, strengths, interests, and capabilities. Families are encouraged to celebrate their children's unique forms of play and to advocate for environments where this play is welcomed and respected. Through this approach, children experience the freedom, acceptance, and recognition they deserve.

BECIS does not have goals to change children's play. Adult agendas are intentionally set aside whenever possible so children can play in ways that are meaningful to them. Professionals do not direct play toward predetermined outcomes; they create the conditions for play to flourish. Skilled practitioners facilitate, observe, scaffold when appropriate, and respond flexibly to family priorities while protecting children's autonomy and rights.

This does not mean there are no moments where adult involvement is necessary. Rather, it means that adult involvement is thoughtful, responsive, and guided by the individual child and family. Human rights and strengths-based practice require flexibility, recognizing that family priorities and child preferences may vary from day to

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day. Skilled practitioners balance responsiveness to family goals with protection of children's rights and opportunities for self-directed play.

Play teaches children to solve problems, negotiate relationships, regulate emotions, take risks, be creative, and explore possibilities. By taking time to observe children's play without unnecessary interruption, practitioners and families gain valuable insight into children's strengths, interests, motivations, and capabilities. Seeing play in this way enables early intervention to become a celebration of children's competence, identity, and development rather than a process focused primarily on deficits or remediation. For BECIS, play is not separate from early intervention. Play is the heart of it.

Conclusion and Recommendations

BECIS demonstrates how a human rights and strengths-based approach can place play at the center of early intervention. Through partnerships with children, families, professionals, and community, the service actively promotes every child's right to play in ways that are meaningful, joyful, and authentic. Its work illustrates how recognising and celebrating diverse forms of play can strengthen participation, belonging, agency, and wellbeing for children and families.

To strengthen children's right to play within early intervention and beyond, this paper proposes the following recommendations:

1. **Recognise play as a fundamental human right**, not solely as a therapeutic or developmental tool.
2. **Adopt disability-affirming and neuro-affirming approaches** that respect and celebrate diverse forms of play.
3. **Support families in understanding and advocating for play**, including recognising their children's unique strengths, interests, and ways of participating.
4. **Create inclusive communities and environments** where all children can access meaningful play opportunities.

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5. **Embed the right to play within policy, practice, and professional education**, ensuring that children's voices, rights, and experiences remain central.

BECIS imagines a world where play is accessible, inclusive, celebrated, and naturally available to all children. It imagines communities where children can play in ways that are meaningful to them and where their play is recognised as valuable and worthy. It imagines families who proudly advocate for their children's right to play and professionals who champion play as a cornerstone of childhood.

Ultimately, every child deserves a playful journey. When children's play is recognised, protected, and celebrated, we create communities in which every child can confidently say: *"I can play my way. My play is valued. My play is my right."* Let every child's play be celebrated. Let early intervention have a playful heart. Let children play.

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Realising the Right to Play through Pedagogy: A Scottish Perspective on Systemic Change in Education

"Embedding Play in National Education Systems"

Fiona Kirkland, Med, Play Scotland

Introduction

Play as a Right in Education

'Play is the highest level of child development. It is the spontaneous expression of thought and feeling, an expression which his inner life requires… It promotes enjoyment, satisfaction, serenity and constitutes the source of all that can benefit the child….At this stage play is never trivial; it is serious and deeply significant.'

(Froebel in Lilley, 1967, p. 84)

Children make sense of their world through play. It is how they explore ideas, try things out, and build relationships with the people around them. Careful observation quickly shows that play is where children's curiosity, creativity, determination and problem-solving are most clearly expressed (Bruce, 2015; Moyles, 2015). For those of us working in the play sector, this is not a sentimental claim but a practical one. Play provides a powerful route into learning, wellbeing, belonging and inclusion, particularly when adults are able to recognise the learning taking place and create conditions that support children in leading their own exploration while being thoughtfully and responsively supported (Else, 2014; Athey, 2007).

Play is also very firmly a children's rights issue. Article 31 of the *United Nations Convention on the Rights of the Child* sets out the right to rest, leisure and play, and *General Comment No. 17* makes it clear that this right should be realised in children's everyday lives, including within the settings where they spend so much of their time (UN Committee on the Rights of the Child, 2013). In Scotland, the UNCRC has been incorporated into Scots law, strengthening this commitment and duties for public bodies, including schools and local authorities, in day-to-day decision-making (Scottish Government, 2024).

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Despite this, many education systems, Scotland's included, struggle to deliver on play. While play is widely recognised as essential in early childhood, it is often progressively constrained as children move through primary education (in Scotland, primary education spans ages 4–12). The pressure to demonstrate evidence of progress intensifies. As they go through school, children lose time, space, and permission to engage in freely chosen, meaningful, and developmentally rich play (Brooker, 2013; Ardelean, Smith, & Russell, 2021). We know that children have a right to play, and that play is a powerful and well-evidenced way for children to learn; however, existing school structures often make this difficult to realise in practice. The gap sits in the misalignment between policy intent, accountability expectations, professional learning, the physical environment, and school culture.

This paper explores how Scotland is working to support schools in embedding play pedagogy as a whole-school approach. Play should not be an add-on, and certainly not confined to the early years, but rather essential from the first year to the last. Drawing on my role as Play Pedagogy Lead at Play Scotland, it outlines how schools are supported to build shared understanding, strengthen leadership, shape environments and practice, and evaluate impact over time. It also highlights the levers that make change more sustainable, which include shared language, credible observation, and supportive leadership. The aim is to offer practical learning for international colleagues seeking to move from strong statements about children's right to play to everyday practice that makes that right real.

Problem Statement

The Gap Between Rights and Reality

Despite Article 31 of the *United Nations Convention on the Rights of the Child* clearly protecting children's right to play, this remains one of the least realised rights within formal education. In many systems, school cultures are shaped by formal attainment, standardisation and performance measures. When the pressure is on to evidence progress quickly and visibly, play is often treated as optional, or as something that sits outside the main business of learning (Ardelean, Smith, & Russell, 2021; Brooker, 2013). The challenge is not that educators do not value play; it is that

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conditions can make it difficult to protect, prioritise and defend it. This is especially true when timetables, assessment expectations, space constraints, staffing pressures, and unspoken norms about "what counts" combine to narrow children's daily experience.

A common misconception, still surprisingly persistent, is that play is mainly for younger children and should give way to more formal methods as they grow older. In primary schools this often translates into play being confined to breaks, or used as a reward once the 'real work' is completed, creating a false divide between play and learning (Bruce, 2015; Moyles, 2015). That divide matters because it reduces children's opportunities to develop agency, creativity, collaboration, and deeper thinking, and it can also narrow the ways children can show what they know and can do. It can also particularly disadvantage children who communicate, regulate, or demonstrate competence in ways that are more visible in play than in formal tasks. When we view play as something separate from learning, we also risk missing what play reveals about children's interests, their working theories, their strengths, and their support needs (Athey, 2007; Nutbrown, 2011; Hedges & Cooper, 2018).

There are also perceived barriers to a play pedagogy approach. Many teachers report limited access to professional learning that supports planning for play pedagogy, observing learning in play, and making that learning visible in ways that feel credible to colleagues, leaders and families. Where play is undervalued, practitioners can feel they are constantly justifying their approach, particularly in upper primary where pace, coverage and attainment expectations can be intense (Ardelean, Smith, & Russell, 2021). These pressures are compounded by parental anxieties and wider societal narratives about readiness, attainment and what "good schooling" should look like, especially where families feel the stakes are high. In that context, staff can end up playing it safe, not because they doubt play, but because they are unsure how to evidence learning in ways that will be recognised.

These issues are not unique to Scotland. The gap between what we know about play and what many children actually experience in school points to the need for cultural, structural and pedagogical change. Without that shift, the right to play risks remaining a principle we endorse rather than a lived reality in classrooms every day. If

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we want Article 31 to be meaningful in education, then play needs to be planned for, protected, and defended with the same seriousness as other entitlements.

Background

Scotland's Policy and Practice Context

Scotland's current focus on play pedagogy sits within a longer journey of policy, practice and research that places children's rights, wellbeing and holistic development at the centre. Our national curriculum, *Curriculum for Excellence*, creates space for learning that is active, relevant and responsive and an expectation that children have opportunities to explore, create, collaborate and make meaning, rather than simply receive information (Education Scotland, 2023).

Alongside this, *Realising the Ambition: Being Me* strengthened national guidance on developmentally effective practice, positioning play as central in the early years and highlighting relationships, responsive environments and children's agency as foundations for learning (Education Scotland, 2020). Although often associated with early years, it has also fuelled professional discussion about high-quality learning across the primary education stage (in Scotland, primary education spans ages 4–12), particularly when wellbeing and rights are taken seriously.

A key development has been the strengthening of the children's rights context. Article 31 of the UNCRC sets out the right to rest, leisure and play, and *General Comment No. 17* clarifies how states should respect, protect and fulfill that right in everyday life, including within education (UN Committee on the Rights of the Child, 2013). In 2024, Scotland incorporated the UNCRC into Scots law through the *UNCRC (Incorporation) (Scotland) Act*, placing duties on public bodies, including schools and local authorities, to give due regard to children's rights in decision-making and service delivery (Scottish Government, 2024). For schools, this reinforces the expectation that play is not simply a pedagogical preference; it is part of what rights-based education looks like in practice.

This rights-based direction is reflected across Scotland's wider play policy landscape. Scotland has had a national *Play Strategy* since 2013, which sets a clear

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ambition for play and establishes a strong foundation for recognising children's right to play. The new *Play Vision Statement and Action Plan 2025 to 2030* builds on the strategy, focusing delivery around three drivers: parents, place and practitioners, and calling for action so that children have time, space and permission to play in daily life. (Scottish Government, 2013; Scottish Government, 2025). Work on play sufficiency, place-based approaches, and child-friendly planning continues to strengthen the wider context for schools, recognising that opportunities for play are shaped by education and by communities, infrastructure and culture.

Within this evolving landscape, Play Scotland has worked to connect policy, research and practice in ways that are useful to schools. Resources such as the *Play Types Toolkit* have been developed to help schools bring more play into the school day. *The State of Play in Scotland*, which captures ongoing challenges and opportunities in children's access to play, has supported the case for play across settings and ages (Scott-McKie & Casey, 2017; Play Scotland, 2023). At the practice level, progress is strongest when staff deepen their understanding of play pedagogy and change everyday approaches, particularly in observation, interaction, and environment design, so that learning through play is recognised, valued, and evidenced. Local practitioner networks across Scotland also provide peer support and professional dialogue that help colleagues test ideas and sustain change over time. Froebelian principles sit within this wider mix for many practitioners, offering a coherent rights-and-relationships lens alongside other approaches.

In this rights-based and practice-focused context, Scotland's approaches and strategies work to embed play pedagogy in primary schools have gathered momentum. In my role at Play Scotland, I support schools in making sense of this landscape and translating it into practical change. This includes building shared understanding across staff teams, developing environments that invite exploration and collaboration, and strengthening observation and reflection to make learning through play visible. The next section outlines the approaches that have been most helpful when schools want change that is sustainable, inclusive, and credible within existing school expectations.

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Strategies

What Supports Sustainable Change

Scotland's progress in embedding play pedagogy in primary education has been strongest where it is treated as a whole school change process rather than an individual initiative or a short-term improvement theme. What schools often need first is not a list of activities but a shared understanding of what play pedagogy means, why it matters for children's learning and wellbeing, and how it connects to curriculum expectations and children's rights. When staff have time to explore the research together, reflect honestly on current practice, and agree a common language, play pedagogy becomes easier to protect and more likely to be sustained (Moyles, 2015; Brooker, 2013).

A practical starting point is to review children's daily experience, asking the questions: where are children offered genuine choice and agency, and where do timetables, routines, or narrow expectations restrict play? Observation is essential, and when schools invest in observation and reflection, they tend to become more responsive, and planning shifts from delivering content to building the conditions for meaningful learning. Just as importantly, it gives staff credible evidence they can use in conversations about progress, including for children who may not show their strengths as clearly in formal tasks.

Leadership makes a real difference. Schools that sustain play pedagogy usually have senior leaders who champion it by creating conditions for staff to develop confidence and take considered risks. That includes protecting time for professional dialogue, supporting manageable pilots, and ensuring play pedagogy is reflected in improvement planning rather than treated as an add-on. Play pedagogy is relational; it depends on adults who are attuned to children and understand when to step in to extend learning and when to step back and let children lead (Bruce, 2015; Else, 2014). In practice, supportive leadership is often the difference between a good idea and a change that survives a difficult term.

A whole-school approach also requires attention to environments, both indoors and outdoors, and to the materials children can access. Loose parts are widely used in Scottish schools because they invite creativity, collaboration, problem-solving and

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sustained engagement without prescribing outcomes (Casey & Robertson, 2019). This is not about expensive resources; it is about selecting open-ended materials that children can transform, combine, revisit and repurpose, which supports agency and deeper learning. Schools have also found that working explicitly with play types helps to protect a range of play opportunities across the school day (Scott-McKie & Casey, 2017). The important shift is not the resources themselves; it is the way adults design for choice, possibility, and inclusion.

Children's participation is another essential strategy. If the aim is rights-based practice, children cannot simply be recipients of change; they need to be involved in shaping it. Approaches such as the Mosaic Approach offer practical methods for listening to children's perspectives and using their insights to inform environments, routines, and learning experiences (Clark & Moss, 2011). Research using creative methods also shows that children often communicate powerfully through non-verbal forms of expression, with implications for how we gather views, particularly for younger children and those with additional support needs (Blaisdell, Arnott, Wall, & Robinson, 2019). In Scottish schools, this can involve children helping to design spaces, deciding how materials are organised, and sharing what helps them feel confident and included. These are often small changes, but they can shift the culture quickly because children feel a real sense of ownership.

Family engagement also matters, particularly because play pedagogy can challenge beliefs about what learning should look like. Families are often supportive once they understand the rationale and can see evidence of learning, but they may need reassurance and opportunities to ask questions. The Education Endowment Foundation guidance on working with parents highlights the importance of respectful relationships, practical strategies, and reducing barriers to engagement (Education Endowment Foundation, 2022). In practice, this can include sharing observations, photographs, and children's voices; inviting families into learning conversations; and making links between play and curriculum learning visible without reducing play to a checklist.

Taken together, these approaches show that play pedagogy is not about adding more to workloads; it is about shifting how learning is designed, how children are

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positioned, and how adults understand their role. Scotland's experience suggests that when schools invest in shared understanding, leadership, environments, observation, participation and family engagement, play pedagogy becomes sustainable, and a realistic way to uphold children's right to play within everyday education.

Making Article 31 Real in Schools

Scotland's work to embed play pedagogy in primary education offers a practical example of how the child's right to play can move from a statement of intent to something children experience in the everyday life of school. What has been most striking in this journey is that sustainable change has not come from a single intervention or a set of activities; it has come from schools taking a whole school approach, investing in shared understanding, and building the confidence to value children's agency, wellbeing and voice as part of learning and progress. In a context where the UNCRC is incorporated into Scots law, the right to play is not simply a principle; it is a responsibility, and that has strengthened the case for ensuring play is protected, prioritised and planned for across the primary years (Scottish Government, 2024; UN Committee on the Rights of the Child, 2013).

For international colleagues, the Scottish experience underlines that play pedagogy is not confined to the early years, nor is it separate from learning. When educators are supported to observe closely, plan responsively and shape environments that invite curiosity, collaboration and depth, play becomes a powerful context for inclusive learning, particularly for children who may not thrive within narrow models of instruction and assessment. It also shows the importance of listening to children and involving them in shaping their learning environments, because rights-based education requires participation, not just provision (Clark & Moss, 2011; Blaisdell, Arnott, Wall, & Robinson, 2019). Even where the policy landscape differs, the transferable lesson is consistent: sustainable play pedagogy needs leadership permission, shared language, and credible evidence that learning is happening. Based on the evidence and learning outlined in this paper, the following recommendations are offered for policymakers, school leaders, practitioners and the wider play sector.

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Recommendations

1. Position play as both a rights issue and a pedagogical one.

Ensure Article 31 is visible in education policy, school improvement planning and accountability, so it is treated as a core entitlement rather than optional enrichment. Where the UNCRC is incorporated, planning for play is part of meeting public duties, not a discretionary extra.

2. Invest in professional learning.

Prioritise observation, interpretation of play, and practical ways to make learning visible. Use accessible frameworks and resources that connect theory to day-to-day practice.

3. Support whole-school approaches and thoughtful implementation.

Enable leadership teams to protect time for professional dialogue, inquiry, and gradual change. Treat play pedagogy as cultural work that requires follow-through, reflection, and review, not a one-off initiative.

4. Tune environments for equity, depth, and inclusion.

Provide sufficient time and space for sustained play, and ensure that indoor and outdoor environments include open-ended materials that children can transform, combine, and revisit. Use guidance that supports inclusive practice and practical set-up without requiring significant new spend.

5. Strengthen meaningful engagement with families and communities.

Build a shared understanding of the value of play and address anxieties about readiness, progress, and attainment through clear, practical communication and evidence of learning. Plan engagement deliberately and reduce barriers for families who have not always found school welcoming.

The child's right to play is universal, but the conditions that support it must be intentionally created. Scotland's experience suggests that when rights, pedagogy, and practice are aligned, play pedagogy becomes a realistic and powerful way to help

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children thrive and to shape education that is effective, inclusive, and grounded in children's rights.

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The Power of Play: Why Unstructured Time Matters in Primary School

Anne Lamont, MEdSt & Sara Scott, BEd

Introduction

The Felixstow 3 Portfolio is a group of public schools in the northeast metropolitan area of Adelaide, South Australia, comprising 12 primary schools.

Our strategy for public education in South Australia (Department for Education, 2024) was released in 2023 with the purpose of ensuring every child and young person can learn and thrive. During 2024, school leaders in the Felixstow 3 Portfolio actively engaged with the strategy, focusing on the four Areas of Impact: Equity and excellence, Effective learners, Learner agency, and Wellbeing. Through targeted conversations, we examined how children and young people experience schooling and identified opportunities to foster environments that nurture key dispositions and capabilities, specifically belonging, resilience, persistence, curiosity, creativity, self-regulation and agency.

Time2Play is a two-year initiative (2025–2026) designed to transform learner outcomes by increasing opportunities for unstructured play during the school day. Guided by the principle that all children and young people have the right to play and need to play, the project aligns with Article 31 of the United Nations Convention on the Rights of the Child (United Nations, 2026). This principle is grounded in the understanding that play is a fundamental human right and a vital driver of healthy development and learning.

Problem Statement

Unstructured play, which is voluntary, self-directed, and imaginative, has declined significantly in recent decades. Children today are estimated to have lost 10 to 12 hours per week of free play compared to previous generations, largely due to more structured activities, fewer play breaks in schools, and more time spent in online environments. In the 1970s, Australian schools typically provided play breaks, totalling 80 minutes or more each day. Today, most schools offer two breaks—recess and lunch—amounting to approximately 50 minutes per day. Currently, children in Australia have

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more compulsory instruction time during primary school than children in other Organisation for Economic Co-operation and Development (OECD) countries. The average hours of instruction each year across primary schools in OECD countries is 800 hours; in the South Australian public education system there are over 1000 hours of instruction each year in primary schools. South Australia has the longest instructional week in Australia of 1600 minutes, compared to 1425–1550 minutes in other states.

Background

Time2Play is grounded in contemporary research highlighting play as essential to children's development and wellbeing. Jonathan Haidt's (2024) *The Anxious Generation* identifies play as central to building resilience, creativity, and social competence, warning that the "phone-based childhood" has eroded these capacities. He calls for extended, unstructured recess and minimal adult oversight, reminding us that "play is the work of childhood." His research helped shape Time2Play's focus on increasing unstructured playtime and redefining the adult role as facilitator rather than supervisor.

Finnish educator Pasi Sahlberg (Sahlberg & Doyle, 2019), co-author of *Let the Children Play*, has directly supported the project through professional learning and advice. His research presents play as a developmental necessity, drawing on global evidence and the Finnish education model to advocate for longer recesses and playful learning environments.

Developmental psychologist Peter Gray's (2013) *Free to Learn* demonstrates how self-directed play fosters independence, emotional resilience, and adaptability. His work strengthened Time2Play's understanding of play as freely chosen and led by children.

Angela Hanscom's (2016) *Balanced and Barefoot* underscores the physical and sensory benefits of outdoor play, showing how movement-rich environments support core strength, attention, and emotional regulation. Her insights reinforced Time2Play's emphasis on outdoor, unstructured activity.

The documentary *Chasing Childhood* (2020) revealed how excessive structure and supervision limit children's capacity for independence and risk-taking. Time2Play

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schools used the film to engage parents and communities in re-evaluating the balance between safety and freedom.

The American Academy of Pediatrics (Yogman et al., 2018) recommends daily play for all children. Together, these resources provide the foundation for Time2Play, affirming that unstructured, child-led play is not optional, but fundamental to healthy development and lifelong learning.

Appropriate Approaches/Strategies

Time2Play is a strategic, research-informed initiative with the potential to create long-term change in how schools value and provide opportunities for play. By combining increased playtime, educator development, community engagement, and rigorous evaluation, the project aims to restore play to its rightful place as a cornerstone of healthy childhood development and a catalyst for engagement, wellbeing, and learning.

Time2Play has five core objectives for participating schools:

1. Increase the time allocated for unstructured play
2. Build educator understanding of its developmental benefits
3. Evaluate its impact on wellbeing, engagement, and learning (particularly for children facing barriers)
4. Clarify the role of educators in facilitating play
5. Engage families and communities in recognising its value.

Participating schools committed to increasing unstructured playtime during the school day, engaging in twice-termly professional learning meetings for teachers and leaders, involving principals in project updates, and sharing insights and observations throughout the process. For most schools, this began with two classes engaging in an extra 30 to 60 minutes of unstructured playtime per week. As the year has progressed, many schools have increased the number of classes participating and the frequency or length of time allocated to unstructured play.

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Implementation of the initiative has included professional learning workshops, such as *Lunchtime Arguments are Awesome* by Adam Voigt (2025) from Real Schools, which reframes playground conflict as a critical opportunity to develop social competence. Parent engagement has also been prioritized, with events such as a workshop by Madhavi Nawana Parker (2025) from Positive Minds Australia about supporting children to be more resilient, manage disappointment and conflict, and solve problems.

The University of South Australia is evaluating the initiative in partnership, using tools such as the Wellbeing and Engagement Collection (WEC), observations, surveys, and narrative evaluations. Early findings are encouraging. Teachers report that children are increasingly able to resolve conflicts, negotiate, engage in imaginative play, and extend play beyond recess and lunch. Parents note that their children are spending more time outdoors after school and on weekends and are showing greater creativity and problem-solving ability in their play. Students themselves describe feeling happier and more excited to be at school, expanding their friendship groups, and enjoying greater autonomy in play decisions. In some cases, they have even taken the lead in shaping playground guidelines, such as organizing "stick summits" to agree on safe ways to use sticks during play.

To build educators' understanding of students' views on effective play skills, children across year levels were asked, *"What makes you and other children good at unstructured play?"* Their responses revealed that gender and age shape preferences, dispositions, and social behaviours in play.

Summary of Gender Trends in Unstructured Play

Boys favored physical, active, and construction play—climbing, digging, or inventing games—focused on mastery and fun. They valued teamwork but expressed less emotional reflection, viewing nature mainly as a resource for building.

Girls preferred collaborative and imaginative play, using storytelling and creativity to foster inclusion and emotional connection. They emphasized kindness, empathy, and shared creativity, seeing nature as a source of inspiration. The following table shows the characteristics of play by age/year group.

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Table 1

Summary of Developmental Trends in Unstructured Play

Age/Year Group	Key Characteristics of Play
Reception – Year 1 (Ages 5–6)	• Emphasis on kindness, sharing, taking turns • Enjoy simple, imaginative games • Excitement from nature and newness
Year 2 – Year 3 (Ages 7–8)	• Growing use of imagination in group games • Start to build and role-play more complex scenarios • Begin reflecting on emotions in play
Year 4 – Year 5 (Ages 9–10)	• Play involves planning, strategy, creativity • Clearer group roles and more structured games • Stronger social dynamics (e.g. fairness)
Year 6+ (Ages 11–12)	• High self-awareness; view play as relaxing and developmental • Use of tools (safely) and materials • Blend of autonomy and teamwork
Overall Maturity Trend	Play evolves from spontaneous and social → to collaborative and imaginative → to reflective and strategic as children age

Unstructured play evolves significantly with age and reflects different emphases by gender:

- Boys often externalize their play — action, tools, mastery, and building.
- Girls often internalize and socialize their play — collaboration, emotion, reflection, and inclusivity.
- As children grow older, play becomes more self-aware, collaborative, and connected *to personal and academic growth*.

Risks, Hazards and Benefits

A key challenge for school leaders in the Time2Play Project is managing the risks of unstructured play. While they recognise its importance for wellbeing and positive student outcomes, they must also uphold their duty of care. This is complicated by parental pressure shaped by “safetyism,” an unhealthy drive to eliminate all risk, amplified by media and social platforms. Combined with complex policy and risk assessment processes, this makes it challenging for schools to judge when play’s benefits outweigh potential risks or when a risk becomes an unacceptable hazard.

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Participant feedback showed that fear of risk limited opportunities for meaningful unstructured play. To address this, we partnered with Nature Play SA (n.d.), a not-for-profit organization that inspires creative and sustainable engagement with nature.

Through case studies and an immersive cubby-building experience, participants explored the difference between a *risk (*something that helps children learn and grow) and a *hazard (*something that offers no benefit and poses serious harm). For example, balancing on uneven surfaces and using sticks can build confidence, coordination, and problem-solving skills, while broken glass or sharp metal in loose parts present unacceptable hazards.

Next Steps in the Project

- Continuing research and providing professional development opportunities, i.e., connecting with experts in loose parts play, attending conferences on play, examining neuroscience research
- Amplifying children's voice in schools and across the school system in South Australia
- Engaging the community so that families and local government understand the benefit of unstructured play for children and young people and advocate for it, i.e., development of green spaces in local areas
- Embedding unstructured play in the school day by ensuring each educator understands what it is, what it isn't, and its significance for supporting all children to thrive
- Scaling up the project at each school to involve all classes across all year levels

Outcomes of the Time2Play Initiative

The Time2Play project has delivered a range of significant outcomes that positively impact student wellbeing, engagement, creativity, resilience and learning.

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Key findings and results include:

- Students demonstrated increased ability to resolve conflicts, negotiate, and problem-solve, e.g., children using a 'fix-it board' to independently resolve conflicts.
  "As a teacher, I did not realise how much time I spent mediating students and involving myself in their problem-solving until I started to step away during unstructured play times and students started to solve their own conflicts."
  (Emma, Time2Play educator)

- Students showed greater engagement with learning after time spent in unstructured play activities.
  "Elvie, a Year Six student with a strong interest in the environment, often felt restless after extended classroom time. During unstructured play among the school's trees, she observed nature and built habitats for imaginary creatures, finding the experience calming and refreshing. Back in class, she felt more focused and engaged, illustrating how outdoor, unstructured play supports wellbeing, curiosity, and readiness to learn."
  (Nathan, Time2Play educator)
  "I've noticed that when my children come in from Time2Play, they are more engaged, calmer, and focused. They work more collaboratively, listen to one another more thoughtfully, and approach challenges with more energy and optimism than I have previously seen. After spending time exploring freely—building, imagining, negotiating—they return to the classroom ready to take risks in their learning, solve problems creatively, and support one another. I see them being more connected and more helpful towards each other."
  (Sue, Time2Play educator)

- Students engaged independently in imaginative and creative play, e.g., using loose parts materials in new and unique ways.
  "Being involved in Time2Play has opened my eyes and expanded my mind. I was initially fearful of not having enough provocations, parts, or resources available for our younger years. However, the worry of boredom turning to robust,

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boisterous or rough activity was quickly squashed. I now reflect on the past year and the amazing play I have witnessed, with unstructured play increasing ideas, imaginations, social skills and mixed year level play flourishing in our school."
(Bec, Time2Play educator)

- Students expanded their friendship groups, and improved decision-making in play activities, e.g., children engaging with other children outside their friendship group and building stronger bonds.
  "Alex often arrived home mentally exhausted and presented with 'big behaviours'. He told mum that he played by himself at school. Since the introduction of unstructured play breaks, he has shown an interest in using planes and balls on the oval and has begun inviting other children to join him. He is now happier and comfortable in his environment at school, and Mum has said that he comes home happy and emotionally regulated."
  (Matthew, Time2Play educator)

- Educators observed improved social skills among students, including teamwork, inclusion, and empathy, e.g., children negotiating group decisions and the fair distribution of resources during both unstructured play and when returning to the classroom.
  "One afternoon in the pine forest, Jayce, a Year 5 student who often struggled to engage in class, led his classmates in building a shelter from sticks, sand, and tarpaulins. Taking initiative, he delegated tasks, welcomed suggestions, and adapted the design, showing strong teamwork and flexibility. The pride he felt as peers praised his work reflected growing confidence that later carried into the classroom, strengthening his engagement, leadership, and communication skills through hands-on play."
  (Amy, Time2Play educator)

- Student agency is evident through initiatives such as shaping playground guidelines (e.g., "stick summits") and developing play agreements.

- Teachers noted how unstructured play involving one or two classes only resulted in children playing more imaginatively and creatively and with different peers,

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compared to play during whole-school recess and lunch breaks, e.g., building forts rather than playing soccer.

- Student resilience and perseverance strengthened, e.g., especially evident in some neurodiverse students who once needed over 20 minutes to join play but now engage more quickly and stay involved longer.
- Emotional and physical self-regulation skills strengthened; e.g., for children in their first year of schooling, beginning each day with unstructured play led to a significant reduction in separation anxiety.
- Positive shifts in parental perceptions, with reports of children spending more time engaging in creative, outdoor play after school and at weekends.
  "On the weekend, Otis, our 5-year-old, excitedly led us to our local park. Drawing on skills learned through unstructured play, Otis showed us how to use fallen sticks and rope to build a sturdy fort. He explained each step to us, showing confidence in his problem-solving and communication abilities. We worked together, laughing and sharing ideas, until the fort was complete. We are delighted to see Otis so engaged and eager to teach us something new."
  (Amy and Harry, parents)
- Greater family and community engagement, e.g., through workshops and sharing documentaries on developing dispositions for unstructured play.
- Teachers gained a deeper understanding and confidence in facilitating and observing unstructured play as a learning tool, e.g., reflecting on their capacity to step back and create space for children to problem-solve, persevere, and resolve conflicts independently.
  "Olivia, aged 6, has been timid and shy all year during 'nature play' but has recently found the confidence to climb trees and attempt obstacle courses. She says she is scared but knows she'll be OK, even though it's high and hard. She was observed engaging in self-talk as well as sharing her feelings with her peers and then being incredibly proud, elated, and excited when she was successful, then

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sharing her achievement with everyone."
(Izzy, Time2Play educator)

- Educators learned to balance risk and freedom effectively.
"As an educator, Time2Play has increased my confidence to allow children to take risks during play, not only in timetabled unstructured play times, but also at recess and lunch playtimes. Time2Play has empowered me to follow my instincts and allow children to explore with the knowledge that I can reassure parents about any 'adventure injuries'."
(Nicole, Time2Play educator)

- Interactive play in a diverse, multi-aged environment that includes peers with varying abilities fostered essential skills such as empathy, reciprocity, sharing, problem-solving, perspective-taking, and cooperation.

Conclusion

Through a strategic blend of student agency, educator professional development, family engagement, and robust evaluation, Time2Play is re-establishing play as a cornerstone of student growth, embedding it as an essential practice for long-term wellbeing and learning outcomes. Within the Felixstow 3 Portfolio, the project has provided a practical way to bring South Australia's education strategy to life by creating environments in which children develop essential dispositions such as resilience, curiosity, collaboration, creativity, and self-regulation.

Early findings highlight clear benefits, including students who are calmer and more focused after play, better able to resolve conflict, more imaginative, and more connected to peers. Families report similar gains at home, and educators have grown more confident stepping back, facilitating rather than directing, and balancing risk with opportunity.

As the initiative expands, Time2Play will continue to build a culture that values children's right to play and recognises it as foundational rather than optional. The project provides a scalable, research-informed model for schools seeking to enhance

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wellbeing and learning by giving children what they need most—time, space, and trust to play.

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Ready or Not, Here I Come: Redefining Kindergarten Readiness to Meet Children Where They Are Upon Arrival

Kyler P. Leiter, PhD, Equity, Inclusion, and Trauma-Informed Committee Chair

Introduction

What does it mean to be ready for kindergarten? The definition of kindergarten readiness has changed substantially in our lifetime. In the past, kindergartens were mainly play-based and served as a bridge between home and elementary schools. Today, many kindergartens resemble first- and second-grade classrooms of the past, emphasizing academic skills and structured, teacher-led instruction. As a result, play has been reduced or removed completely, and children are often expected to arrive at kindergarten with established academic knowledge. In this paper, I argue that we must reorient our approach to kindergarten curricula. Instead of focusing solely on academics, we should also prioritize social and emotional development through playful means. In doing so, we can create early childhood education (ECE) programs that are developmentally responsive, engaging, and inclusive of all children and their backgrounds. Only then can we meet children where they are when they arrive in kindergarten.

Problem Statement

The definition of *kindergarten readiness* has undergone a radical transformation in the last 30 years. Historically, kindergarten was conceptualized as a developmental stage in which children grew socially, emotionally, physically, and cognitively through play and experiential learning. In this traditional sense, readiness to enter kindergarten was measured not by academic knowledge or ability but by a child's aptitude for navigating social interactions, managing emotions, and participating in self-directed exploration (Muelle, 2013). Play was regarded as the primary vehicle for this learning, fostering creativity, problem-solving, and social competencies essential for later academic success.

However, a dramatic paradigm shift has occurred. Driven by accountability policies, standardization, and a narrow focus on measurable academic outcomes, the

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definition of kindergarten readiness shifted from a developmental perspective to an academic one. This focus increasingly centers on children's ability to demonstrate early literacy skills (i.e., phoneme isolation, syllable segmentation, grapheme identification) and numeracy skills (i.e., rote counting, basic addition, numeral and shape identification) acquired *befor*e kindergarten begins. This redefinition has profound implications for children's early school experiences. Because of pushdown academics, many kindergartens now feature structured, teacher-led activities and minimize play-based, experiential methods. This shift toward academic standards has devalued social and emotional development in the primary grades, which research shows is critical for later academic achievement (Hirsh-Pasek et al., 2009).

Furthermore, this academically-driven approach tends to overlook the diversity of children's backgrounds and lived experiences, leading to inequities in educational outcomes. Children from historically marginalized communities, who may have different cultural norms or less access to early learning opportunities, often face disadvantages when standardized curricula fail to recognize their unique strengths and contexts (Gunn et al., 2021). Emphasizing academic skills at such an early age can suppress natural curiosity, which is typically built through play. Additionally, the low-stakes environment created through play supports accessible social dynamics, which produces cultural exposure and the development of empathy through diverse peer interactions (Waite & Rees, 2014); something completely missed within whole-group instruction.

This paper critically examines how the current kindergarten readiness framework, driven by state-issued standards and accountability measures, negatively affects children's social, emotional, and overall developmental well-being. I argue that an overemphasis on academic performance and the growing use of scripted instruction undermine kindergarten's foundational purpose as a developmental stage. I then call for reimagining ECE policies grounded in developmentally responsive practices that meet children where they are cognitively, physically, and emotionally upon kindergarten entry.

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Background

Historical Perspectives on Kindergarten

The origins of kindergarten as an educational institution trace back to Friedrich Fröebel's pioneering work in Germany in the early 19th century. Fröebel emphasized hands-on activities, play, and social interaction. This pedagogical framework viewed children as active learners whose natural curiosity should be nurtured through engaging, child-centered experiences (Shirakawa & Saracho, 2022). Fröebel's philosophy profoundly influenced early American kindergarten educators, such as Susan Blow and Elizabeth Peabody, who prioritized play as the primary mode of learning and focused on fostering social competence, emotional regulation, and motor skills within instruction (Muelle, 2013). During this time, "play [was viewed] as the work of children," a phrase contributed by Maria Montessori (1936, p. 196).

The mid-to-late-20th century marked a turning point, as kindergartens began incorporating more formal instruction, especially in literacy and numeracy, mirroring elementary school expectations (Muelle, 2013). Kindergartens served as a transitional stage, neither entirely child-centered nor solely academic, but emphasizing a balance of social, emotional, and cognitive growth through developmentally responsive means (i.e., play). This shift was partially driven by the belief that early academic success predicted later achievement, a premise supported by research but generally misunderstood or overgeneralized. The 1983 publication of "A Nation at Risk" intensified this trend, warning of declining American educational standards and advocating for increased accountability across public school settings. Although it targeted higher grades, the movement toward standardization seeped into early childhood. Many states then adopted curriculum frameworks emphasizing early literacy and numeracy benchmarks (Institute of Medicine and National Research Council, 2015).

The No Child Left Behind Act further cemented the focus on measurable outcomes (NCLB, 2002). ECE programs faced increasing pressure to demonstrate student progress through standardized assessments, especially as publicly funded programs shifted to full-day schedules. This pressure increased the prevalence of drill-and-practice activities, skill-based curricula, and scripted programs, limiting teachers'

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ability to adapt instruction to children's individual needs, cultural contexts, and developmental appropriateness (Bassok et al., 2016).

This shift has been associated with a steep decline in play-based pedagogies. Play, long regarded as a vital component of ECE programming, was disregarded in favor of direct instruction and scripted lessons designed to meet specific benchmarks. Consequently, children's opportunities for social interactions, creativity, and exploration decreased. Research indicates that such practices can impair children's social-emotional development, executive functioning, and motivation; skills that are crucial for academic success and physical and mental development (Hirsh-Pasek et al., 2009). Additionally, in these new kindergartens, children sit for longer intervals, utilize higher-level thinking abilities (often leading to cognitive fatigue), and participate in fewer unstructured social activities (Miller & Almon, 2009). This ultimately leads to behavioral outbursts that hinder the instruction that caused the original dysregulation (Skinner, 2018): a true catch-22.

International Comparisons and Alternative Approaches

In contrast, countries like Finland have maintained a developmental view of early childhood. Finnish children typically start formal literacy and numeracy instruction around age seven (three years after American children), with a strong emphasis on play, social-emotional learning, and individualized instruction. Finnish educators prioritize the child's holistic development, fostering curiosity, creativity, and social skills before academic rigor (Sahlberg, 2015). This approach correlates with Finland's high performance on international assessments (i.e., PISA), demonstrating that delaying formal instruction does not hinder later academic achievement and may, in fact, elevate it. Similarly, in Canada, New Zealand, and throughout Europe, early childhood policies emphasize play-based learning, cultural responsiveness, and family engagement to a much higher degree than their American counterparts. These nations recognize that children's diverse backgrounds and experiences should be valued and integrated into curricula, promoting equity and inclusion, and the outcomes speak for themselves (Ainscow, 2020).

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The Need for a Paradigm Shift

Given the evidence from international models and developmental science, there is a compelling case for reorienting kindergarten policies toward a more balanced, developmentally responsive approach. This includes recognizing that social-emotional skills, cultural competence, and experiential learning are fundamental to children's success, both academically and in life. Recent research underscores the importance of social-emotional competencies, such as self-regulation, empathy, and cooperation, in predicting academic achievement (Hirsh-Pasek et al., 2009). This understanding challenges the current emphasis on rote skills, standardized testing, and academic rigor at the expense of fostering resilient, socially competent, and motivated learners, underscoring ECE's original purpose. Ultimately, such programs infringe on children's innate needs and rights to play (Toblin, 2019). It is hypothesized that if kindergarten programming were redesigned to foster social competencies alongside academics, the pressure to prepare children for kindergarten could be lifted. Therefore, we must shift our thinking on kindergarten readiness, moving from what kids *should* know when entering kindergarten to what we can do to meet children where they are holistically (socially, emotionally, physically, culturally, and yes, even academically) when they arrive in kindergarten.

Strategies

Considerations

To reconstruct a kindergarten readiness framework, kindergarten programming needs a complete overhaul. In order to foster a more equitable, developmentally responsive, and research-based approach to kindergarten education, several key aspects should be considered:

Prioritizing Social-Emotional Development

Standards and curricula should explicitly emphasize social-emotional skills. Schools should incorporate professional development focused on creating nurturing environments that support children's emotional well-being, self-regulation, and interpersonal skills (Gunn et al., 2021). These skills underpin academic success and are

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particularly vital for children from historically marginalized backgrounds who may face additional challenges outside of school.

Valuing Children's Diverse Backgrounds and Lived Experiences

Children enter kindergarten with a rich tapestry of backgrounds, cultures, languages, and prior experiences. Curricula should be culturally responsive and inclusive, recognizing and valuing these differences. Teachers should incorporate children's stories, family traditions, and community assets into daily routines to foster a sense of belonging and identity (Heckman & Mosso, 2014). This approach not only enhances engagement but also addresses achievement gaps rooted in socio-economic and cultural disparities.

Emphasizing Play and Experiential Learning

Research consistently demonstrates that child-led play and experiential learning settings promote cognitive, social, and emotional development, as well as academic development (especially regarding oral language development and problem-solving abilities; Miller & Almon, 2009; Ridgway et al., 2015). High-quality pre-K and kindergarten programs should allocate substantial time for both child-led and guided play opportunities, including imaginative play, outdoor exploration, and hands-on activities. Educators should serve as facilitators and observers, guiding children's discoveries rather than dictating playful interactions or setting rules for play scenarios (Hirsh-Pasek et al., 2009). Such environments foster creativity, problem-solving, and collaboration; skills that are vital for success in the 21st-century workforce.

International Models and Policy Implications

Countries like Finland exemplify how delaying formal academic instruction until children are developmentally ready can yield positive results. Finland's emphasis on play, social-emotional learning, and individualized support has produced high international rankings without sacrificing children's well-being or engagement (Sahlberg, 2015). These models suggest that early academic pressure is unnecessary for later high achievement and that fostering a love of learning and social competence

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creates a more sustainable educational foundation. Therefore, we must look to these successful models to improve our own.

Supporting Equity and Inclusion

Recognizing and verifying children's lived experiences requires intentional efforts to address systemic inequities. Schools should consciously implement policies that support bilingualism, incorporate culturally relevant curriculum, and provide additional resources for children facing economic disadvantages. Such strategies ensure that all children have equitable opportunities to succeed and feel valued in their kindergarten environment (Viskovic, 2021). Inclusive curricula can never be scripted, as teachers must have the autonomy to adapt as needed.

Community Outreach and Parent Engagement

School systems should invest time and resources in the larger community to connect with families. Additionally, local and state resources should help families prepare for school expectations as their children age, including methods to build children's independence and social skills. This could include information on how child-led play lays the foundation for later learning, as well as how the Centers for Disease Control and Prevention's (2022) Learn the Signs initiative can help parents understand realistic age expectations and developmental milestones. These resources can help families prepare children for the social dynamics they will inevitably encounter in school (Hindman & Morrison, 2011).

Policy and Practice Recommendations

To implement these reforms, policymakers and administrators should:

1. Use a developmentally responsive framework as the guiding principle for early childhood standards;
2. Increase funding for ECE programs that prioritize child-led play, social-emotional learning, and family outreach;
3. Provide ongoing professional development that equips teachers with skills in culturally responsive, child-led play, and social-emotional pedagogies;

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4. Advocate for the inclusion of child-led play pedagogical instruction in higher-education institutes to better prepare pre-service teachers;
5. Develop authentic assessment tools that are formative, developmentally responsive, and culturally sensitive, moving away from high-stakes standardized tests;
6. Engage families and communities as partners in children's learning, recognizing their vital role in supporting the holistic development of their children; and
7. Recognize that play is not a frivolous activity and a break from learning, but rather a child's innate right and preferred method for acquiring new skills and knowledge.

Conclusion

The current conception of kindergarten readiness, driven by academic standards and standardized testing, has shifted ECE environments away from their foundational roots in social, emotional, and child-led play. This paradigm not only diminishes the joy and curiosity inherent in young children's development but also risks long-term harm to their social-emotional well-being, overall engagement, and equity. International models, such as those in the Nordic region, show that delaying formal academic instruction and emphasizing play and social development can produce high academic achievement without compromising children's overall well-being. These models challenge American policymakers, educators, and families to reconsider the purpose of kindergarten and prioritize developmentally responsive, inclusive, and engaging pedagogies, which will ultimately ease schools' academic expectations for children upon their arrival to kindergarten.

Reforming ECE requires a collective effort: policy changes, professional development opportunities, and a cultural shift toward valuing whole-child development as a public responsibility (the phrase "it truly takes a village" comes to mind). Children will enter our kindergarten programs with varied experiences and knowledge. To improve kindergarten quality, we must meet children where they are upon arrival, not dictate where they should be on day one. Schools must embrace a

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balanced approach that recognizes the importance of social-emotional skills, cultural responsiveness, and experiential learning alongside academics. Only through such comprehensive reform can we ensure that kindergarten truly functions as a gateway to lifelong learning, well-being, and success for *all* children, no matter their background. Stakeholders must advocate for policies grounded in the considerations and recommendations stated above. By doing so, we can restore kindergarten to its rightful purpose: nurturing curious, competent, and confident learners prepared for the challenges and opportunities of the future through play.

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Reimagining the Educational Ecosystem: Modeling Play, Choice, and Community Partnership for Holistic Development

Angie Nastovska, PhD, iLEAD California

Introduction

Education is frequently described as preparation for life rather than life itself. This framing has led many systems to prioritize efficiency, compliance, and standardization at the expense of curiosity, joy, and human connection. Yet decades of research in neuroscience, psychology, and education affirm that children learn best when they are actively engaged, emotionally safe, and intrinsically motivated.

Play is the primary way children make sense of the world. Through play, they experiment with ideas, negotiate social relationships, practice self-regulation, and build cognitive flexibility. Despite this, play has steadily disappeared from many educational environments, particularly in upper elementary, middle, and secondary education.

The iLEAD (i/I am a/an lifelong learner, empathetic citizen, authentic individual, design thinker) philosophy challenges this trajectory by reconceptualizing education as a dynamic ecosystem. Within this ecosystem, play is not a reward or an enrichment activity; it is the core method of learning. It weaves play into the fabric of school culture. By treating families as "educational partners" and the community as a "classroom," iLEAD has developed a model where play is the primary vehicle for growth across a diverse range of learning environments. Modeling these values from the administrative level down to the learner helps create a culture of authentic engagement. This White Paper outlines how iLEAD Schools and iLEAD California intentionally design systems that protect play while maintaining academic rigor and accountability.

Problem Statement – Issues

The traditional education system faces several serious challenges that limit how children grow, learn, and thrive. While schools are often focused on academic achievement, many systems unintentionally overlook how children naturally learn best. At the heart of this problem is the gradual removal of play from everyday learning experiences. Three major issues stand out.

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2.1 The Play–Learning Divide

In many schools, play and learning are treated as two separate things. Play is often seen as something children do during recess or free time, while "real learning" is expected to happen quietly at a desk. This sends the message that play is fun but unimportant, and learning is important but uncomfortable.

For children, this creates confusion and frustration. Play is how children naturally explore ideas, ask questions, and make sense of the world. When learning feels serious, stressful, or disconnected from curiosity, students are more likely to lose interest. School can start to feel like a list of tasks to finish instead of a place to discover and explore.

As children get older, play opportunities usually decrease even more. Worksheets, tests, and lectures often replace creativity, imagination, and hands-on learning. This can lead to boredom, anxiety, and a lack of motivation—especially for students who learn best by doing, building, or collaborating with others.

2.2 Limited School Options for Families

Another major issue is the lack of variety in school design. Many families are offered only one school model: a traditional campus where students sit in classrooms most of the day and follow a fixed schedule. While this works for some children, it does not work for all.

Children who are neurodivergent, experiencing trauma, parenting, working, traveling, or learning at a different pace often struggle in rigid school settings. Families with unique needs may feel they have no real choice but to stay in a system that does not fit their child.

When schools do not offer flexible options—such as independent study, home-based learning support, or specialized programs—children who learn differently are often labeled as struggling or disengaged. This lack of choice creates barriers to success and prevents many children from accessing joyful, meaningful learning experiences.

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2.3 Schools Operating in Isolation

The third challenge is that many schools function in isolation from their surrounding communities. Learning is often limited to the classroom, even though powerful learning opportunities exist in museums, parks, libraries, and community organizations.

When schools do not partner with community resources, children miss out on hands-on, real-world experiences that bring learning to life. They may struggle to see how what they learn in school connects to everyday life. This disconnect can make learning feel abstract and irrelevant.

Schools also miss opportunities to strengthen community relationships. When families, nonprofits, and schools work together, children benefit from stronger support systems and richer learning environments. Without these partnerships, schools carry the responsibility alone, and children lose access to meaningful, play-based experiences beyond the classroom.

Background

The iLEAD model was developed in direct response to these systemic challenges. It draws on research in brain development, trauma-informed education, motivation, and experiential learning to create environments where children can thrive academically and emotionally. At the heart of this model are three integrated pillars that form a clear, intentional "Method of Play" across all grade levels.

These pillars guide how we design learning, support students, and make decisions at both the classroom and campus level. Play is not treated as an extra activity or enrichment; instead, it serves as a shared foundation that shapes curriculum, relationships, and learning environments throughout the entire educational experience.

Individualized Learning acknowledges that children develop at different rates and through different pathways. iLEAD replaces uniform pacing guides with Individualized Learning Plans (ILPs), allowing learners to explore concepts deeply and master skills at their own pace, without the pressure of constant comparison to others. In addition, learners participate in Learner-Led Conferences (LLCs) and Learning

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Showcases—structures that place learners at the center of their education. Through these experiences, learners develop a voice in their learning, reflect on their growth, and take ownership of their progress by sharing their work and goals with families, educators, and peers.

Social-Emotional Learning (SEL) provides the emotional foundation necessary for play. Neuroscience research demonstrates that stress inhibits learning, while supportive relationships enhance neural integration and executive functioning (Siegel, 2020). SEL practices enable learners to take risks, collaborate, and recover from failure.

Project-Based Learning (PBL) serves as the academic expression of play. Through sustained inquiry and authentic problem-solving, learners engage in meaningful work that integrates academic standards with creativity and purpose. In this way, play becomes rigorous, relevant, and transferable.

iLEAD Core Values as a Living System for Play

At iLEAD, play is supported not only through programs and learning models, but through the values that guide how people work together every day. These core values (Solution-Oriented, Inclusive Collaboration, Commitment to Excellence, Servant Leadership, Integrity, Empathy) shape decisions, relationships, and daily operations. They serve as a lens for designing learning and a system that protects play across classrooms, schools, and the wider community.

iLEAD's mission—Free to Think. Inspired to Lead—reflects a belief that children and adults learn best in environments where they feel safe to ask questions, try new ideas, and grow. The vision is to develop lifelong learners, empathetic citizens, authentic individuals, and design thinkers. Staff live these ideas daily through how they interact, support learners, and address challenges.

Being solution-oriented means focusing on what can be done rather than who is at fault. When problems arise, learners and adults are encouraged to experiment, adjust, and try again. This mirrors the way children play—testing ideas, learning from mistakes, and moving forward with confidence.

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Inclusive collaboration ensures that everyone feels heard and valued. Play thrives when people work together respectfully, listen to different perspectives, and solve problems as a team. This value supports strong relationships between learners, educators, families, and community partners.

A commitment to excellence means striving to grow rather than striving for perfection. At iLEAD, play and high expectations exist together. Learners are encouraged to think deeply, reflect on their work, and improve over time, using play as a pathway to meaningful learning.

Servant leadership guides how adults lead within the organization. Leaders support others, model curiosity, and work alongside their teams. This creates trust and shows learners that leadership is about service, collaboration, and shared responsibility.

Integrity ensures that decisions align with iLEAD's mission and values in every setting. When values are consistent, learners and families can trust that play-based learning is not temporary or optional, but a core part of the educational experience.

Empathy is the foundation of a safe and supportive environment. By leading with care and understanding, iLEAD creates spaces where learners feel comfortable taking risks, expressing themselves, and learning from one another. This emotional safety is essential for play, growth, and connection.

Together, these core values function as a living system. They are practiced daily through human interactions and operations, ensuring that play remains central to learning, relationships, and community life.

Appropriate Approaches and Strategies

To ensure that play is accessible to all learners, iLEAD offers multiple educational pathways designed to meet the diverse needs of families and communities. These pathways include site-based campuses, online programs, homeschools, independent study options, and specialized trauma-informed programs. By offering multiple entry points into learning, iLEAD ensures play-based education isn't limited to one type of student or family structure, but remains flexible, inclusive, and responsive to real-life circumstances.

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One example of this flexibility is Empower Generations, a program designed specifically for pregnant, parenting, and traumatized teens. For these learners, traditional school environments often feel unsafe or unwelcoming. Empower Generations uses play as a healing and developmental tool, integrating Social-Emotional Learning (SEL) and Project-Based Learning (PBL) to help students rebuild confidence, agency, and purpose. Academic work is connected to real-life experiences, including parenting, health, and personal growth, allowing learners to see themselves as capable, successful individuals rather than defined by past challenges.

Sustaining play-based systems also requires intentional leadership. iLEAD California supports schools through professional learning, systems design, and collaborative projects that model creativity, reflection, and shared responsibility. When school leaders and support staff engage in playful problem-solving, design learning environments, reimagine spaces, or collaborate across departments, they show that play is not only appropriate for children but also essential for adult learning, innovation, and organizational health.

Community partnerships further extend iLEAD's educational ecosystem beyond school walls. A school should not function as an isolated institution, and the partnership between iLEAD and the LEAP (Learn, Experience, Act, Play) Children's Museum is central to this approach. iLEAD serves as a key sponsor and collaborator in LEAP's mission to establish a permanent, state-of-the-art children's museum in Santa Clarita, dedicated to hands-on, play-based learning for children and families across the region.

Through this partnership, iLEAD and LEAP co-create learning experiences that blend education, wellness, and community engagement. One example is the Healthy Heroes Pop-Up initiative, which hosts play-based STEAM wellness labs in public spaces. In these pop-ups, iLEAD volunteers act as curators, designing interactive exhibits and teaching community members about topics through play. These experiences allow staff and students to apply academic knowledge, practice communication skills, and engage meaningfully with audiences of all ages.

A recent Healthy Heroes collaboration illustrates the Method of Play in action. iLEAD learners designed a human-sized digestive system maze for a LEAP pop-up

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event. To complete the project, students applied biological concepts through hands-on construction (PBL), collaborated to solve design and logistical challenges (SEL), and explained their work to toddlers, parents, and community members (community engagement). Learning became active, joyful, and purposeful—rooted in play and connected to real-world impact.

In addition to museum partnerships, iLEAD is expanding access to future-focused opportunities through its College Connect dual enrollment program. This initiative allows high school learners to take college-level courses while still enrolled in high school, blending independence, choice, and real-world responsibility. By offering dual enrollment alongside play-based and project-based learning, iLEAD demonstrates that play and academic rigor are not opposites, but complementary elements of a strong educational ecosystem.

Together, these pathways and partnerships demonstrate how schools, families, higher education institutions, and community organizations can collaborate to protect the child's right to play while preparing learners for meaningful participation in the world beyond school.

Conclusion and Recommendations

The iLEAD model demonstrates that play is not a luxury but a necessity for healthy development and effective learning. When play is embedded into systems, leadership practices, and community partnerships, children thrive academically, socially, and emotionally.

Educational leaders are encouraged to model play at the systems level, expand flexible learning modalities, formalize community partnerships, and integrate Individualized Learning, SEL, and PBL as a unified framework.

By embracing these recommendations, educational systems can honor the child's right to play while preparing young people for resilient, connected, and purposeful lives.

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Strengthening Child, Teacher, and Parent Relationships Through Play

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Introduction

It takes a village to raise a child. This African proverb is deeply relatable, as evidenced by its widespread use (Goldberg, 2016). The persistence of this sentiment suggests that, throughout time, humanity has acknowledged that every adult in a child's life should work *together* to nurture, grow, and teach our children. In this spirit, The DoSeum uses the term caregiver rather than "parent" to acknowledge the variety of families in our "villages" today. Children benefit when caregivers and teachers cooperate. Further, caregivers and teachers benefit from external support provided by community partners in third spaces – spaces outside of home and occupation (school or work). Places like children's museums can serve as safe, public spaces for educators and families to interact without the pressures inherent to the strict formal roles of "student" or "teacher". Informal educators can facilitate authentic, joyful learning activities – rooted in play – to empower friendly interactions and enrich relationships between caregivers and teachers, benefiting their children. This is one of the essential values of museums – allowing students, teachers, and caregiver chaperones to enjoy field trips. But beyond the limited engagement of field trips, how can museums foster deeper, more impactful connections? The DoSeum's *Strengthening School & Family Relationships* (SSFR) program fosters community learning through play – inviting families, teachers, and school administrators to celebrate and support one another in a third space.

Background

A school community includes educators, students, caregivers, and partners who work together to improve the school and enhance students' learning opportunities (Epstein & Salinas, 2004). While teachers and administrators have long understood that functional relationships with caregivers are essential to children's education, it is all too easy for school faculty and caregivers to misalign their efforts and – at worst – end up in conflict, to the detriment of their children's learning. Unfortunately, we are all too

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familiar with the archetypes of "bad" students, caregivers, and teachers. And the pace of school life – especially the vast scope and rapid sequence of academics – makes it seem as though authentic, positive interactions between students, their families, and their teachers are unattainable. However, informal educators in third spaces can serve as liaisons between families and educators, fostering lifelong, joyful learning and building strong bonds between teachers and families.

School and caregiver partnerships have been successfully implemented in schools since the 20th century, but these efforts have been largely limited to people of privilege - predominantly White middle-class families (Auerbach, 2007). The standard models of caregiver engagement implemented by schools over the last thirty years do not include marginalized families. Research focused on marginalized families affirms that these caregivers – far from being "bad" caregivers – have the best intentions for their children yet may lack access points to participate fully as a partner in their child's education (Auerbach, 2007). Research into school and family relationships begins with Joyce Epstein (Center for Research on Elementary and Middle Schools, 1986). Epstein, as Director of the National Network of Partnership Schools (NNPS), with Karen Clark Salinas – senior research assistant at the Center on School, Family, and Community Partnerships at Johns Hopkins University and communications director of the NNPS – have provided a framework and case studies of effective school and community partnerships (Epstein & Salinas, 2004). Central to Epstein and Salinas's recommended approach are multiple access points of participation for six types of caregivers (Epstein & Salinas, 2004). Since the 1990s, Epstein's model of family and school partnerships has dominated research, policy, and practice (Epstein, 1997). Yet this model is limited.

Susan Auerbach – Professor Emeritus, California State University, Northridge – and her peers have demonstrated that school systems mirror the inequities of the dominant culture. People of color and low socioeconomic status (SES) have found it challenging to access effective partnerships with teachers. It is all too easy for educators to assume that people of color and/or low SES are uninvolved in their children's education when they are unresponsive to the typical channels of communication and do not participate in "legitimate acts" of caregiver involvement such as the PTA, field trip chaperones, or fundraising – acts which may be out of reach for families that struggle

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with financial means and whose time is necessarily occupied by their job (Auerbach, 2007).

How do families that struggle with finances, lacking access to resources, support their children's education? To answer this question, Auerbach and colleagues utilized three years of ethnographic data in a longitudinal study of students and their families conducted at a large, racially and socioeconomically mixed high school in the Los Angeles metropolitan area that was 46% Anglo, 34% Latino, 12% African American, and 8% Asian American. Researchers recruited students for this research through the Futures Project, a partnership with the University of California, Los Angeles, that combined a small college access program with a study of the educational trajectories of students of color. Researchers identified these students in a ninth-grade Achievement through Individual Determination (AVID) college-preparation class. Some families were intentionally selected to explore the construction of parenting roles in working-class people of color who lack a college education yet want college for their children. Some of these family samples include immigrant families whose unique experiences affect parenting roles. Caregivers selected for the study had a range of educational attainment, "from no formal schooling to one semester of university, with about half having less than a high school diploma and half having completed high school or some community college". Most of these caregivers were employed as skilled laborers, in sales, or in clerical jobs. English fluency, marital status, and their child's high school GPA all varied (Auerbach, 2007).

Through their research, Auerbach and her colleagues developed an "Alternative Typology of Parent Roles," which demonstrates the broader support that the struggling families of color in their study demonstrated – which contrasts with Epstein's standard model of school and family engagement (Auerbach, 2007). Auerbach and her research team's experience mirrors the experience of the teachers in *Strengthening Schools and Family Relationships* (SSFR). These educators anticipate that the unique caregiving roles among struggling families of color will vary from the traditional model of caregiver engagement. Teachers in the SSFR program readily recognize the caregiver roles outlined in Auerbach's "Alternate Typology" — in their own students' families and sometimes in their own.

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Auerbach and her team conclude that it is in the best interest of educators to strive for a better understanding of how their families support their students; this will equip them to promote collaborative partnerships – better engaging all caregivers with "respectful, culturally sensitive, home-school relations" (Auerbach, 2007). Educators in the SSFR program learn to apply this approach, using play as a means of connection. Play provides a universal frame of reference and an authentic way to inspire wonder and learning. In 2016, The DoSeum's Education team asked what could be done to address the fact that the standard model of caregiver engagement does not work for every school community, and what role The DoSeum could play in the solution; the resulting program was SSFR.

Appropriate Approaches/Strategies

The DoSeum's *School and Community Programs* team facilitates the SSFR program in collaboration with local public school educators in San Antonio, Texas. Play-based learning activities bring students, their caregivers, and their families together in the spirit of community and lifelong joyful learning. Teachers participate in *Professional Learning Community* (PLC) sessions focused on each school's unique needs.

The DoSeum's SSFR program launched during the 2016-2017 school year. The first schools selected to participate were established partners in The DoSeum's STEM Afterschool program. In partnership with Communities In Schools, The DoSeum outreach program targeted struggling schools. These schools' demographics mirror those in Auerbach's (2007) research.

Schools in the San Antonio Independent School District (ISD) included Douglass Academy and Washington Elementary. Douglass's community reported that 95% of residents were economically disadvantaged, with 99% at the Washington campus. Douglass's student population was predominantly Hispanic/Latinx (88%) with smaller populations of White (4%), Black (7%), and mixed race (1%) students. Students with Limited English Proficiency made up 17% of Douglass's and 19% of Washington's students. Washington's student population was also predominantly Hispanic/Latinx (81%), with a larger Black population (17%) and smaller populations of White students (1.7%) and mixed-race students (0.3%). Walzem Elementary is a school in the North

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East ISD with similar student demographics: 91% economically disadvantaged and 55% having Limited English Proficiency – and 81.9% Hispanic/Latinx, 9.5% Black, 3% Asian, 2.5% White, 2.3% mixed race, 0.5% Native American, and 0.3% Pacific Islander. In the next phase of growth, HB Gonzalez Elementary in Edgewood ISD joined the program. Edgewood's demographics mirrored the first schools in SSFR with 85% economically disadvantaged and 31% Limited English Proficiency – and 95.1% Hispanic/Latinx, 2.8% Black, 1.3% White, 0.5% Asian, and 0.3% mixed race.

Teachers in the SSFR program participate in three ninety-minute PLC sessions facilitated by DoSeum educators. During these sessions, educators reflect on and discuss their current approach to family engagement, study articles about school and family engagement – including Epstein and Auerbach's research- and envision ideal interactions with their students' families. Teachers plan and set goals in advance of each of the two family nights, which alternate with the PLC sessions. Teachers respond to surveys to confirm goals, assess themselves and their school, and affirm their commitment to caregiver engagement. The surveys provide data for The DoSeum to improve.

During family night visits to The DoSeum, participants engage in playful learning activities. Activities range from open-ended engineering design challenges with models that enable role-playing, playful testing, or gamified competition. SSFR activities provide innovative, joyful learning experiences in The DoSeum, while modeling what can be done outside The DoSeum – back at the school campus, at home, or in other third spaces.

Early SSFR activities have included designing "robotic" arms made from upcycled materials or parachutes that could be tested from a second-floor launch area. An activity based on The DoSeum's Spy Academy exhibit has families use the Engineering Design Process to build a spy hideout – complete with secret passages and traps. In another role-play-based activity, students take on the role of one of the three little pigs and design shelters that can withstand "The Big Bad Wolf," simulated by an air cannon. In another activity, students take inspiration from the children's book *Rosie Revere, Engineer* by Andrea Beaty (2013) and build the creative skill of upscaling what others

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might consider rubbish into tools and materials for engineering design. In a city-building activity, families play a gamified version of a city council. In all of these activities, teachers and caregivers are invited to play with and support learners in their thinking processes. Adults foster growth mindsets, critical thinking, and collaborative behavior. They model how to approach new challenges as they play and learn together.

The SSFR program aims to engage more than half of the students' families in each teacher's class. To remove the potential financial barriers to this engagement–with support from generous funders–The DoSeum offers this program at no cost to our school partners. The DoSeum also reimburses schools for bus costs to transport families to The DoSeum. Dinner is provided, and DoSeum staff provide childcare for younger siblings who attend the event.

The program aims to instill a culture of joyful, lifelong learning within families and strengthen connections within the school community. Teachers, caregivers, and students participating in the program collaborate to develop campus-based programs with the support of The DoSeum and other community partners. These "Campus Cooperative Initiatives" have included using SSFR family nights to restart a defunct PTO, hosting a family read-along night, and scaling school-based STEM activities to a superplayful scale by inviting the San Antonio Fire Department to bring their big ladder from which to drop eggs in student-designed contraptions – making a joyful spectacle out of a traditional STEM activity.

Program Adaptations

The DoSeum is intentionally responsive and ever-evolving. During the COVID pandemic, The DoSeum adapted the SSFR program. Hybrid events were coordinated – with some families joining online from home and some attending masked, socially distanced events at The DoSeum. Two new community partners emerged during this time – A&M-San Antonio's ASPIRE Program, which develops partnerships with the university and surrounding school districts, and Opportunity Home. ASPIRE supported recruiting new schools from the East Central and Harlandale ISDs.

In 2022, the San Antonio Housing Authority renamed and reset its organizational mission, becoming Opportunity Home. Opportunity Home reached out

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to The DoSeum seeking services. The SSFR program provided a model that met Opportunity Home's needs, allowing a pilot partnership. After two successful years with Opportunity Home, challenges became evident in adapting the school-based model to a large-scale nonprofit serving more than 62,500 children, adults, and seniors and employing over 600 staff. The program was valued for building relationships with families. This sparked new, creative ideas for a customized, nonprofit version. To guide this shift, we scheduled a debrief and planning meeting with key stakeholders. This dialogue helped determine how to customize the Opportunity Home partnership. We learned that the PLCs needed to be reframed for nonprofit administration, as play-based learning was not always viewed as a "professional" training. At the same time, the Opportunity Home staff affirmed that play was meaningful, especially for adults who may not have had opportunities to play as children. These experiences reminded families to play together and offered parents time to connect with their children. Opportunity Home staff were inspired to use the family connections at SSFR family night events to promote literacy by providing book giveaways to support learning at home. Although Opportunity Home is no longer in SSFR, the family night experiences showed what is possible in our ongoing partnership.

Meanwhile, the school-based SSFR program continues to thrive. Because the program is intended as a multi-year partnership, we added additional resources to the PLC. In later years of the program, teachers step away from the school perspective and examine parenting styles through the lens of human development (Awiszuz, 2022). Our PLC sessions focus on how parenting styles affect child development. Teachers are invited to make personal connections with caregivers before addressing academics to support the whole child better. Educators' discussions in the PLCs allowed them to adjust parent/teacher interactions during family nights preemptively – brainstorming the best ways to engage with each type. Educators in SSFR have noted that our family night events have been their first positive interactions with specific parents, and they felt better equipped to have those interactions because of the PLCs.

To provide holistic support to the educators in this program, we have incorporated consultation with mental health experts into our PLCs. Keeping DoSeum's mission of joyful learning close at heart, we have co-created sessions with a local

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adventure therapist focused on teacher rejuvenation through play. The activities give educators time to reflect on why they entered education, connect meaningfully to those reasons, and use play to create objects that anchor them to those reasons. Teachers are provided with various media- Legos, clay, shrink plastic- to create a physical object that anchors them to their passion for teaching. Sessions begin with a physical movement piece that improves focus and centers on celebrating classroom wins. These activities often use balls, hula hoops, and ropes to incorporate play.

Data from the surveys conducted from 2017 to 2020 affirm the value of SSFR. An average of 20 educators participated in the PLC sessions annually – earning continuing professional education credit required to maintain teacher certification in Texas. Six to seven hundred students and their families participated in the family nights annually, with an average of 160-170 children and 160-170 caregivers each semester.

Post-program teacher surveys found:

- 90% of teachers were more confident in their ability to engage with caregivers because of SSFR,
- 78% committed to changing how they work with families because of the program,
- 89% talked with caregivers outside The DoSeum about interactions during the SSFR family nights, and
- 100% would recommend the SSFR program to other educators.

The post-program caregiver surveys reported:

- 95% of caregivers had at least one pleasant interaction with their child's teacher at an SSFR event,
- 90% reported they decided to do more educational activities with their child outside of school because of the program, and
- 100% stated they and their children learned something new during their visit(s) to The DoSeum.

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Conclusion/ Recommendations

With the average American spending less than five percent of their life in the classroom (Falk & Dierking, 2010), museums and other third spaces can and should embrace both their opportunity and responsibility for strengthening young learners' education. While many museums offer a standard program portfolio of daily workshops or demonstrations, one-and-done field trips, and camps, for example, The DoSeum's commitment to its community has expanded and evolved to think beyond the standard. SSFR is one program that resulted from this approach, and it has demonstrated that embedded partnerships yield the most impactful and most rewarding results.

While many teacher professional development programs within the museum industry emphasize one-day sessions, which can yield a high number of participants, The DoSeum's approach is one of quality over quantity, presenting deeper and more meaningful experiences for teachers that, in many cases, lead to actual change in the classroom via a true partnership between museum staff and our partner schools.

Though the SSFR program has been continually adapted, one element remains consistent: play. Play is essential to the DoSeum experience and has provided a stable foundation for SSFR's goals. Keeping play at the center of SSFR family nights connects families and their educators, transforming their communities into centers of joyful learning.

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Ready for Me: A DEY Campaign to Change the Narrative About Going to Kindergarten

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Introduction

In 2023, Defending the Early Years (DEY) launched regional Working Groups (WGs) to support early childhood advocates in working together to address issues related to our national campaign and to restore the link between high-quality and child development (Defending the Early Years, n.d.). We began with six regional groups, each with two co-facilitators, and 6-25 members recruited from our networks. Potential working group co-facilitators completed an online application and participated in a virtual informational interview. Once we determined they met the criteria to lead a working group successfully (experience leading adults, understanding of local issues, etc.), they signed an agreement and began recruiting members.

Our Kentucky Working Group (KWG), co-facilitated by co-authors Michele and Hans, held regular meetings with an active group of 12-16 members. At one of our quarterly co-facilitator meetings, they shared their art campaign, Ready for Me, which engaged children, teachers, and parents in sharing what schools needed to be ready for children. Using funds from a DEY mini grant, they hosted sessions throughout the community and helped participants create art in response to prompts about schools being ready for children. In 2025, we presented their work at the Network for Public Education conference in Columbus, Ohio, and, at the request of another WG co-facilitator, we agreed to make Ready for Me a national campaign for DEY.

The Problem

Reframing Readiness

DEY has addressed school readiness in several reports and blog posts (Farran, 2025; Feeny, 2016; Katz, 2015). The focus on school readiness has changed

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kindergarten from play-led environments that support whole-child development to spaces where academics, standardized assessments, and teacher-directed instruction dominate most of the school day (Farran, 2025; Miller & Almon, 2009). Furthermore, this change has led to a demand that publicly funded preschools focus on school readiness (Brown, 2018), thereby placing more developmentally harmful experiences on younger children.

Although school readiness became a policy goal and states tied funding for early childhood education to proving that children were being prepared for school, a clear understanding of what school readiness meant and the best way to achieve it remained absent. Brown (2018) identified four framings of school readiness situated within education reform discourses: "*the nativist, empiricist, social constructions, and interactionist perspectives*" (p. 288). He notes that "how stakeholders frame this construct informs the ways in which they understand the process by which children are ready for school, the problem of school readiness itself, and the means through which government should address the issue" (p. 288).

The *nativist perspective* understands readiness as something that develops within the child with no input from family, teachers, or schools, while the *empiricist framing* takes the opposite approach and views readiness as something outside of the child; the focus is on what the family, teachers, and schools do to make children ready for school. Brown (2018) notes that this perspective dominates early childhood education in the US.

The *social constructions* and *interactionist* perspectives take a hybrid approach to understanding school readiness. *The social constructionist approach* acknowledges that school readiness is dependent on a variety of social factors, meaning that in one context a child can be ready while in another they would not be. The *interactionist framing* recognizes that both the child and the school contribute to school readiness, valuing the interaction between what the child brings and what teachers do at school. *The interactionist framing* shifts the notion that children must be ready for school to the idea that schools must be ready for the children.

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Ready for Me takes an *interactionist approach* to school readiness. Traditional approaches that begin with a presumed deficit in the child and their family and demand that early childhood teachers be held accountable for addressing these supposed deficits have led to what Miller and Almond (2009) deemed a crisis in kindergarten. Thus, we believe we must reframe the narrative of school readiness if we are to restore the link between what we know about child development and what we understand to be high-quality early childhood experiences. This reframing must begin by dismantling deficit thinking rooted in traditional school-readiness approaches and by reconceptualizing what school readiness means and how best to achieve it.

Ready for Me rejects the premise that young children are deficient before they enter kindergarten. Children are born curious and eager to construct knowledge through hands-on, engaging experiences. Environmental and biological challenges can impact a child's ability to pursue their curiosity and to construct knowledge, but that does not make them inherently deficient. A child who does not know their letters, or numbers, or how to spell or write their name, but can recognize when their emotions change, or demonstrate respect for elders, or take initiative in solving problems, is not deficient.

Academic knowledge should not be the only basis for defining school readiness. Katz (2015) argued that we should assume intellectual skills and dispositions, those that relate to skills of the mind, such as analyzing, questioning, predicting, and reasoning, are inherent in all children. Furthermore, in the early years, a developmentally focused curriculum would encourage and motivate children to develop academic skills through intellectual pursuits, rather than prioritizing academic instruction at the expense of intellectual development.

Once we reject the implicit deficit view of children, we can realize that school readiness is the development of intellectual skills and dispositions that support the use of academic skills in environments that foster hands-on, child-led, engaging experiences. This reframing of school readiness removes the need for teacher-directed instruction and standardized assessments that only serve an academically focused approach to school. Instead, teachers need to get to know the children, understand the knowledge, skills, and dispositions they bring to the classroom, and create experiences

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that allow children to engage in intellectual activities that naturally encourage the development of academic skills. This intellectual approach to school readiness requires that we shift our thinking from how we make children ready for school to how we get ready for the children who will come to our school. Ready for Me is our attempt to bring about this much-needed reframing.

Background

Ready for Me and the Kentucky Work Group (KY WG)

As cohort co-facilitators, Hans and Michele began the work in Louisville, KY, as the city launched its first initiative to create a mixed-model universal pre-K for all 3- and 4-year-olds. Hans, along with 20 others in early childhood-adjacent high-level administrative roles (15 women, 6 men, predominantly white, some with early care and education experience, and 1 parent with children aged 0 to 5), served on an advisory group that met biweekly from June to November 2023 to craft an implementation plan. Guided by a retired business leader, the Director of the Mayor's Office of Early Childhood Development, the Director of the Mayor's Office of Philanthropy, and a Project Manager from the Office of Philanthropy. As this process evolved, Hans continued to share information about Thrive by Five's (TB5) work with the KY WG. At the group's regular meetings from July 2024 through February 2025, and through weekly email correspondence, members offered feedback, asked questions, and shared information within their professional worlds.

Working group members included the Director of Early Childhood Education at the area's only Historically Black College and University (HBCU); an early childhood teacher who served with Michele as our representative of the Consent Decree Coalition related to the murder of Breonna Taylor; the director of the West Louisville Math and Science Center, a community based organization serving the "West End", a Black community within a segregated city; and the Birth-to-12th-Grade School Impact Coordinator for a statewide refugee support community organization.

Other members were directors of various early childhood spaces, including Skillz 4 Life, the city's only trauma-informed childcare center; Auburndale Head Start, a Spanish-speaking-only facility; a private preschool program; a YMCA childcare center;

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and the YMCA after-school enrichment program, the largest in the city serving all Jefferson County Public Schools.

The most active member, Kim Pirog, the founder and director of Side by Side Studios in Louisville, enthusiastically participated and became a full partner in the Ready for Me art campaign as it evolved. While Side by Side Studios has a home base near downtown Louisville, it primarily serves the broader community by providing expressive art opportunities in parks, childcare settings, and community centers in areas considered "expressive arts deserts" within a highly segregated city. Many other members who could not attend meetings participated via email, sharing their thoughts and ideas throughout the process. Since the original mayor's office advisory group concluded its work and made its recommendations for the plan announced in March 2024, several concerns remained central to the KY WG:

- The advisory group was composed primarily of white members, with one or two exceptions, and those in the most influential roles were white.
- Participants did not take action to address the lack of diversity.
- Corporate leadership was particularly dominant, with a strong presence of white men.
- Representation from across the city was lacking.
- The panel lacked representation from the range of agencies working with early childhood facilities.
- The panel lacked inclusion of people working in early childhood education.
- Participants lacked understanding of the day-to-day lives of children in the early childhood community.

In particular, there was a lack of understanding of the current circumstances of children in early childhood settings, including but not limited to:

- Identity development in early childhood
- The role of play in early childhood
- Neuro, sensory, and motor development in early childhood
- The impact of poverty in early childhood

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- Multilingualism as an asset in early childhood
- The persistence of deficit-based descriptions of early childhood

Despite ongoing questions and repeated concerns raised by the KY WG, none of these issues were addressed, and no meaningful changes were made.

Because of continued concerns about the impacts of these dynamics on the early stages of the "universal pre-k" expansion, the KY WG met in November 2024 with the two women leading this work before hiring an Executive Director. During this meeting, the group shared ways they could support one another and address their concerns. As the KY WG had access to many of the individuals and perspectives excluded from the process, the group felt it was essential to facilitate access to those voices to increase their chances of being heard.

As a result, 4 KY WG members were invited to serve on work groups formed by the Board Chair. However, group members reported disappointing experiences within these work groups. In one case, a member, a former program director and NAEYC administrator, was told she was wrong when she shared factual information with the committee about early childhood education and teachers. None of the other work group members had professional experience or expertise in early childhood. At this point, as committees were being formed, decisions about the direction of the approved $5 million budget from the Louisville Metro Council were already underway.

Strategies

Early in 2025, the KY WG identified two areas they believed they could effectively address as initial steps toward the vision for early childhood in Louisville. The first was the question of "kindergarten readiness," which had come to drive every budget decision, policy discussion, and political move. The second was identifying the best strategy for addressing this issue from the perspectives of children, families, and teachers. The second strategy focused on ensuring that the voices and experiences of children, families, and teachers were acknowledged. As Kim Pirog said, "You have to make it so big that it cannot be ignored."

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After much deliberation and reflection, it became clear to the group that they wanted to change the narrative around going to kindergarten. As Michele and Hans continued to formulate this idea, Michele began writing about it. Drawing from those writings and from the children she saw during her daily classroom visits, the words "not me ready for kindergarten… kindergarten, be ready for me" emerged. Thus, "Ready for Me," as group members repeated it again and again, offered clarity and direction for the work.

Michele and Hans, as well as members of the KY WG, had previously worked with the artist Lily Yeh in Louisville. Her considered and measured approach to using visual arts as a vehicle for social change was a natural fit for this effort. Gathering art was a practice that many members, particularly those at Side by Side Studios, were already doing. The group adjusted the lens by asking the artists to visualize what kindergarten would look like if it were truly ready for the children of this community. What would it need? What would be on the walls, in our hands, and in our arms? How many pathways would lead to the outdoors, and how many wild spaces would there be? What kind of food would we find there? Would we grow it? Who would be there, and what would they know about me? What would I want them to know about me? What would my adults want them to cherish and see in me? What would my community agree to if kindergarten were ready for me? Would it insist on a new way of viewing community helpers? A new way of holding them accountable for shared safety? As mentioned earlier, would it mean setting aside your beliefs about who I am and what I lack, and letting what I have to offer and how I shine step forward? What would it all mean?

The next step was to gather adults together and ask them, using art materials, to lay down their dreams in response to our questions (see Figure 1). When KY WG exhibited the artwork in spaces such as the Muhammad Ali Center, paper taped to tables invited the community to respond with their own experiences.

Side by Side Studios entered juvenile (in)justice facilities to ask teenagers and young adults to use the art materials and answer the same questions. The KY WG then set up displays of the teenagers' and young adults' artwork at high schools across the city. Across settings, the paper-covered tables revealed deep knowing and a longing to connect.

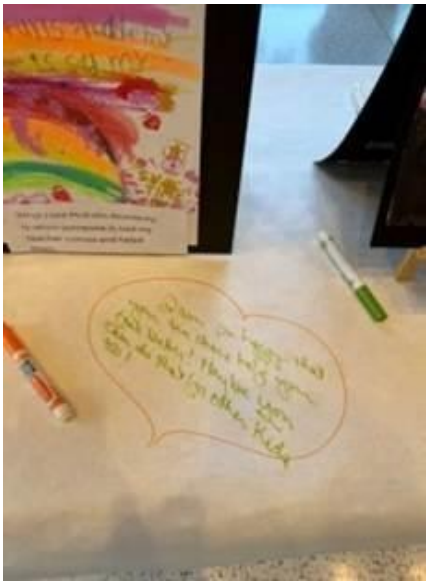
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Figure 1: Ready for Me flyer created by DEY Kentucky Area Working Group

A common thread emerged: the realization that no one had ever been asked, "What does school need to know to be ready for me?" Joy and disappointment recurred in the art (see Figures 2 and 3).





Figures 2 and 3: Muhammad Ali Center Council of Students at the Muhammad Ali Center in Louisville, KY. Photo credit: Side by Side Studio

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Thus, as we arrive at this moment, we must now ask: who needs to see this and who needs to hear this? The governor of KY has announced a universal pre-K launch as part of his presidential campaign. He and the mayor of Louisville have appeared together, expressing their shared support for early childhood. At the same time, citing statistics focused on deficits and fears, without acknowledging the breadth of humanity in each child.

The KY WG group will continue gathering art to exhibit during the 2026 Week of the Young Child and will invite both the governor and the mayor to the event. The group has outlined specific asks and plans to make it public at that time as we join our colleagues and friends in the National Ready for Me campaign.

Our asks:

- Can we invite you to an ongoing conversation about your efforts to bring early childhood programming into existing and new spaces?
- Please consider refraining from using only statistics on deficits in families and children when promoting your early childhood agenda.
- Please consider leading with this as your primary message: Children are born ready to be themselves.
- We will focus on supporting each adult in every classroom the children find themselves in to create a space where children indeed find *themselves*.
- We will make our early childhood spaces ready for children in the ways they tell us are necessary.
- We will allow children their universal human right to play.
- We understand this will build the communities our children deserve and, as they grow up, will belong to them in increasingly influential ways.
- We will be who we want them to become.

Conclusion

Taking Ready for Me National

The KY WG, Ready for Me, recognizes the essential role that children's and early childhood professionals' voices must play in identifying what schools need to be

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genuinely ready for incoming kindergarteners. Art as advocacy offers one effective way to bring those voices into the public sphere. Lily Yeh's work in art activism demonstrates how creative expression, particularly when created by those who are often unheard, can elevate lived experiences and shift public narratives in meaningful ways.

As the KY WG developed the Ready for Me model, other DEY Regional Working Groups stalled for various reasons. During this period, one co-facilitator expressed interest in adapting and implementing the KY WG's Ready for Me model within their own region. From this conversation, the idea of a National DEY Ready for Me Advocacy Campaign emerged.

The potential of this project to empower young children, early childhood educators, and advocates across the country —while also bringing their voices to the forefront of the kindergarten readiness conversation —is significant and compelling; this potential alone warrants action.

In collaboration with the remaining co-facilitators, DEY had hoped to launch a national campaign. It began to develop accessible, adaptable resources that early childhood educators and advocates could use across diverse contexts. Because DEY closed on June 30, 2026, Michele from the KY WG reached out to the International Play Association USA affiliate to discuss transferring the Ready for Me initiative. In early June 2026, the Governing Board of IPA USA adopted Ready for Me. All participating cohorts from the DEY original "Ready for Me" campaign will now join this effort. We can build on our work from DEY and the considerable local and international reach of IPA USA, a not-for-profit organization.

The goal remains to create a comprehensive toolkit that includes informational materials, implementation guidelines, and advocacy support, in a format that is clear, inclusive, and usable, with additional guidance and support as needed. By doing so, Ready for Me aims to support locally grounded advocacy efforts while advancing a shared national narrative: schools must be ready for children, not the other way around. Ready for Me was born, nurtured, and experienced its own period of early childhood in the loving embrace of Defending the Early Years. We are ready to join the world of

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liberation and play now outside that safe, warm place, and we hope to honor it through our continued thread, the not-so-invisible one that joins us all.

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Play as a Biological Necessity: The Importance of Attractive and Playable Outdoor Play Spaces for the Healthy Development of All Children

Suzanne Quinn, PhD, KOMPAN Play Institute

Introduction

Play, as an activity, is important across the lifespan, but especially for children and youth. Play is a biological necessity, a byproduct of enabling conditions, and should be present in healthy, unstressed children and adults (Burghardt, 2010b).

In the U.S. and many places worldwide, dedicated outdoor play spaces for children (playgrounds, play parks, playscapes) provide the conditions and environments in which children can play. These playgrounds, play parks, or playscapes support physical fitness, social connection and development, cognitive and creative enrichment, and experiences in nature. In this article, I will explain why active outdoor play matters, especially for children, and share recommendations from the Physical Activity Alliance, the American Academy of Pediatrics, and others. I will also present research on the importance of active outdoor play; what attracts children to dedicated outdoor play spaces; the importance of considering children of all abilities; how this information supports advocacy for dedicated outdoor play spaces in communities; and how to design these spaces effectively.

Problem Statement

Why Active Outdoor Play is Important

A robust body of research supports active outdoor play as a primary activity for child development (American Academy of Pediatrics, 2021; Lee et al., 2025). The 2025 position statement on active outdoor play (Lee et al., 2025) draws on strong evidence that children are more active outdoors and that active outdoor play benefits children across physical, social, cognitive, and spiritual domains. They also cite findings indicating that the health benefits of physical activity in nature are greater than those of exposure to nature or physical activity alone (Christiana et al., 2021).

Promoting active outdoor play for children is urgent. Only 20-28% of children aged 6-17 meet the physical activity recommendations in the U.S. (HHS, 2018; Physical

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Activity Alliance, 2024). For children over the age of 5, the guidelines recommend at least 1 hour of moderate-to-vigorous physical activity per day, including aerobic and muscle-strengthening activities (Centers for Disease Control, accessed February 2, 2026). In addition, the rising prevalence of child and youth mental health concerns (American Academy of Pediatrics, American Academy of Child and Adolescent Psychiatry and Children's Hospital Association, 2021; Shim et al, 2022) calls our attention to the benefits that could be gained by having opportunities for active outdoor free play in dedicated and naturalized play environments.

To gain benefits from dedicated outdoor play spaces, ensure they are attractive and nourishing for people with a broad range of abilities, and pay close attention to design features that support children and families who may face barriers due to physical or cognitive differences. These design features ensure that the outdoor space supports both physical diversity and neurodiversity.

Background

Outdoor play spaces designed to attract children and their families and inspire a range of movements have become an important resource for supporting children's health and wellbeing.

National playground studies in the U. S. have found that innovative outdoor playgrounds attracted 2.5 times more users, generated almost 3 times as much moderate to vigorous physical activity, and had 31% more users per square foot than standard or traditional playgrounds (Cohen et al., 2020; 2023a; 2023b; Talarowski et al., 2019; Young et al., 2023). Innovative playgrounds were defined as having at least three of the following: a variety of surface types, naturalized and planted areas designed for play, open-ended structures that do not dictate play sequence, and moveable equipment.

In a study examining children's perspectives on the attractiveness of playgrounds, Jansson (2010) found that children were drawn to unique, thrilling equipment not available elsewhere in their communities. In an observational study of children's use of public playgrounds, Refshauge et al. (2013) found that the most-used playgrounds had the greatest variety of play activities, including opportunities for both

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active and sedentary play. Similarly, Reimers and Knapp (2017) found that playgrounds with a greater variety of play activities and thrill attracted the most users and supported more active play.

Research on the benefits of inclusive playgrounds for people with differing abilities found that opportunities for exciting, social play experiences are important for all children (Brown et al., 2021; Wenger et al., 2021). It is also important to encourage children of differing abilities to play together, rather than segregating them with specialized equipment that does not appeal to all. In a study of users' perspectives on playgrounds, Lynch et al. (2020) found that variety, thrill, challenge, and usability are important for children of all abilities. A subsequent scoping review by Morgenthaler et al. (2023) also supports these findings, highlighting the importance of the social dimensions of play, especially when children with differing abilities play together.

Appropriate Approaches/Strategies

When considering approaches and strategies for designing dedicated outdoor play spaces, it is important to begin with an understanding of play as a specific behavior with defining characteristics (Burghardt, 2010b). This will have implications for how dedicated play spaces are designed and programmed.

First characteristic of play: Play is always voluntary. The person playing must be able to choose to play and what to play.

Second characteristic of play: it is an activity that is done for its own sake – children, and people of all ages and all abilities, play to have fun (Gray, 2013).

Play can offer benefits, such as exercise and skill-building from active outdoor play, but it is done simply because it is fun. This distinguishes 'free play' from organized sports activities led by adults, rather than free play led by children's interests and motivation. Two other characteristics of free play that distinguish it from organized sports are:

Third characteristic of play: Body movement is modified relative to the activity's ordinary function in everyday contexts, and it involves repeating an action while allowing variation in those repetitions. One example, often seen exclusively in

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dedicated outdoor play spaces, is climbing. Climbing is a functional activity. Climbing is a form of mobility, and it can serve a survival function. Climbing stairs to move between levels is useful for most people. Climbing a tree, mast, or ladder is another example that may not be relevant or achievable for everyone, but is relevant to many people, and, arguably, all of us depend on others' ability to do these things for our collective survival. Climbing may take the form of moving across a surface by aid of an assistive device. This could be a challenge, especially for persons who have barriers due to the limits of their bodies in terms of strength, muscle control, and fatigue, but this can be designed for on a playground with attention to opportunities in landforms, resting places, and flexible membranes strategically placed to support a range of abilities.

When children or adults play at climbing, they modify the climbing and provide opportunities to vary it. For example, climbing a net or rope structure on a playground offers variations that let children choose different pathways and movements; a hillside to climb with ropes to hold onto is another example of climbing play.

Fourth characteristic of Play: Intentional design to provide access to a spectrum of challenge levels in climbing and mobility is essential for people of all abilities. Universal Design Principles support this (KOMPAN Play Institute, 2024).

While Universal Design Principles can apply to any built environment or object, specific principles relate to outdoor playground equipment and dedicated play spaces (Moore et al., 2023). The main points encompassed by Universal Design Principles related to outdoor playgrounds are accessibility, multifunctionality, variety of play and social experiences (including social, solitary, and parallel play), usability (through ease of use, a broad spectrum of effort, and play signals), transparency (clear sight lines), and thrill. Moore et al. (2020) explain that Universal Design Principles for playgrounds have the greatest potential to support public playground design because they align with equity, inclusion, and children's rights.

Universal Design Principles also provide strategies for designing for people who are blind or have low vision (BLV). One aligned strategy is to use high-contrast colors on movable play activities and the playground surface to indicate play zones. Universal Design Principles can also support neuro-inclusion in outdoor play spaces. Children

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with ADHD, Autism, and sensory processing conditions may require additional support for sensory and social needs. Research has found that to support neuro-inclusion, it is important to offer both peer play and solitary play opportunities on outdoor playgrounds. Opportunities for solitary or parallel play (when children play side by side without direct interaction) help children to play on their own terms, or if they want or need to regulate the stimulation that often occurs on playgrounds (Brown et al., 2021; James et al., 2022; Pawlikowska-Piechotka, 2011; Prellwitz & Skär, 2007). Areas for children to take a break on the playground (such as naturalized areas or relaxed yet playful seating) will also help them stay in the play space while regulating their senses and emotions.

An emerging area of research examines how freestanding, ground-level play panels with dynamic play activities can support children with diverse cognitive styles (including those with Autism, ADHD, and sensory processing disorders), as well as children with limited mobility (including those who use wheelchairs or assistive devices). This is because they are easy to use, can support group, individual, and parallel play, and are designed to let children play in areas of the playground with reduced sensory stimulation. It is important, however, to design and select these freestanding play panels so that they are for play – meaning they are fun, social, stimulating, and supportive of movement (KOMPAN, 2025).

Conclusion/ Recommendations

Active outdoor play has benefits for children in all areas of their development – physical, social, cognitive, creative, and in their connection to local ecologies. Children need nourishing experiences that are accessible to them and their families. Communities benefit from dedicated play spaces for people's health and well-being.

Research indicates that to be effective and attract people to stay and play, these spaces should be innovative, featuring enjoyable, unique equipment and natural elements. Apply Universal Design Principles to the design of dedicated outdoor play spaces so people of all abilities can enjoy the health and social benefits.

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Unstructured Outdoor Play is Essential for Sport Readiness

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Introduction

Children do not necessarily know what their brains and bodies need; they depend on their parents, teachers, and other influential adults to provide developmentally focused movement opportunities. Unstructured outdoor play is fundamental for healthy brain and body development in childhood. Sadly, adults sabotage children by bypassing the developmental process and replacing unstructured outdoor play with sports.

Overall, adults want children to be healthy and happy, but the opposite trend is growing among children. If we pause to reflect on why this generation is the most unhealthy and unhappy of all, it is due to the removal of play from children's lives and the adult push for children to participate in sports and competition before they are developmentally, physically, and emotionally ready (Forrest et al., 2025).

Unstructured outdoor play lays the foundation for a child to be sport-ready. Sport readiness is the child's overall state (physical, mental, emotional, social) to meet the demands of a sport (Purcell, 2005). Therefore, parents need to understand that sport readiness develops naturally through daily outdoor play, which provides valuable opportunities for long-term motor skill development (Aicinena, 1992; Kochanek et al., 2019).

Consider the following two scenarios of park spaces a child might have access to. Which of these scenarios would lay the foundation for healthy development, and which one would fall short?

Scenario One: A parent working on soccer drills with their two sons (ages 7 and 10). The parent sets up cones, an agility ladder, and a soccer goal as a circuit. The sons would do the explained circuit drills– with eyes down and seemingly uninspired – receive a few minutes of feedback from the parent before trudging back to the start of the circuit to run robotically through the exact same sequence again.

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Scenario Two: Parents sitting on a blanket while their kids (10 and under chase birds, climb a tree, swing, or dig for fossils. They use physical skills such as running, dodging, stopping, starting, skipping, accelerating, and strategizing, as well as laughing, throughout their play.

Scenarios One and Two can be seen throughout the United States. The first scenario is adult-directed, repetitive, and boring. This is NOT the secret formula for children's health, fitness, and sports readiness. The second scenario illustrates the joy, excitement, laughter, physical challenges, and strength-building that occur when children lead their play.

Problem Statement

For children to develop physically, emotionally, cognitively, and socially, unstructured outdoor play is essential to healthy development. Children's bodies demand the opportunity to be physically active every day. Adults, not children, have led the trend we have seen over the past fifty years. This has created a developmental model that is counterproductive to a child's health and may, ultimately, destroy their enthusiasm for life. This cultivated developmental model assumes that sports can replace unstructured outdoor play and produce similar holistic developmental outcomes.

In reality, substituting structured sports for free play can hinder development in significant ways, as unstructured, self-directed outdoor play is crucial for developing balanced limbs (Webb & Rhea, 2023a), motor skills (Campbell-Pierre & Rhea, 2023; Sutapa et al., 2021), brain neuroplasticity (Cebolla & Cheron, 2019; Pedersen, 2019), social negotiation (Rhea, 2021), and emotion regulation (Rhea et al., 2025). While sports can provide physical activity, they often lack the imagination, intrinsic motivation, and autonomy found in unstructured outdoor play (Gray, 2017).

Adults assume that if children participate in sports early enough and maybe even specialize in one sport, they will develop more quickly and become better athletes than those who do not participate in sports early in life. Specialization at an early age has been shown to increase muscle imbalances and injury rates, and to decrease physical performance over time (Puzzitiello et al., 2021; Rugg et al., 2021; Stricker et al., 2020).

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Participating in a sport at an early age does not produce sport readiness; unstructured outdoor play does. To improve a child's overall health and fitness so they can lead a healthy life and succeed in sport, we must consider how to appropriately develop sport readiness in children.

Background

Sport readiness means a child has established baseline health and will navigate childhood and, eventually, adulthood with confidence, functioning at the advanced levels of movement, mobility, and explosiveness needed for sports. These positive elements increase the likelihood of lifelong physical activity while reducing injury risk (Basso et al., 2021; Rosengren et al., 2021a; Rosengren et al., 2021b).

Unstructured outdoor play gives children a perfect space to be physically active, coordinate limb movements, and vary limb movement directions through fundamental skills such as walking, running, jumping, dodging, cutting, crawling, and climbing (Campbell-Pierre & Rhea, 2023; Dankiw et al., 2020; Webb & Rhea, 2023a). School and home are the perfect places to provide outdoor play opportunities. Sadly, these opportunities are missing in both places.

Recess in School for Sport Readiness

Fifty years ago, the American school system understood the value of whole child development and the need for indoor and outdoor movement breaks. This was evident in play and imagination stations within the classroom, an emphasis on physical education, music, and art, and multiple outdoor recess breaks each day, which provided ample opportunities for physical activity. Over the past 25 years, standardized testing for 3rd through 12th graders, competition-focused physical education opportunities, and the rampant use of technology have prioritized academics over whole-child development (Panieti-Madan & Ranganathan, 2023). These standards quickly removed children's individual developmental achievements and forgot that children are social, physical, spiritual, emotional, and cognitive beings (Stoewen, 2025). Governmental policies imposed on the American school system have caused it to lose its soul and shift from whole-child development to predominantly academic and competitive pursuits. This has left a void in opportunities for children to build sport readiness during the

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school day through the most opportune means: recess, defined as outdoor, unstructured free play.

One highly successful recess intervention, The LiiNK Project® (Let's inspire innovation 'N Kids), focuses on whole child development in elementary and middle school settings. The LiiNK intervention is a multi-year, routinely scheduled, teacher-embraced model that includes four 15-minute recesses (outdoor child-directed play breaks) and 15-minute character lessons (Positive Action®) daily. LiiNK research has shown that children with 60 minutes of daily recess have decreased stress levels (Rhea et al., 2025), improved happiness and positive emotions (Clark & Rhea, 2017), decreased off-task behaviors (Rhea & Rivchun, 2018), and maintained greater attentional focus when returning to the classroom (Lund et al., 2017). The LiiNK research team has also found that children with 60 minutes of recess exhibit exponentially more moderate-to-vigorous physical activity (MVPA) and have significant gains in postural balance, movement skills, and muscular strength development compared to those who receive 30 minutes or less of daily recess (Farbo et al., 2024; Farbo & Rhea, 2022; Rhea et al., 2026; Webb et al., 2025a; Webb et al., 2025b). The increased MVPA, postural balance, movement skills, and muscular strength provided by school recess are essential for enhancing whole health and sport readiness in children and preparing them for structured activities, such as Physical Education (PE).

Physical Education (PE) can play a key role during the school day in supporting sport readiness. PE is a structured, planned, intentional, and adult-supervised environment designed to improve motor and social skills as well as physical fitness and lifetime physical activity. The PE teacher must create a fun, safe, and engaging environment to advance social, emotional, cognitive, and physical skills. Even the best PE programs in the world cannot replace the benefits of recess. For the PE environment to be successful, a child must first practice moving their body and limbs in their chosen planes during free play to build the foundation of strength, coordination, mobility, flexibility, and confidence needed for structured physical activity if recess has been prioritized throughout the child's life. Free play allows children to apply the structured skills introduced in PE.

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Physical Activity at Home for Sport Readiness

Before the 1980s, children played outside from the time they came home from school until they were called in to have dinner. Over the past few decades, this has all changed. Parents have become more fearful of their children playing outside due to safety concerns and a lack of areas to play. One key shift to address these issues was introducing sport development to younger children (starting at age 5). Most parents believed introducing their child to sport at a younger age would improve their physical fitness, emotional control, and social well-being. The intent of this early introduction for children was basic motor skill development related to the sport of interest and a safe, healthy place to be physically active. In most cases, it quickly became much more competitive without taking the child's developmental considerations into account. Most children have neither become more physically fit nor appropriately developed social and emotional skills.

Many parents have substituted outdoor play for organized sport. Organized sport, being another structured active environment, is similar to PE. It is often misunderstood in childhood as an appropriate replacement for outdoor unstructured play. Parents often check off the daily physical activity box for their child when the child attends practice or a game, not realizing the child gets fewer opportunities to be physically active than during recess or unstructured outdoor play at home. The components of sport do not provide the choice and variety of limb movements that outdoor free play offers and therefore lack many of the elements that prepare the future athlete for advanced movement skills and a reduced risk of injury. This is evident in youth sports, where repeated skill sequences often lack variety and intensity of movement for years on end. Increased injuries and surgeries in high school athletics testify to the detrimental effects of this repetition, particularly the lack of physical activity variety that unstructured free play offers (McLellan et al., 2022; Okoruwa et al., 2022).

Early participation in sport, especially early specialization, has led parents to believe their child is fit for a future in sports. The reality is that their child is "skilled" for future sport, but their body is not conditioned or prepared for the impacts of future sport. Negating the variety of movement from outdoor free play in childhood negates

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the muscular, bone, joint-stabilizing, and neuromuscular development needed for success and injury prevention in higher levels of organized sport (Beato et al., 2021; Hulteen et al., 2018; Kokštejn et al., 2017; Payne & Isaacs, 2017; Pedersen, 2019; Rosengren, 2021a; Sutapa et al., 2021; Widodo et al., 2022).

Therefore, PE and/or organized sports cannot replace unstructured outdoor play; they should be secondary and supplemental. Children will be successful, confident, safe, and strong in structured opportunities only after they have developed properly through choice-directed, unstructured free play in the natural outdoor environment. The beauty of this actuality is that outdoor free play is accessible to most children, if purposefully sought, with fewer financial obligations and time constraints than organized sports. Additionally, when children are allowed to play outdoors freely, the vast majority (97%) engage in limb movements that prepare the body for the development of muscular strength and neuromuscular control, thereby enhancing sport readiness (Webb & Rhea, 2023a).

Appropriate Approaches/Strategies

The key to sport readiness in childhood is increased time spent in unstructured outdoor free play. Strategies to increase time spent playing outdoors at school and home are given below.

School Setting Strategies

First, every school district should adopt a recess policy that includes at least four components: 1) recess is offered at least twice daily for 20 minutes each; 2) recess is protected from tutoring or punishment; 3) recess is unstructured and outdoors; and 4) electronic devices or any other reading materials should be available during this time.

Second, as a teacher, parent, or coach, identify school board representatives, state legislature representatives, and state boards of education members with whom you can build a rapport about examining procedures and protocols such as those found with The LiiNK Project to provide quality recess settings essential for whole child development and sport readiness. A few sport readiness talking points for school districts to adopt LiiNK practices or similar are:

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1. Children will have fewer discipline issues and be more focused in the classroom, on the field, or in the gym.
2. Children will develop resiliency and intrinsic motivation so they will be much better equipped for school, for sport participation, and for life; children will be more socially responsible and emotionally regulated;
3. Children will develop strong bones, muscles, joints, and nervous systems, prepped and ready for advanced opportunities in physical education and sport.
4. Physical educators should assess muscular strength and neuromuscular control to ensure they are physically ready for complex motor skills and participation in sports.

When children do not have daily time for play and recess, physical issues such as limb imbalances, lateral vs. vertical movement weaknesses, decreased neuromuscular control, and poor bone/muscle/joint development can develop and lead to sport injuries. Therefore, these assessments are essential to develop sport-ready children.

Home Setting Strategies

- Parents must begin monitoring all daily screen time (cell phones, iPads, televisions, etc.) and develop a purposeful plan to replace at least 1 hour of that time with outdoor free play. Parents, be ready for mood swings and resistance as you replace sedentary screen time with unstructured outdoor play. Electronics, similar to drugs, are emotionally and chemically addicting. At first, you'll see irritability and resistance to detoxing, but hold your ground. You will see amazing changes in your child's emotional state and activity levels within a few short weeks, with more gains as time progresses.
- Make sure the outdoors is accessible to children daily. If safe, have children go outside for at least an hour when they first come home from school, as this has many physiological and cognitive benefits for sport readiness and overall child/adolescent health. Outdoor physical movement removes excess cortisol or stress hormones from the body that build up stress after a long day at school, it reboots hormone and insulin sensors for increased energy and moods in the evening (Al Zaki et al., 2023; Li et al., 2023), it brings oxygen to the brain for

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cognitive clarity (Raine et al., 2023), and it allows for much needed reflection time alone, and/or social time with siblings/peers (Qiu et al., 2025). As a parent of four, I feel that the best time for outdoor playtime on weekdays is immediately after school. Children are drained from the sedentary school day and the overloaded focus time. Parents often mistake the first hour at home for a time to rest or do homework, when it's actually the best time to get kids moving. They become more energized and can focus on homework once they have had time to play and refresh their bodies and minds.

- Wait until children are at least 10 years old before introducing them to more competitive sports programs, but keep them playing outdoors in the neighborhood. For children under the age of nine, the goals of participation are to be active, have fun, and have a positive sports experience through learning and practicing fundamental skills. Competition is not the goal. Intense training at a young age can lead to burnout, with an estimated 70% of young “athletes” dropping out of sports by age 13 (Seligman, 2025). Furthermore, sport specialization should not occur until late adolescence, around ages 15-16 (Brenner et al., 2016; Seligman, 2025). This means children should participate in different sports across seasons throughout the year, rather than one sport year-round. Sport specialization for young children increases risk for depression, stress, anxiety, and issues around self-worth and attrition, in addition to compromising joint health and appropriate physical development, leading to sport injuries and mental health issues (Puzzitiello et al., 2021; Rugg et al., 2021; Stricker et al., 2020)

Conclusions

Sport readiness is a child's ability to meet the demands of participation in sport and to learn the values and skills required to do so successfully (Aicinena, 1992; Harris, 2000; Kochanek et al., 2019). Sport-ready children must meet developmental milestones in muscular strength and neuromuscular control. Setting these milestones for each age group and then testing children for these competencies is necessary to understand their developmental level. Researchers have assessed components such as muscular strength and neuromuscular control in physical education classes (Webb et

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al., 2025a; Webb et al., 2025b). Integrating these assessments into schools and sports programs on a large scale will help determine children's health and identify where intervention strategies are needed to help children become sport-ready. Although some national physical testing standards exist, they need revision to assess the muscular strength components included in the above studies and accurately gauge sport readiness among our youth.

Current trends in state legislation are making strides toward protecting and increasing recess time during the school day. California's Senate Bill 291, passed this year, requires all school districts to provide 30 minutes of daily recess, separately distinct from meal and physical education times (CDE, 2025). School adoption of recess protocols, such as The LiiNK Project, along with legislative recognition of required recess time, will significantly increase the percentage of children who enter adolescence with a sport-ready foundation.

Overall, when children have unstructured outdoor play throughout the school day, parents purposefully trade sedentary time for it. If parents realize sports should not replace outdoor unstructured free play time, the U.S. will present a new generation of sport-ready children who have increased baseline health, a lower chance of future comorbidity, more positive trends in mental health and social-emotional skills, confidence in the ability to move, increased opportunity for advanced skill, and decreased injuries. Outdoor unstructured play opportunities allow children to develop their limbs and muscular strength naturally, thereby increasing sport readiness and lifelong physical activity opportunities for generations to come.

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Restoring Time and Space for Play in Taiwan

Wei-Shun Tseng, OT, Ju-Pi Pan, Cindy Chung, Jackie Wang, & Jen Hsiu-Chuan Wang
Play Taiwan

Introduction

Registered as a non-profit organization in 2017, Play Taiwan originated from a spontaneous grassroots movement led by parents dedicated to reimagining children's play environments. Over the past decade, Play Taiwan has spearheaded a national play revolution, advocating for high-quality, engaging, and diverse play spaces. Central to Play Taiwan's strategy is applying the Social-Ecological Model (Bronfenbrenner, 1979). This framework recognizes that a child's development is not isolated but shaped by nested layers of environmental influence (Figure 1).

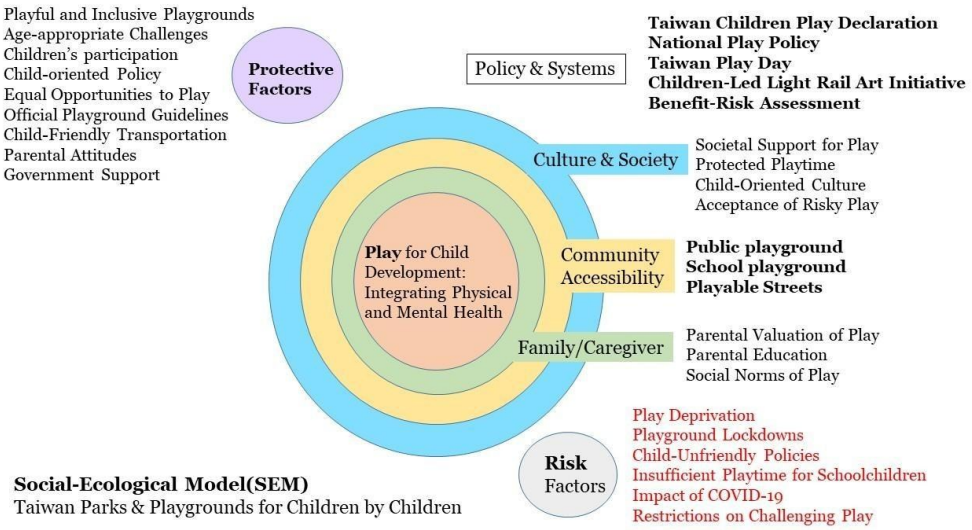


Fig. 1. Play Taiwan's Advocacy Framework: Applying the Social-Ecological Model (2017–2025)

See Appendix for long description

The organization strategically operates across these levels to ensure systemic sustainability by:

- **Macrosystem (Policy & Legislation):** At the highest structural level, Play Taiwan engages in policy reform and legislative advocacy. A landmark

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achievement is drafting t*he Taiwan Children's Play Declaration*, which provides a foundational framework for government agencies to recognize play as an essential right rather than a luxury. By amplifying children's voices in urban planning, Play Taiwan ensures that play rights are anchored in national governance and legislative frameworks. Furthermore, we extend the Right to Play beyond traditional playgrounds into the broader urban fabric through initiatives such as the Children's Light Rail Art Project, facilitating children's direct participation in urban governance.

- **Exosystem & Mesosystem (Social & Cultural Climate):** The organization actively reshapes the cultural narrative surrounding childhood through public education and media outreach, emphasizing that playtime is development time. This shift encourages parents, educators, and the public to value play as vital to cognitive, emotional, and physical health.
- **Microsystem (Community & Physical Environments):** On the ground, Play Taiwan has supervised the renovation of nearly 500 children's playgrounds. These efforts have transformed Taiwan's public spaces from standardized equipment into inclusive, themed, and sensory-rich environments.

By intervening at every level of the social-ecological hierarchy, Play Taiwan ensures that playgrounds are not merely physical sites, but free, accessible public assets. This holistic approach guarantees that every child—regardless of socioeconomic background—can exercise their fundamental right to play and rest in a fair, equitable, and developmentally supportive environment (Russo & Pereira, 2025).

Government authorities must prioritize children's right to play and formally integrate it into national and urban planning policies. It is time to listen to the children. By addressing these environmental and regulatory barriers, we can ensure that every child—regardless of age—has the time, space, and freedom to play.

Problem Statement

The rate of identification of children with developmental delays has substantially increased in Taiwan. According to statistics from the Ministry of Health and Welfare (MOHW, 2023), the number of early intervention recipients increased from 26,392 in

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2021 to 34,781 in 2023. Drawing on research from the Hsin-Yi Foundation (2022) and the National Science and Technology Council (Chang & KIT Project Team, 2025), a critical correlation exists between environmental restrictions and developmental setbacks.

Findings indicate that over 80% of Taiwanese lower-grade elementary students fail to meet World Health Organization (WHO) daily physical activity guidelines. This deficiency is attributed to sedentary lifestyles, a lack of regular exercise, and limited engagement in household chores or diverse outdoor play. While the post-pandemic cohort exhibits marked delays in social-emotional, communication, and motor domains, the rise in recorded cases also reflects heightened parental awareness and improved screening efforts.

Urban Heat Island (UHI) Effect

During a 2025 field audit of a playground in Taiwan. Play Taiwan used infrared thermometry, which revealed that stainless steel and concrete slides reached temperatures as high as 50°C (122°F). Rubber safety surfacing exceeded 60°C (140°F), whereas natural turf remained at 28°C (82.4°F). Natural loose-fill surfacing (e.g., pea gravel, bark, engineered wood fiber, sand) maintains surface temperatures 8°C (46.4°F) to 14°C (57.2°F) lower than synthetic alternatives while offering tactile sensory experiences.

Play Poverty

Based on a comprehensive survey with 2,467 respondents (Hsin-Yi Foundation, 2022), a stark play gap exists: while preschool children access outdoor playgrounds 1–2 times per week, school-age children do so only 1–2 times per month—a reduction of over 75%. Reclaiming playtime is a fundamental right, not a luxury, and requires urban planning that prioritizes accessible play infrastructure, school recess reform, and climate-resilient cool play spaces.

However, data alone tells only half the story. Direct interviews with children reveal that the vanishing of play is not merely a result of academic pressure. It is a systemic failure driven by inadequate play spaces, restrictive institutional regulations,

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and the escalating threat of extreme heat. Children are expressing a clear desire to play, yet they are being systematically excluded from their own childhoods. To bridge this gap, urban planning must prioritize accessible play infrastructure, school policies must be reformed to protect recess, and climate-resilient cool play spaces must be developed.

Background

Consistent with the scoping review by Uibel et al. (2022), findings underscore a strong correlation between extreme thermal environments and risks to pediatric health. Children are inherently vulnerable within social and environmental structures due to their limited life experience, reduced adaptive capacity, and unique physiological differences. Specifically, children possess higher metabolic rates and lower sweat rates than adults. These biological factors limit their efficiency in heat exchange with the surrounding environment, rendering them more sensitive to thermal stress, less capable of maintaining thermal homeostasis, and disproportionately susceptible to the deleterious effects of extreme heat, air pollution, and radiation (Balbus & Malina, 2009; Vanos, 2015; Tarpani et al., 2023). Consequently, urban playgrounds that lack sufficient greenery and shade pose an acute risk of overheating, particularly for children under five (Tarpani et al., 2023).

Children in Taiwan are currently at a critical crossroads of a Play Crisis. This crisis is driven by a long-standing systemic imbalance between academic achievement and healthy play development; the deprivation of outdoor play opportunities due to extreme climate events and Urban Heat Island (UHI) effects; and a trend toward sterile, monotonous play spaces fueled by a societal overcorrection for safety and risk aversion. Combined with a structural deficiency in play time, these factors are silently constricting the essential space children need to grow.

Research by Tarpani et al. (2023) underscores that urban playgrounds lacking sufficient greenery and shade pose a high risk of overheating, particularly for children under five. In response to heightened societal anxiety and excessive safety expectations, we advocate for four core pillars: *prioritizing playtime*, *age-appropriateness, the fundamental right to play,* and the *courage to embrace risk*. This represents more than just the current state of play advocacy in Taiwan. It is a vital milestone we must achieve

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over the next decade. Our goal is to forge a play-friendly, climate-resilient society that respects the value of adventure and remains steadfastly centered on holistic child development.

Strategies to Achieve Taiwan's Children's Play Declaration

Play Taiwan proposes five pillars of action.

1. **National Recognition of Play:** High-profile public events, such as "Taiwan Let's Play Day" (June 7, 2025) in front of the Presidential Office Building, elevate the "Right to Play" to a national priority (Taipei Times, 2025). President Lai pledged collaboration between central and local governments to safeguard play rights and expand play spaces.
2. **Climate-Resilient Play Environments:** In alignment with design strategies proposed by Tarpani et al. (2023), integrating vegetation, shade structures, and natural permeable surfaces (e.g., sand, engineered wood fiber) significantly mitigates heat risks and improves microclimatic comfort.
3. **Reframing Safety via Benefit-Risk Assessment (BRA):** Shifting playground safety management from a "zero-risk" mindset to a Benefit-Risk Assessment (BRA) framework enables managed risk essential for resilience (Play Safety Forum, 2025). In 2025, the MOHW, MOI, and MOE formally declared unified support for integrating BRA across Taiwan.
4. **Healthcare Integration ("Play Prescriptions"):** Implementing Social Prescribing through "Play Prescriptions" written by pediatricians, occupational therapists, and clinical psychologists to address vision care, developmental milestones, and mental health (Yogman et al., 2018).
5. **Safeguarding Dedicated Time for Play in Schools:** Protecting the "Right to Recess" in alignment with UNCRC Articles 12 and 31 (United Nations, 1989) by guaranteeing at least 60 minutes of daily unstructured play or physical activity.

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Recommendations

President Lai has pledged to foster collaboration between central and local governments to safeguard children's right to play (Figure2). Emphasizing the vital link between play and public health, the administration will direct relevant agencies to systematically expand play spaces and protect dedicated play time for all children.



Fig.2. Imagination is National Power: Empowering the Next Generation: National Strategies for Advancing Children's Right to Play.

These high-profile public events challenge traditional perceptions of state-protected perimeters, inviting the next generation into the heart of the country's sovereign center. By turning the seat of the Presidency into a position that advocates for play, the movement elevates the Right to Play to national priority status. It secures a formal commitment from the highest echelons of the state, signaling that children's welfare and agency are now central to the nation's governance and identity. View event hightlights.

In alignment with the UN's (2024) inaugural International Day of Play, this proposal urges the government to elevate the Right to Play to national priority status. By securing formal recognition and commitment from the Presidential Office—drawing inspiration from global precedents such as the U.S. White House Easter Egg Roll and the U.K.'s Lessons at 10 and National Playday- Taiwan can evolve from a restrictive framework into a proactive system that safeguards child development through play.

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Climate-Resilient Play Environments

According to Tarpani, E. et al. (2023), integrating vegetation and permeable surfaces into playgrounds significantly improves microclimates and enhances children's thermal comfort. Specifically, trees mitigate heat by blocking direct solar radiation and modulating local airflow.

Mitigating Extreme Heat Risks: As the UHI intensifies, it is imperative to establish and enforce infrastructure standards for playgrounds. At the Coordination Meeting for the Prevention of Child and Adolescent Accidental Injuries, we proposed establishing heat-injury prevention mechanisms and enhancing playground shading in direct response to climate-driven play challenges.

At the Extreme Heat Crisis Public Hearing for Children's Climate Policies, we propose adding sun-shading inspection items to the Children's Playground Self-Inspection Checklist, with a clear priority on natural or shaded structures. We advocate for the strategic use of natural surfacing materials (e.g., sand, engineered wood fiber, or gravel) to minimize the large-scale installation of synthetic rubber, which exacerbates the UHI effect. Furthermore, we recommend expanding water play features and enhancing nighttime lighting to enable extended operating hours, ensuring families can play safely and comfortably during cooler evening hours.

Reframing the Narrative: Transitioning to Benefit-Risk Assessment (BRA)

Shift the paradigm of playground safety management from a zero-risk focus to a Benefit-Risk Assessment (BRA) framework. This policy change recognizes that managed risk is essential for healthy child development, allowing for more challenging, diverse, and engaging play spaces that foster resilience and physical literacy.

In a significant stride for children's rights, the Ministry of Health and Welfare (MOHW) and Play Taiwan co-hosted the New Perspectives on Play Benefits and Risk: 2025 International Conference on Playground Design and Child Development (Figure 3). During this landmark event, representatives from three key central government agencies—the Social and Family Administration (MOHW), the National Land Management Agency (MOI), and the K-12 Education Administration (MOE)—formally

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declared their unified support for integrating the BRA framework into the management and design of Taiwan's children's playgrounds.



Fig. 3. New Perspectives on Play Benefits and Risks: Findings from the 2025 International Conference in Taiwan

In a landmark move, we released the Benefit-Risk Assessment Form: Practical Examples, which was officially authorized by the UK Play Safety Forum for translation by Play Taiwan. This document serves as a practical reference for government authorities, inspection agencies, and designers nationwide.

This is far more than a form; it signals a fundamental shift in Taiwan's play-space design philosophy—moving from a restrictive "zero-risk" mentality to a balanced "Benefit-Risk Equilibrium."

Healthcare Integration: Implementing "Play Prescriptions"

Advancing Social Prescribing through Outdoor Play: We advocate for the systematic adoption of Social Prescribing, focusing on implementing Play Prescriptions. This initiative seeks to integrate play into diverse ecosystems, including early intervention systems, pediatric healthcare, and NGO-led advocacy. By empowering professionals—including pediatricians, occupational therapists, and clinical psychologists—alongside NGOs acting as Link Workers, we enable the utilization of outdoor play as a formal methodology or clinical intervention.

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A Practical Framework: Collaborative Play Prescriptions. Developed through collaboration between pediatricians and occupational therapists, these prescriptions serve as a tangible tool for child health. A proposed framework for Play Prescription may include:

- Dosage & Environment: The recommended minimum of 1 hour of daily play in public parks or specialized playgrounds.
- Targeted Play Modalities: Healthcare and developmental professionals—including occupational therapists, pediatricians, and clinical psychologists—prescribe tailored play activities based on specific developmental needs. These include Gross-Motor Play, Sensory Play, Social-Interactive Play, and Musical & Water Play.
- Resource Mapping: The prescription incorporates an Integrated Playground Map, allowing practitioners to check off specific locations best suited for the intervention or recommend trusted NGO partners to facilitate the play experience.

This approach aims to revolutionize holistic child wellbeing by addressing key public health challenges:

- Vision Care: Preventing myopia through consistent exposure to natural light and outdoor depth perception.
- Developmental Milestones: Supporting age-appropriate physical, social, and cognitive growth.
- Mental Health: Fostering emotional resilience and psychological stability.
- Lifestyle Optimization: Combating physical inactivity, balancing sedentary screen time, and strengthening parent-child attachment through shared play experiences.

Safeguarding Dedicated Time for Play and Physical Activity in Schools

Protecting the Right to Recess: Time as a Non-Negotiable Asset. In alignment with UNCRC Articles 12 (The Right to be Heard) and 31 (The Right to Play), we advocate for the formal safeguarding of school recess. Playtime must be protected as a

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fundamental right and never sacrificed for remedial instruction or disciplinary measures. To achieve Play Justice, we call for a policy guarantee of at least 60 minutes of daily unstructured play or physical activity for every student, ensuring that the school schedule respects the developmental biological necessity of movement.

Reimagining Campus Landscapes: Creating Diverse and Challenging Play Spaces

- We urge schools to transition from sterile, standardized rubber-mat playgrounds toward "Climate-Resilient Play Environments". This evolution involves integrating natural loose-fill materials (such as sand and engineered wood fiber), varied topography, and strategic vegetation to mitigate the UHI effect.
- By embracing a BRA framework, schoolyards can provide diverse sensory stimuli and managed challenges, transforming the campus into a primary setting for fostering resilience and physical literacy.
- Scaling Impact through School Play Days: Cultivating a Play-Positive Culture

Play Taiwan promotes School Play Days as a catalyst for cultural change, temporarily reimagining and dissolving traditional campus boundaries.

Through the introduction of Loose Parts Play, pop-up materials, and student-led initiatives, these events demonstrate the transformative power of self-directed play. These initiatives serve as a practical proof of concept for educators and parents, shifting the social mindset from risk aversion to a culture that celebrates adventure and child-led exploration.

Conclusion

The surge in developmental delays and the vanishing of play are warnings we cannot ignore. By applying the Social-Ecological Model, Play Taiwan remains committed to dismantling regulatory and environmental barriers that stifle growth. We call upon global stakeholders to join us in this revolution. It is time to listen to the children, invest in their freedom, and ensure that every child—regardless of their background—has the time, space, and community support to simply play.

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Achieving this vision requires not only grassroots advocacy but also institutional commitment. Taiwan's evolving policy landscape offers a historic opportunity to embed children's play rights into national governance structures.

As the Ministry of Health and Welfare undergoes organizational restructuring in 2026 to establish the Child and Family Support Administration, we see a critical foundation for advancing children's participation in public policy. This new agency should integrate child protection, family support, and play advocacy to create comprehensive developmental environments.

Play Taiwan remains committed to providing expertise and recommendations, with priorities including: developing innovative and challenging play spaces; implementing Benefit-Risk Assessments; establishing Play Sufficiency policies; creating Climate-Resilient Playgrounds; formalizing children's participation in urban planning; and building Playable Cities.

The play revolution is no longer a choice; it is a necessity for a sustainable and equitable future. The question before us is simple: will we build a world where children can grow, or one where they are merely managed? The answer must be clear—and the time to act is now.

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Appendix

Long Description for Figure 1

This graphic presents a **Social-Ecological Model (SEM)** titled *"Taiwan Parks & Playgrounds for Children by Children"* that details the factors influencing play and child development.

Core Framework (Concentric Rings)

At the center of the visual framework is a multi-layered circle diagram:

- **Center Core (Salmon/Peach):** "Play for Child Development: Integrating Physical and Mental Health"
- **Layer 1 (Green Ring): Family/Caregiver**
  - *Associated Factors:* Parental Valuation of Play, Parental Education, Social Norms of Play
- **Layer 2 (Yellow Ring): Community Accessibility**
  - *Associated Factors:* Public playground, School playground, Playable Streets
- **Layer 3 (Blue Ring): Culture & Society**
  - *Associated Factors:* Societal Support for Play, Protected Playtime, Child-Oriented Culture, Acceptance of Risky Play
- **Top Level (Boxed Header above outer ring): Policy & Systems**
  - *Associated Factors:* Taiwan Children Play Declaration, National Play Policy, Taiwan Play Day, Children-Led Light Rail Art Initiative, Benefit-Risk Assessment

Flanking Factors

Protective Factors (Top-Left)

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Enclosed by a purple circular label labeled **Protective Factors** is a list of positive systemic and environmental influences:

- Playful and Inclusive Playgrounds
- Age-appropriate Challenges
- Children's participation
- Child-oriented Policy
- Equal Opportunities to Play
- Official Playground Guidelines
- Child-Friendly Transportation
- Parental Attitudes
- Government Support

Risk Factors (Bottom-Right)

Enclosed by a light-gray circular label labeled **Risk Factors** is a list written in red text highlighting structural and environmental challenges:

- Play Deprivation
- Playground Lockdowns
- Child-Unfriendly Policies
- Insufficient Playtime for Schoolchildren
- Impact of COVID-19
- Restrictions on Challenging Play

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Nature is Essential

Fostering Young Children's Empathy through Nature Play

Nature-Based Play in Kenyan Early Learning through Play: *The Pendo Mazingira Framework*

Nature and Place-based Environmental Education: A Primary Grade Teacher Focused Group Case Study in Wilmington, NC



ipa CHRISTCHURCH 2026

USA ipa American Association for the Child's Right to Play

Fostering Young Children's Empathy through Nature Play

Julie Ernst, PhD & Claire Underwood, PhD

Introduction and Problem Statement

Empathy is the knowledge and sharing of others' feelings (Knafo-Noam et al., 2009). It relies on the ability to perceive, understand, and care about another being's experiences or perspectives (Young et al., 2018). As part of a broader category of prosocial actions, empathy promotes human flourishing and serves as the foundation for ethical and humane action (MCC, 2018). Empathy also has significance in conservation contexts (Skibins & Powell, 2013). However, empathy has been declining, likely due to increased social media use, reduced family size, and changes in parenting styles (Konrath, 2011). Given its potential to motivate action and serve as a powerful driver for positive change in social and environmental contexts, there is a need to support the development of empathy, particularly during the formative period of early childhood.

Background: Empathy and Its Significance

Empathy includes both cognitive and affective components. Cognitive empathy encompasses perceiving cues from another person, understanding what that person is feeling and thinking, and perspective-taking, which involves placing oneself in another's mind and imagining what they are thinking or feeling (Cuff et al., 2014). Cognitive empathy is considered intentional, controllable, and teachable (Carr et al., 2003). Cognitive empathy develops alongside social-cognitive development and gradually increases from early to late childhood (Hoffman, 2000).

The affective domain of empathy includes emotional sharing, which is sensing or experiencing another's emotions, and empathic concern, which is the motivation to care (Cuff et al., 2014). Emotion regulation skills may contribute to emotional sharing, which may lead to empathic concern (Eisenberg, 2000; Hay, 2009). Mirror neurons in the brain are the origin of both affective and cognitive empathy (Goldman, 2014); thus, people generally have the capacity for empathy, yet certain biological conditions can affect how well mirror neurons function and develop (Gerdes et al., 2013). Affective

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empathy generally develops very early in life and remains relatively stable across one's lifetime (Davidov et al., 2013).

Empathy's significance is twofold. First, empathy, which is described as "the spark of human concern for others, the glue that makes social life possible" (Hoffman, 2000, p. 3), is significant in the context of pro-social behavior. Empathy plays an important role in social interactions (Bernhardt & Singer, 2012). It is associated with comforting, altruistic, and responsive behaviors toward peers (Miller & Jansen op de Haar, 1997), as well as a propensity to relieve another's suffering through action (Pittinsky & Montoya, 2016). Empathy in childhood is also part of a larger prosocial personality trait that motivates helping behaviors into adolescence and young adulthood (Eisenberg et al., 1999).

The second aspect of empathy's significance is in the context of wildlife conservation and environmental conservation more broadly. Empirical evidence links empathy with wildlife to conservation behavior (Shelton & Rogers, 1981; Skibins & Powell, 2013; Young et al., 2018). Empathy with wildlife can be a catalyst for empathy with the natural world more broadly (Tam, 2013), which, in turn, predicts biospheric concern and is associated with environmental behaviors. However, researchers point out that while empathy for wildlife and/or nature can influence behavior, it is unlikely to be sufficient when barriers arise or when the desired behavior is complex (Young et al., 2018). While more research on the relationship between empathy for animals and conservation behavior is needed, empathy's value continues to grow among wildlife conservation organizations, given its potential not only to connect people with wildlife and nature more broadly, but also to motivate conservation behavior.

Further, many Indigenous traditions emphasize the interconnectedness of all beings, which calls for deep respect, reciprocity, and care (Kapyrka & Dockstator, 2012), offering additional insight into strategies for fostering the development of empathy. From an Indigenous perspective, empathy is described as a "relational and dynamic process of sharing feelings with others and acting compassionately for the good of a community." It is not an individual trait but something that arises from relationships and community (Dorlando, 2011, p. 43). Many Indigenous perspectives also recognize

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an inherent responsibility, grounded in relationships, that flows from the deep interconnection between humans and the more-than-human world (Kapyrka & Dockstator, 2012). In this way, empathy is reciprocal, active, and shared (Ernst et al., 2023).

Strategies

Supporting Empathy Development in Children through Nature Play

Early childhood is a critical period for empathy development. While neural development, genetics, and temperament influence empathy development (Zahn-Waxler et al., 1992), socialization and developmentally responsive strategies also play a role (Goldman, 2014). For example, warm, positive early environments and secure attachment relationships provide an important foundation for empathy development (Kestenbaum, 1989). Empathy, particularly cognitive empathy, is considered teachable (Teding van Berkhout et al., 2016); thus, the early years are crucial for empathy development, as children's brains have greater plasticity. Supporting the development of emotional and behavioral regulation skills also promotes empathic capacities in early childhood, as these skills and capacities are intertwined (Eisenberg & Eggum, 2009; Song et al., 2018).

While research literature suggests supporting the development of children's empathy through behavioral and communication skills training (Teding van Berkhout & Malouff, 2016) and social-emotional learning curricula (Malti et al., 2016), play-based interventions can also be effective (Fisher, 1992). Through peer play, children develop a wide range of interpersonal and regulatory skills that help them relate to others and maintain relationships.

Nature play, or unstructured and open-ended playful interactions with and in nature, has been shown to foster social and emotional skills and prosocial behaviors, such as positive peer play behaviors (Burgess et al., 2020) and self-regulation (Ernst & Stelley, 2024), as well as cooperation, sharing, and helping behaviors (Brussoni et al., 2016). Beyond social and emotional learning more broadly, several studies suggest empathy is an outcome of nature play. For example, McArdle et al. (2013) found that outdoor play, in conjunction with a nurturing approach, fostered resilience, self-efficacy,

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and empathy in young children. Additionally, nature play has been shown to support young children's cognitive and affective empathy toward wildlife, as well as their empathic behavioral intentions toward humans and animals (Ernst et al., 2022).

The dynamic nature of nature play offers many opportunities for risk-taking, problem-solving, and processing new information and constructing new meanings (Bundi et al., 2009). In nature play, teachers tend to provide less direct supervision and give children more autonomy. This allows children to rely on each other, rather than a teacher, to solve problems, assist one another as they encounter challenges, and comfort and help one another (Alme et al., 2021). This "stepping back" approach, which gives children room to respond to and care for one another, can be particularly effective in supporting the development of children's empathy. By "stepping back," the teacher or caregiver makes space for the children to step forward, thereby creating opportunities to practice and develop empathy (Underwood et al., 2025).

Another aspect that supports children's empathy development is nature play's ability to foster community through cooperative-oriented play schemes that unfold, such as working together to move a giant log or ensuring everyone has something to "eat" in the mud kitchen (Underwood et al., 2025). Nature play also affords children's curiosity and questions, which, when followed by teachers' scaffolding to support empathetic responding, can serve as an avenue for developing empathy (Acar & Torquati, 2015). In doing so, children's empathy, confidence, and connection flourish. As such, while nature provides abundant opportunities, the teacher or caregiver is often instrumental in translating nature's affordances into opportunities to develop empathy (Underwood et al., 2025).

Nature play affords opportunities to experience stories embedded in the land and place, which can build empathy and connection (Anderson et al., 2017; Ernst et al., 2023). Teachers can model the practice of "listening with the ear of our heart" to experience nature and life itself, and prompt relational and responsive caring actions (Goulais & Curry, 2005). Since repeated opportunities to practice empathy skills are more effective than infrequent practice, and practicing empathy skills in real-life

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situations is also particularly effective (Durlak et al., 2011), nature play may be particularly effective in fostering empathy when sustained over time.

Beyond the play aspect of nature play, time in nature is associated with reduced stress, anxiety, and depression (Dankiw et al., 2020). Nature has a soothing and healing effect on children, allowing their directed attentional capacities to recharge (Kaplan, 1995). University of Washington researcher Peter Kahn describes time in nature as a softener of negative-conditioned mental patterns: "If you can find nature, engage with it and get your heart rate down, then your mind begins to settle. When your mind is not ruminating, it can then open to a wider world, where there is great beauty and healing" (Ma, 2020, para. 13). As such, nature's calming, stress-reducing, and healing qualities afford the opportunity to attend to the deeper, more emotional lessons of life, such as empathic responding.

Conclusion

Children have a natural curiosity and desire to care for one another and the world around them, and they can be remarkably capable. By offering opportunities to practice empathy through nature play, children can learn to respond to one another with expressions and actions of encouragement, care, and support, as well as through shared problem-solving, which helps them connect with one another and the world around them. By responding to one another, children build emotional connection and resilience; they are reminded of their capabilities and learn that they do not need to rely solely on the teachers and caregivers supporting them and others, which in turn creates and reinforces opportunities for empathic responding. As such, nature play has strong potential to foster empathy development during the critical period of early childhood. By creating opportunities for children's nature play and "stepping back" to make space for children's empathic responding, adults (teachers, researchers, and play workers alike) can leverage the affordances of nature play to nurture children's empathy.

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Nature-Based Play in Kenyan Early Learning Through Play: *The Pendo Mazingira Framework*

Dinah Awino Kawino, BS in Environmental Education

Introduction

Worldwide, there is growing recognition that play is essential to children's wellbeing, development, and sense of belonging, supporting social-emotional learning when protected in everyday settings (Skene et al., 2022; UNICEF, 2024; Tuncdemir, 2025). Play in natural environments is particularly important, as it supports emotional regulation, social connection, and the development of eco-empathetic relationships that shape lifelong environmental identity (Chawla, 2023; Barrable et al., 2024). Yet in many school contexts, academic pressure, rigid routines, urbanization, safety concerns, and limited access to green spaces have increasingly constrained opportunities for outdoor and nature-based play (Patchen et al., 2024; Teeuwen et al., 2024). These constraints are often reinforced by curriculum demands that prioritise measurable academic outcomes over unstructured outdoor play, particularly in urban and low-resource settings (Prins et al., 2022). As a result, many children experience nature as distant, regulated, or instructional rather than relational and playful (UNICEF, 2025; Pereira et al., 2024).

Emerging research suggests that locally designed, nature-based play approaches are among the most effective ways to support children's relationship with the natural world, recognising that while the value of nature play is universal, children's pathways to connection are individual and culturally situated (Chawla, 2020; Barrable et al., 2024). Practice-based frameworks such as the ***Pendo Mazingira Framework*** respond to this insight by offering intentional yet flexible play structures that enable educators to engage children creatively with natural elements while adapting activities to local contexts, resources, and learner needs. By supporting multiple entry points to nature, such as land, water, air, plants, trees, animals, and natural resources this approach strengthens agency, emotional regulation, and eco-empathy more effectively than standardised or purely instructional models (Barrable et al., 2024; Tam & Chan, 2024). At the same time, the growth of locally developed nature-based play initiatives

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highlights the need for supportive frameworks that recognise and legitimise context-specific methodologies, particularly where formal licensing pathways remain limited (International Play Association [IPA], 2023; Outdoor Play Canada, 2022).

This paper draws on my background as an environmental educator and community development practitioner, alongside collaborative facilitation with qualified Early Childhood Development (ECD) teachers across Montessori, community-based, and faith-affiliated schools in Kenya. Rather than positioning play as an external intervention, the ***Pendo Mazingira Framework*** is implemented through co-partnership with teachers, recognising their professional expertise while offering tools to observe, support, and extend children's nature-rich play. While this paper does not present large-scale evaluation data, it offers early practice-based insights grounded in observation, reflection, and participation. It proposes a theory of change in which low-cost, child-led nature play, supported by sensitive adult roles and teacher partnerships, fosters children's wellbeing, eco-empathy, and long-term environmental identity within the realities of Kenyan early learning spaces.

Problem Statement

Despite growing recognition of the importance of play, many children in their early years, particularly in formal school settings, experience increasingly limited and regulated contact with nature. In Kenya, rigid routines, academic pressures, and reduced outdoor time restrict opportunities for child-led, nature-based play, weakening children's emotional and relational connection to the natural world. Teachers, though highly trained and committed, often work under institutional constraints that position play as optional rather than essential. At the same time, environmental education is rarely integrated into early childhood practice in relational or playful ways, with responsibility toward nature introduced later through abstract instruction. Regulatory frameworks, while necessary for child protection, can further limit interdisciplinary collaboration. Together, these conditions highlight the need for low-cost, context-specific, and co-facilitated nature-based play approaches that expand children's everyday relationship with nature.

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Background

Across the Global North, nature-based play initiatives such as bush kinders in Australia, outdoor nurseries in Scotland, and forest kindergarten models in Canada and the United Kingdom demonstrate how child-led play in natural environments can be embedded within early learning in context-specific ways (Speldewinde & Infantino, 2025; Outdoor Play Canada, 2022). While the developmental benefits of nature play are widely available, research shows that children's pathways to nature connection are shaped by culture, context, and individual experience (Chawla, 2020; Barrable et al., 2024).

This understanding is particularly relevant in African contexts, where formal, non-formal, and informal learning environments coexist and access to play infrastructure varies widely. Locally grounded frameworks such as the ***Pendo Mazingira Framework*** respond to these realities by offering flexible, low-cost approaches that prioritise cultural relevance, accessibility, and adaptability over replication. In doing so, they support nature-based play that is sustainable, meaningful, and responsive to the lived contexts of children and educators.

Appropriate Approaches and Strategies

Pendo Mazingira Framework is an eco-mentorship program developed by AkadiEco and Mentorship Ventures in 2024 to support environmental learning and relationship-building across children, educators, and communities. While the program integrates both pedagogy and andragogy (*a method and practice of teaching adult learners, focusing on self-direction, life experience, and practical problem-solving*), nature-based play sits within the Children's Corner as a key pathway for nurturing early eco-empathy and connection to nature. The program emerged from the recognition that limited opportunities for free play in nature during childhood can shape how people relate to the environment later in life. **Pendo Mazingira Framework** (Awino, 2026) responds by using gentle, playful experiences in nature to help children feel connected, cared for, and at home in the natural world, supporting the development of environmental identity through everyday play (Barrable et al., 2024).

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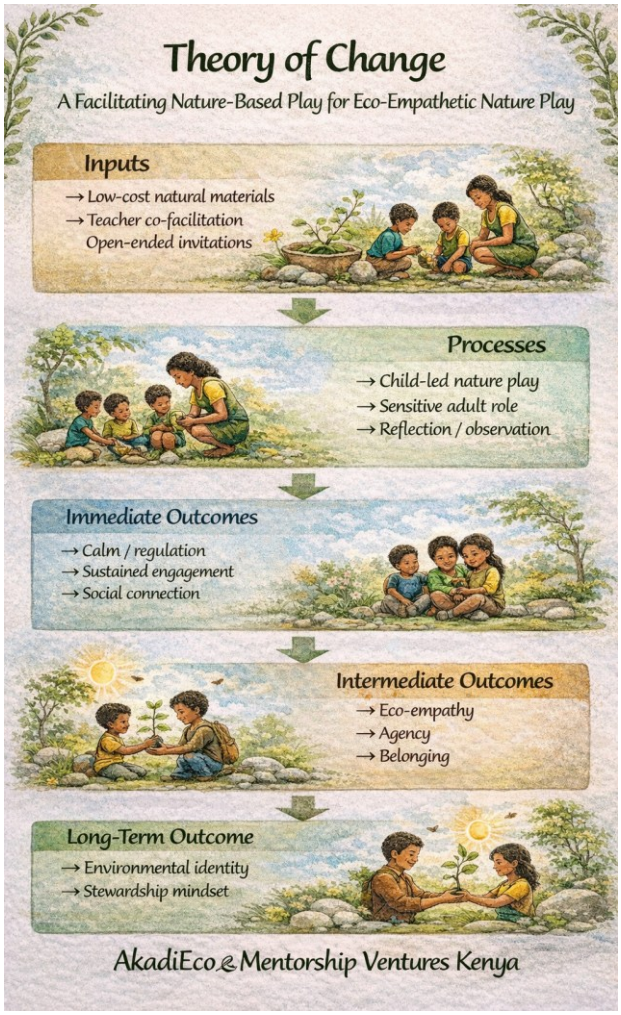


Figure 1. Theory of Change: Nature-Based Play and Eco-Empathetic Outcomes

See Appendix for long description of Figure 1

Pendo Mazingira's Theory of Change (Awino, 2026) shows how low-cost materials, teacher co-facilitation, and open-ended play invitations support child-led nature play within school settings. Through sensitive adult observation and reflection, this approach promotes calm, engagement, and social connection, which foster agency, belonging, and eco-empathy. Over time, these experiences contribute to the development of environmental identity and stewardship.

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Figure 2. The *Pendo Mazingira Framework*: Eight Pathways for Eco-Empathetic Nature Play

See Appendix for long description of Figure 2

Figure 2 presents the *Pendo Mazingira Framework* (Awino, 2026), an eight-element model that supports children's eco-empathetic connection with nature through play. The framework includes interconnected pathways focused on land, water, air, sky, plants, trees, animals, and natural resources, each offering a relational entry point shaped by children's interests and context. Rather than following a linear sequence, children move fluidly across elements through low-cost, open-ended play supported by teacher co-facilitation. Together, these experiences nurture eco-empathy, emotional regulation, and emerging environmental identity.

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Figure 3. The M.I.R.A.C.L.E Approach: A Facilitation Ladder for Eco-Empathetic Nature Play

See Appendix for long description of Figure 3

Figure 3 presents the M.I.R.A.C.L.E. Approach, a facilitation ladder that guides adult engagement in nature-based play within the *Pendo Mazingira Framework* (Awino, 2026). The approach outlines a relational sequence that emphasises sensitive presence, emotional attunement, inclusion, and shared learning, supporting adults to scaffold play without directing it. Through repeated use, the MIRACLE Approach fosters children's emotional regulation, belonging, eco-empathy, and emerging environmental identity (*Innovated by AkadiEco and Mentorship Ventures Kenya).*

Research consistently shows that early, sensory-rich nature experiences support lifelong environmental empathy, stewardship, and pro-ecological behaviour (Chawla, 2023; Beery & Jørgensen, 2023; Tam & Chan, 2024). Playful, place-based approaches

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are especially effective in fostering emotional resilience, ecological literacy, and nature connectedness in early childhood (Barrable et al., 2024). Within the *Pendo Mazingira Framework* (Awino, 2026), the MIRACLE Approach positions eco-empathy as a core developmental pathway, enabling children to care for nature through relationship and belonging rather than obligation.

Ensuring School Adoption of Nature-Based Play Programs

For schools to adopt nature-based play programs, they must align with existing priorities such as children's wellbeing, self-regulation, inclusion, and positive behavior, and be implemented through shared ownership rather than as add-on initiatives (IPA, 2023; UNICEF, 2024). Schools that already value child-led learning, such as Montessori, international, faith-based, and progressive centres provide conducive entry points for piloting such approaches. Co-facilitation with qualified teachers strengthens legitimacy by respecting professional expertise and embedding play within everyday routines. Evidence indicates that low-cost, teacher-supported outdoor play using locally available materials is most sustainable when integrated into regular school practices, such as recess, and supported through observation rather than rigid instruction (Outdoor Play Canada, 2022; IPA, 2023).

Co-Facilitating Nature-Based Play with Children and Teachers

Facilitating ***the*** *Pendo Mazingira Framework* (Awino, 2026) in Kenyan early learning centres has demonstrated that co-facilitation with qualified Early Childhood Development (ECD) teachers is both a practical and ethical approach to nature-based play. Rather than viewing regulatory requirements such as ECDA certification as barriers, the program works through partnership recognising teachers' professional expertise while contributing a complementary nature-based play perspective. Play activities are offered as open-ended invitations, with adults adopting a non-intrusive role focused on safety, inclusion, and observation. This approach allows learning to emerge organically and supports children's emotional regulation, cooperation, and imaginative engagement.

The work of AkadiEco and Mentorship Ventures (Awino, 2026) is grounded in environmental education and community development practice across formal, non-

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formal, and informal learning systems. This interdisciplinary foundation integrates both pedagogy and andragogy, shaping play experiences that support children while respecting the educators who guide them. Early professional experience within institutions such as the Kenya Wildlife Service Education Department and the Kenya Organization for Environmental Education reinforced the role of nature as a primary teacher. It highlighted the importance of culturally responsive, relational approaches in school and faith-based settings. Advanced training in environmental studies and community development has further strengthened the program's capacity to facilitate participatory, context-sensitive learning spaces.

Across schools where the ***Pendo Mazingira Framework*** (Awino, 2026) is facilitated, nature-based play is observed to impact teachers as well as children. While educators are highly trained and committed, rigid curricular structures often limit playful engagement. Through co-facilitated play, teachers are supported in slowing down, observing differently, and reconnecting with more responsive and joyful learning environments. Positioned as co-partners rather than recipients of expertise, teachers engage in shared reflection and learning, strengthening both pedagogical practice and relational connection (Smedsrud, 2025). Overall, *Pendo Mazingira* (Awino, 2026) reframes facilitation as holding space rather than directing outcomes, demonstrating that effective nature-based play does not require replacing teachers, but strengthening collaborative, context-sensitive practice.

Play as a Pathway to Lifelong Environmental Identity

Through the *Pendo Mazingira Framework* (Awino, 2026), play is positioned as the foundation of a lifelong relationship with the natural world rather than as leisure alone. By engaging freely with elements such as land, water, air, trees, and animals, children develop care, familiarity, and respect that support future environmental responsibility. At the same time, reflective adult participation strengthens shared learning and connection (Hahn, 2021). Grounded in environmental education and community development practice, the program responds to early and often subtle disconnection from nature by framing nature connection as a lived, relational experience rather than a concept to be taught. This approach is operationalised through

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the Eight Pendos Framework: land, water, air, sky, plants, trees, animals, and natural resources, which offers flexible, non-linear entry points for children's play based on interest and context. Using low-cost, locally available materials, the *Pendo Mazingira Framework* (Awino, 2026) reduces barriers to access while reinforcing the idea that nature is something to relate to, not consume. Together, these elements support early eco-empathy and environmental identity, positioning stewardship as a relationship formed through play rather than an obligation learned later.

Conclusion and Recommendations

Eco-Mentorship for the Next Generation

This white paper affirms that play in nature is foundational to children's learning, wellbeing, and long-term environmental identity. The *Pendo Mazingira Framework* (Awino, 2026) approach demonstrates how child-led, eco-empathetic play can be integrated into early learning spaces through low-cost materials, sensitive adult facilitation, and co-partnership with teachers. When children engage playfully with natural elements, they develop emotional regulation, a sense of belonging, and care for the natural world that extend beyond childhood.

Practice-based insights indicate that eco-empathy is most effectively nurtured early, through relationship rather than instruction. Nature-based play allows children to experience the environment as something they belong to, while co-facilitation also supports educators by creating space for reflection and renewed appreciation of play as an essential pedagogical practice.

The paper highlights the importance of context-specific play frameworks. *Pendo Mazingira Framework* (Awino, 2026) responds to Kenyan educational, cultural, and ecological realities, demonstrating why locally grounded approaches are critical for relevance, inclusion, and sustainability. Effective play initiatives do not replicate imported models but adapt core principles of child-led exploration and relational engagement to local contexts.

In conclusion, supporting nature-based, eco-empathetic play in early childhood is both an educational priority and a shared responsibility. When children are given time,

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space, and freedom to play in nature, they develop the relationships and values needed to care for the world they inhabit.

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Appendix

Long Description for Figure 1

This infographic illustrates a 5-step vertical "Theory of Change" model for nature-based early childhood education. Each step features a descriptive text box paired with a soft watercolor illustration showing children and educators interacting outdoors in Kenya, connected by downward green arrows.

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Header

- **Title:** Theory of Change
- **Subtitle:** A Facilitating Nature-Based Play for Eco-Empathetic Nature Play

Flowchart Stages

1. **Inputs (Orange Header Box)**
   - **Text Points:**
     - Low-cost natural materials
     - Teacher co-facilitation
     - Open-ended invitations
   - **Illustration (Right):** An adult co-facilitator kneeling on the ground with young children examining potted plants and outdoor flora.
2. **Processes (Green Header Box)**
   - **Text Points:**
     - Child-led nature play
     - Sensitive adult role
     - Reflection / observation
   - **Illustration (Left):** Children engaged in self-directed outdoor play with an attentive adult observing and interacting nearby under trees.
3. **Immediate Outcomes (Blue Header Box)**
   - **Text Points:**
     - Calm / regulation
     - Sustained engagement
     - Social connection
   - **Illustration (Right):** Three children sitting together peacefully on rocks in a natural setting.
4. **Intermediate Outcomes (Gold Header Box)**
   - **Text Points:**
     - Eco-empathy
     - Agency
     - Belonging

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- **Illustration (Left):** Two young children kneeling together under a bright sun, carefully cradling a small plant sprout in their hands.

5. **Long-Term Outcome (Green Header Box)**
   - **Text Points:**
     - Environmental identity
     - Stewardship mindset
   - **Illustration (Right):** Two older children working together in a sunny landscape to plant and nurture a growing seedling.

Footer - Organization: AkadiEco & Mentorship Ventures Kenya

Long Description for Figure 2

This circular infographic created by **AkadiEco & Mentorship Ventures** illustrates nature-based play prompts centered on environmental love and connection, structured as a floral wheel with a central heart, eight colored petals, and an outer ring of play invitations.

Center Core

- **Green Heart Icon:** "Pendo Mazingira" (*Love Environment*)

The Eight Petals (Environmental Themes)

Moving clockwise starting from the top:

1. **Top (Blue):** Pendo Maji — *Love Water* (illustrated with water splashes)
2. **Top Right (Yellow):** Pendo Hewa — *Love Air* (illustrated with blowing dandelion seeds)
3. **Right (Green):** Pendo Mimea — *Love Plants* (illustrated with sprouting leaves)
4. **Bottom Right (Brown):** Pendo Miti — *Love Trees* (illustrated with a child hugging a tree trunk)
5. **Bottom (Green):** Pendo Anga — *Love Sky* (illustrated with flowers and sky motifs)
6. **Bottom Left (Orange/Terracotta):** Pendo Ardhi — *Love Land* (illustrated with fallen leaves and soil)

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7. **Left (Dark Brown):** Pendo Wanyama — *Love Animals* (illustrated with animal paw prints)
8. **Top Left (Bright Yellow):** Pendo Rasilimali ya Asili — *Love Natural Resources* (illustrated with honeycomb, roots, and bees)

Outer Ring ("Play Invitations Around the Wheel")

The outer ring lists specific interactive activities aligned with the nature themes:

- **Splash & Pour** (positioned above *Love Water*)
- **Blow & Chase** (positioned above *Love Air*)
- **Cloud Gaze** (positioned near *Love Air / Plants*)
- **Leaf Rub** (positioned near *Love Trees / Sky*)
- **Treasure Build** (positioned near *Love Sky / Land*)
- **Barefoot Touch** (positioned near *Love Land / Animals*)

Treasure Build (positioned near *Love Natural Resources*)

Long Description for Figure 3

This infographic presents a 7-level framework structured around the acronym **MIRACLE**, framed as a "Facilitation Ladder for Eco-Empathetic Nature Play." The graphic features stacked text blocks on the left aligned with a stone staircase on the right, surrounded by lush vines, yellow flowers, and a bright sun with a yellow bird perched at the top step.

Header

- **Title:** MIRACLE Approach
- **Subtitle:** A Facilitation Ladder for Eco-Empathetic Nature Play

The MIRACLE Framework Steps

- **M — Mingle Genuinely**
    - *Theme:* Trust & joy
    - *Approach:* Adult presence that is warm, attentive, and non-directive.
    - *Outcome:* Child gains emotional safety.

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- **I — Illuminate Feelings**
    - *Theme:* Emotional awareness
    - *Approach:* Adults name and validate emotions observed in play.
    - *Outcome:* Child gains self-expression and regulation.
- **R — Respond to Needs**
    - *Theme:* Safety & care
    - *Approach:* Adults respond sensitively to physical, emotional, or social needs.
    - *Outcome:* Child gains security and confidence.
- **A — Anchor Trust**
    - *Theme:* Safety & autonomy
    - *Approach:* Adults remain consistent, calm, and predictable.
    - *Outcome:* Child gains freedom to explore independently.
- **C — Call to Belonging**
    - *Theme:* Inclusion & identity
    - *Approach:* Adults invite participation without pressure.
    - *Outcome:* Child gains sense of belonging and acceptance.
- **L — Learn Together**
    - *Approach:* Adults co-explore rather than instruct.
    - *Outcome:* Child gains confidence, inquiry, and voice.
- **E — Empower Regeneration**
    - *Theme:* Hope & stewardship

Footer - Organization: AkadiEco & Mentorship Ventures Kenya

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Nature and Place-based Environmental Education: A Primary Grade Teacher Focused Group Case Study in Wilmington, NC

Christine Jie Li, PhD; Beth Saile, MS; & Callie Hendricks, BS

Introduction

This project examines how to make nature- and place-based environmental education more accessible in elementary classrooms, particularly in coastal North Carolina. Although research consistently shows that outdoor and locally grounded learning strengthens student engagement, sense of place, and pro-environmental attitudes, teachers face persistent barriers, including limited time, a lack of standards-aligned materials, and insufficient preparation resources. A five-day carnivorous plant unit was developed as a model for fully prepared, standards-aligned curriculum that integrates local ecology, hands-on activities, and clear instructional supports. During Fall 2025, a focus group of elementary teachers from New Hanover County Public Schools evaluated three coastal ecosystem lessons, highlighting strengths such as local relevance, engaging phenomena, strong content support, and opportunities for scientific discourse. Teachers also identified key needs, including explicit differentiation strategies, ready-to-use materials, pacing guidance, and integration of real data. Findings underscore the importance of designing phenomenon-driven, classroom-ready, locally grounded environmental education (EE) curriculum that aligns with state standards and supports teacher implementation.

The shift in how much time children spend outdoors has become one of the most talked-about childhood trends of the past decade (Waite, 2010). The author of *Last Child in the Woods* argues that children suffer from nature-deficit disorder when disconnected from the natural world. Other studies show that digital platforms compete directly with outdoor experiences and classroom instruction (Siskind et al., 2022). Urbanization and reduced green areas also add to the safety concern and keep children from exploring outdoors (Kabisch et al., 2017). Together, these ideas underscore a growing recognition of the need for nature and place-based education among elementary students, approaches that ground learning in real environments, local ecosystems, and hands-on experiences. This shift pushes back against overly test-driven

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models by showing how outdoor, experiential learning supports academic growth, emotional well-being, and a deeper sense of stewardship for the places that children call home (Sobel, 2004).

Problem Statement

Despite evidence that place-based and outdoor learning enhances student engagement and pro-environmental attitudes, many classrooms still face barriers to implementing nature-based lessons. Research shows that environmental education (EE) can strengthen students' sense of place, especially when students engage directly with local ecosystems – even in highly urbanized settings (Kudryavtsev et al., 2012). However, classroom teachers often struggle to bring these experiences into their instructional practice.

One challenge is the inconsistent way that place-based education is implemented. Many environmental lessons created by informal educators in park, museum, and aquarium settings are high-quality, but are not designed with state curriculum requirements in mind. As a result, they frequently lack connections to required standards and learning objectives that classroom teachers must prioritize. This aligns with broader research showing that teachers often lack the time, training, and support needed to adapt EE lessons to school settings or align them with required curriculum (Guevara-Herrero et al., 2025).

A second barrier is the lack of classroom-ready materials. Studies show that preparation time, logistics, and insufficient resources are among the most pervasive obstacles to implementing EE whether in school or informal settings (Ding et al., 2025; Pereira et al., 2022). Teachers cannot devote personal time to assembling materials and activities or navigating complicated lesson structures.

Because of these structural barriers, most classroom teachers cannot integrate place-based learning into their instruction, even when they recognize its value. The disconnect between what research recommends and what standards-based teaching allows prevents students from accessing meaningful EE that connects them to their own communities. These barriers point to a need for high-quality, standards-aligned, fully prepared place-based curriculum that teachers can use without additional preparation.

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Without resources designed specifically for classrooms, the benefits of place-based EE may remain largely out of reach for students.

Background

Recent research shows that the benefits of nature exploration and investigation are numerous and extensive. These benefits include cognitive, psychological, and physical gains for individuals in early childhood and beyond. Today, as children experience an increasing disconnect from nature (Driessnack, 2009), nature-based education can help address this issue and foster stronger relationships with the environment (Speldewinde & Campbell, 2024). The term nature-based experiences can mean many different types of activity, but generally includes interacting with natural elements, such as trees, plants, and water (Dankiw et al., 2020). In a systematic review studying the impacts of *unstructured nature play* on early childhood health, Dankiw et al. (2020) found consistently positive impacts on both physical activity and cognitive play. Nature play can help mediate different health issues like obesity, depression, cardiovascular disease, and anxiety (Frumkin et al., 2017). One identified barrier to nature exploration is perceived dangers to students, such as wildlife-related issues, hazardous plants, or possible injuries, but this also means more adult surveillance and attention are warranted (Speldewinde & Campbell, 2024). Even though nature experiences may require more attentive supervision, it helps students carry an appreciation of the environment into later schooling (Speldewinde & Campbell, 2024).

The issue of children not reconnecting with nature is increasingly prevalent, and a large body of literature addresses this trend. Today, children are more exposed to technology than ever, which can potentially cause negative physical effects and mood changes (Žulec et al., 2022), making it increasingly important to reconnect them with their natural environments. Another concern is that income is one of the biggest predictors of access to nature activities in both urban and rural communities, with students from higher-income families having more access to nature activities (Jensen et al., 2024).

Importantly, childhood interactions with nature can carry into a lifetime relationship with the environment (Barrable et al., 2024), in a snowball effect of sorts

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(Jensen et al., 2024). Individuals with a lack of connection with nature report lower life satisfaction (Barrable & Booth, 2022), so fostering early relationships with the environment can have lasting benefits for emotional well-being.

Place-based education connects students to the physical place where they live (Yemini et al., 2023). School-based food forests are an example of this learning strategy that can help students deeply engage in hands-on, practice-based learning while participating daily in gardening activities (Gobs, 2025). A study using GPS technology for localized activities and games has shown it can help engage students with their local area (Isogai et al., 2012).

A noticeable gap exists in existing research on coastal place-based education, such as in North Carolina. This does not necessarily mean place-based education is absent in these coastal spaces; rather, the literature on the topic is limited. Many place-based education opportunities can help connect children to their coastal communities. Near the coast, educators can use marsh habitats and sandy beaches for a range of learning activities. Field trips to barrier islands are common in areas like coastal North Carolina, and students can interact with nature and living organisms. Masonboro Island, an undeveloped barrier island in southern North Carolina, is a site frequently used for place-based education. Students from elementary schools in the surrounding counties take boat rides to explore and learn about island habitats and participate in activities like net fishing and shark tooth hunting. Students can experience surrounding environments they may not access outside of school, fostering a relationship with their coastal homes.

Appropriate Approaches/Strategies

A Place-Based Education Program: Learning About the Venus Flytrap. To illustrate how high-quality, place-based curriculum can be designed for formal classrooms, researchers developed a five-day instructional unit centered on one of coastal North Carolina's environmental highlights: Carnivorous plants. Carnivorous plants offer a compelling anchoring phenomenon: *Why did these plants evolve to eat bugs?* This phenomenon immediately sparks curiosity and encourages students to formulate a hypothesis based on observable natural events.

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This unit engages students in exploring plant adaptations, nutrient-poor soils, fire-dependent ecosystems, and local conservation issues. Each day includes hands-on activities such as trap-identification challenges, habitat mapping using local geography, and creative projects that apply knowledge of carnivorous plant parts. This structure reflects research suggesting that experiential EE can deepen students' sense of place and personal value of the local environment (Kudryavtsev et al., 2012). Because teacher time constraints can hinder EE implementation (Ding et al., 2025; Pereira et al., 2022), the unit is fully classroom-ready. All materials (including lesson guides, student worksheets, visual supports, and optional extensions) are prepared for immediate use with no teacher assembly required. This directly addresses preparation-time and resource limitations that often prevent teachers from implementing EE lessons.

Figure 1

Demonstration: A Model of How the Venus Flytrap Works in Nature



Alignment to state curriculum standards was another design priority. Each activity in the unit directly corresponds with North Carolina's science standards. Concepts such as plant structures, adaptations, ecosystems, and human impact are introduced in ways that fit naturally within existing educational frameworks, helping teachers integrate place-based EE without sacrificing required academic outcomes.

Local relevance is woven throughout the unit. Students examine local maps of nature preserves to investigate where Venus flytraps grow in their own region.

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Discussions about poaching, habitat loss, and fire suppression invite students to consider real conservation challenges affecting species that exist only miles from their homes. Research suggests that such localized EE can foster stronger connections between students and their home communities, which supports long-term environmental attitudes and awareness (Kudryavtsev et al., 2012).

Taken together, this unit demonstrates how standards-aligned, fully prepared EE curriculum can make place-based education both feasible for teachers and meaningful for students. It serves as a model for developing broader coastal North Carolina lesson sequences grounded in local ecology and designed for classroom realities.

Teacher Focus Group-Design and Implementation

A focus group was conducted with elementary educators in October 2025, during which they highlighted additional strategies for implementing the lessons (IRB #H25-0871). This focus group included five elementary educators from New Hanover County Schools. The researchers led the focus group using a pre-designed facilitation schedule. The sessions aimed to present, demonstrate, and gather educator feedback on three place-based environmental education lesson plans developed for upper elementary students in coastal North Carolina.

Participants received an overview of "Five Wonders of Coastal North Carolina." Three lessons were selected for in-depth demonstration: *Carnivorous Plants, Native Plants and Animals of Coastal North Carolina, and Longleaf Pine Savannas and Fire Ecology*. Two additional lessons—*Wonderful Watersheds* and *Saltwater Marshes & Tidal Estuaries*—were acknowledged but not available because they were still in development.

Each demo followed a consistent structure: (1) an overview of lesson goals and NC standards alignment, (2) a short instructional presentation, and (3) demonstrations of selected student activities. Teachers participated in these activities and, after each lesson block, completed short mini-reflections to capture immediate feedback on each lesson's clarity, feasibility, and classroom fit.

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The afternoon ended with a facilitated focus group discussion. Teachers responded to guided questions and open discussion regarding lesson strengths, barriers to implementation, materials, and time constraints. Teachers were referred to by initials to recognize individual perspectives without breaking confidentiality. The team is using feedback from the session to refine lessons and support future curriculum development for classrooms and educator training.

Conclusion/Recommendations

Lessons Learned from the Teacher Focus Group. Focus group participants showed strong consensus on curriculum strengths and recommendations for improving classroom readiness. Participants emphasized that the lessons were engaging and locally relevant, while also identifying constraints related to time, materials, and instructional support. The following themes represent the most common findings:

1. Standards Alignment is Essential for Adoption. Teachers were clear that even high-quality environmental lessons cannot be used unless they are explicitly connected to state standards. Future curriculum development must center standards alignment from the outset.

2. Teachers Regarded the Lessons as an Integrated Whole Rather Than as Separate, Disconnected Sessions. Teachers described the lesson plans as functioning more like multi-day instructional units than single-day lessons. While they viewed this positively for its depth, teachers emphasized the need to frame the lessons as a unit that could be chunked across multiple days. A teacher identified as VM said, “I would not be able to get through all the components in one day in 45 minutes.” Teachers recommended implementing suggested stopping points, guiding questions for each section, and language that helps teachers decide how to pace lessons across days.

3. Participant Engagement Was Notably High, Particularly During Lessons that Incorporated Elements such as Fire, Location, and Structured Discussion. Teachers identified high levels of engagement in the lessons, with fire ecology and longleaf pine savannas emerging as particularly compelling because of their perceived “wow factor” and the concept of an environmental “phenomenon.” VM highlighted the

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importance of beginning each unit with a phenomenon that prompts students to notice, wonder, and investigate, and said, “Fire will captivate [students]. . . something that people deem bad actually helps the environment.”

Teachers also noted that the activities naturally encouraged scientific discourse and evidence-based reasoning, even when this was not a stated design goal. One teacher, AB, said, “We were engaged in argument – claim, evidence, reasoning – and that’s a science and engineering practice.” This suggests alignment with current shifts towards inquiry-driven science education.

4. Local Relevance Was a Major Strength and Motivator. Teachers emphasized that the place-based focus on coastal NC ecosystems was one of the curriculum’s greatest strengths, in contrast to broader programs that lack geographic specificity. They expressed that students benefit when lessons focus on species and ecosystems they can see in their own community. They described this local focus as a meaningful way to support environmental identity and community connection.

AB said, “That’s the biggest drawing factor for me… It’s specific to my area.”

EB said, “My students would like it because it’s about their hometown.”

Teachers stressed opportunities for students to learn outside of the classroom by visiting local parks or free public sites, increasing equity and accessibility.

“I can take my children to a place I don’t have to pay for, like a park,” VM said.

5. Teachers Equally Valued Content Support and Student Activities. Teachers stressed that they are not content specialists, and that the strong background information included with the curriculum gave them confidence and instructional effectiveness.

“There was a lot of information I learned today… It gave me the confidence to teach it,” VM said.

Teachers noted that background content, vocabulary, and key explanations should be explicitly included in written materials so they could anticipate student questions.

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6. Accessibility and Differentiation are Attainable; But Must Be Clearly Defined. Teachers agreed that lessons were adaptable for diverse learners and multilingual learners, but emphasized that differentiation supports should be labeled and built in, rather than assumed. Teachers identified visual supports, step-by-step instructions, and structured scaffolds as especially important.

7. Teacher Time Was the Main Barrier, Not Willingness. The most consistent barrier to implementation identified was time required to prepare materials. Teachers were clear that they would not implement lessons requiring extensive assembling, cutting, or prep outside instructional hours.

"If I have to create all the items . . . I don't have the time, so I'm not going to do that," VM said.

Teachers favored reusable, pre-made materials (i.e., card sets, posters) that could be stored easily and used year after year.

8. Teachers Requested More Data and Higher-Order Questioning Supports. Teachers emphasized the need to integrate real data, including charts and graphs, to support analysis and alignment with statewide assessment expectations. They requested pre-written higher-order questions and guidance on discussion trajectories to support standards-aligned conversations.

9. Community Partnerships Were Seen as a Major Opportunity. Teachers identified numerous local organizations, parks, and professionals that could meaningfully extend lessons, including state parks, conservation groups, arboretums, fire departments, and island education programs. Teachers cautioned that these extensions should be framed as optional, recognizing variability in scheduling and access.

Together, these insights highlight the importance of creating place-based curriculum that is phenomenon-driven, standards-aligned, fully prepared, and rooted in the unique ecology and nature of coastal North Carolina. We hope more educators will fall in love with taking students outdoors to explore their places and communities through nature exploration and outdoor learning.

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Play Across the Lifespan

From the Womb to the Tomb: Play Across the Lifespan

"How come we never do anything fun?" Inspiring Play Advocates in the College Classroom

Being Fully and Vibrantly Alive Through Play: Play in the College Classroom

Playful Pedagogies and Preservice Teachers' Mindsets



IPA CHRISTCHURCH 2026

USA IPA American Association for the Child's Right to Play

From the Womb to the Tomb: Play Across the Lifespan

April Kendrick, PhD and Kimberly Blitch, PhD
The University of Alabama
Alabama Infant Toddler Specialist Network

"What do most Nobel Laureates, innovative entrepreneurs, artists and performers, well-adjusted children, happy couples and families, and the most successfully adapted animals have in common? They play enthusiastically throughout their lives."

(Stuart Brown, Institute of Play)

Introduction

Play is the fundamental right of children (U.N. Article 31, 1989). There are a plethora of studies spanning across fields of education, human development, psychology, and pediatrics on the benefits and impacts of play on physical, social, emotional, and cognitive development (Burdette & Whitaker, 2005; Frost, 1998; Milteer & Ginsburg, 2012; Saracho & Spokek, 1998; Sanders, 2010). Play is a state of mind, a way of being, an attitude or motivation rather than a behavior (National Institute for Play, N.D.). However, the concept of play remains constrained during early childhood, perhaps due to pressures for academic success, the demand for standardized and structured activities in early grades, and even an influx of technology.

Problem Statement

For adults, permission and opportunities for play are further constrained. Often, play is seen as a child-exclusive endeavor, not as important across the lifespan. Is this because as we age, we lose the understanding, joy, and ability to play? Yet research shows that play not only matters but also offers significant *benefits* as we age.

Despite the many conferences, summits, and initiatives devoted to play (IPA, NAEYC, US Play Coalition), justification and advocacy for play still seem needed. This paper will outline the role of play across the lifespan to highlight its value not just in childhood but throughout a person's life.

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Background

Play in Childhood

Prenatal Play

While less studied, research on fetal development through the lens of play behaviors shows that the exploratory behaviors exhibited by the unborn child resemble those seen in infants, suggesting an intrinsic need or drive to engage with the environment in novel ways. Using 4D ultrasound to observe fetal movement, Harmon et al. (2014) highlighted complex motor behaviors (kicking, stretching, turning) between 24 and 28 weeks gestation. These movements are not simply reflexive; they are early signs of intentional exploratory behavior in large motor development.

Similarly, Windrim et al. (2006) used 4D ultrasound to document complex fetal movements to examine health and well-being. Other studies explore fetal behaviors related to sensory systems such as hearing and responsiveness to sounds (Hepper & Shahidullah, 1994), where fetuses begin to respond to sound around the 25th week of gestation, which may have implications for language development and cognition. We see bonding and recognition of the mother's voice postnatally (Andrade et al., 2021; DeCasper & Fifer, 1980), which plays a pivotal role in maternal bonding with her infant and thus facilitates attachment. These studies support the idea that early fetal behaviors lay the foundation for infant well-being and likely influence exploration and play-like activities.

Play During Infancy and Toddlerhood

In infancy, play continues to facilitate all domains of development as babies begin exploring their world. Play may be enhanced with parents, siblings, and family members through games like peek-a-boo and by imitating a baby's facial expressions, which ultimately strengthen serve-and-return pathways, communication, and language development. It is through play, such as dropping a toy from the highchair and the parent picking it up to hand it back, that an infant begins to understand cause and effect and their influence on the world around them. They begin to understand objects and people, and develop initial understandings of schemata and concepts.

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Babies learn best through experiences and their senses, a fundamental aspect of Constructivist learning theory. Highlighted by pioneers such as Piaget (1964) and Vygotsky (1978), Constructivist learning theory illustrates how play is central to child development, positing that learning is not passive, but actively constructed by the learner through exploration and experience. Through various types and forms of play, children engage in hands-on exploration, social interaction, and a variety of physical experiences through which they actively construct knowledge.

This learning becomes even more important as children become toddlers and seek autonomy. During this time, they engage in parallel and then associative play (Parten, 1932) and move toward more interaction with others. Vygotsky introduced the importance of social influences through his concept of the Zone of Proximal Development, highlighting the value of engaging with someone more knowledgeable to support learning and exploration through guidance and co-constructed knowledge. The experienced partner can be an older sibling or peer who can elevate a child's learning and performance (Zuckow, 1989) and help the child access knowledge they cannot gain alone.

Play During the Preschool Years

As children age, play remains the primary conduit for learning, especially as their play becomes more complex with environments, materials, and peers. Preschool helps build skills children will find useful in school, such as working in groups, sharing, negotiating, resolving conflicts, and learning self-advocacy skills. (Erickson, 1985; Hurwitz, 2003; McElwain & Volling, 2005; Pellegrini & Smith, 1998). Preschool creates opportunities to engage and play with peers in a variety of ways. Most preschools have learning centers that facilitate learning and play.

Additionally, opportunities to engage in play on the playground also help to encourage development. Outdoor play and nature spaces are valuable, providing rich, hands-on learning that promotes children's overall well-being (Kiviranta et al., 2023) and supports school readiness (Zhu et al., 2024). Children who attend preschool are better adjusted in elementary school (Ladd & Price, 1987).

Play During School Age

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Play does not diminish in importance for school-age children, but it shifts in how children engage; play evolves. Piaget illustrates this shift as children enter the concrete operational stage (Piaget, 1964). During this time, children often engage in sports and board games, which have high cognitive demands. Social negotiation in play becomes essential (Winter & Goldfield, 1991), and children's reasoning and understanding of others' perspectives evolve into more complex collaborative play.

Educators are encouraged to create environments that facilitate both unstructured and structured play, allowing children to transition fluidly between different types of play and learning opportunities. This variety provides opportunities to learn in various formats (e.g., large- and small-group, learning centers, routines) and across a spectrum of instructional types that guide play (Hirsh-Pasek & Cook [NAEYC], 2017). Understanding this evolution is critical for educators and parents to foster environments that support children's overall growth and learning.

For adolescents and emerging young adults, play often takes the form of hobbies, recreational sports, creative endeavors, and exploration. These activities promote stress relief, identity formation, and social bonding.

Context of Play in Adulthood

Whether it loses importance or adults have simply forgotten how to play in an ambition-driven world, adults spend less time engaged in overtly playful activities. However, play still serves important psychological and social functions. Adults involved in playful leisure pursuits tend to report higher well-being, better work–life balance, improved emotional resilience, problem-solving, and creative engagement, which enhances innovation and collaboration (NIFP, N.D.).

Play is often used as a paradigm in several therapeutic contexts, including play therapy with children, the role of play in medical preparation and distraction in child life settings, and pediatric healthcare (Dag et al., 2021). In fact, the American Academy of Pediatrics (AAP) recommends that pediatricians "prescribe" play to families, recognizing that play is essential for healthy brain development, stress reduction, and social-emotional skills.

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These examples illustrate how play is used in professional, evidence-based practice to support child development by instructing and guiding parents to engage as play partners. Instructions such as observing and following the child's lead, without taking over play, are key to an effective play partnership.

Playful Learning

In Kendrick's 2013 study on play behaviors, she examined the role teachers play while engaging children on the playground. Coded for child and teacher behaviors, she found teachers fall into different categories: observer, safety monitor, stage manager, facilitator, and play partner. The study found that more didactic teachers unintentionally disrupted play when they tried to engage with children. Children ceased playing and shifted to attention-seeking behaviors from the teacher in what Kendrick identified as a "policeman effect."

However, the belief that adults play an important role in modeling and engaging in children's play is still supported and encouraged. For example, the Life is Good Playmaker Project (Gross, 2011) teaches and encourages adults to enter play to understand children's development, for the benefit and joy of the adult engaged in play. This foundation works with educators and adults, often following natural disasters as a way of healing the community through play. Interestingly, at the World Association for Infant Mental Health (WAIMH) 2023 conference, a panel session was held on supporting young children in natural disasters (Wantanabe, H., et al., 2023). The panelists shared a common theme: play helped communities heal after natural disasters. This was a global truth and powerful message.

Playful Learning in the College Classroom

As University faculty, we observe that pre-service teachers are often intimidated or inhibited when asked to explore and play with materials they would likely use in the early childhood classroom. They often revert to achieving tasks in the "correct way" and are less likely to engage in play for exploration and joy. While pre-service teachers may see the connection between play and learning, they may struggle to use play to achieve learning outcomes (Szilagyi et al., 2015). Building experiential learning activities helps pre-service teachers overcome inhibition and engage more fully in playful approaches

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when working with children in the classroom. How can they model if they are not willing to explore themselves?

Play in the Workplace

In some areas of leadership, play is discussed as a strategy to build team cohesiveness, foster joy in the workplace, and improve worker performance. Play improves leadership, employee satisfaction, retention, problem-solving, and creativity (Johnson, 2014). Even in adulthood, play helps maintain cognitive sharpness, strengthen relationships, and provide outlets for self-expression (National Institute for Play, N.D.). Adults engage in play to support their children's development but also to experience joy, connection, and renewal for themselves. Furthermore, adults who regularly participate in social clubs, supper clubs, board-game groups, or recreational athletics benefit from increased social connectedness and reduced feelings of isolation. Engaging in playful activities may counterbalance chronic stress and contribute to improved cardiovascular and mental health (Robinson, L. et al., 2025).

Play Among Senior Adults

Engaging in play activities, whether through digital games, traditional games, or other playful interactions, offers multiple benefits for senior adults. These activities enhance cognitive function, promote social connections, improve physical health, and support overall well-being. Cognitive stimulation is one of the most significant benefits of play for older adults. Digital games encourage intellectual engagement through brain-training and problem-solving elements, potentially mitigating age-related cognitive decline. These games often involve physical movements that enhance motor skills and cognitive processing, fostering intellectual activity as seniors navigate challenges during play and contributing positively to mental acuity (Boj et al., 2018). Engagement in play correlates with improved executive functions, potentially leading to better memory and information processing capabilities (Guo et al., 2021; Tsai et al., 2017).

Play serves as a crucial avenue for social engagement among older adults. Shared play experiences contribute to improved emotional well-being and life satisfaction among seniors, underscoring the role of social interaction in promoting mental health (Hirao et al., 2012; Suzuki et al., 2014).

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Physical health benefits are also evident among older adults who incorporate playful activities. Exergames, which combine physical exercise with gaming, encourage seniors to move. By making physical activity enjoyable, these games support overall fitness, which is closely linked to improved cognitive function (Rosi et al., 2025). Furthermore, the motivational aspects of games may encourage older adults to participate in physical activity, reducing sedentary behavior that can exacerbate health issues (Cai et al., 2025).

Playful interactions can also significantly enhance psychological well-being. Enjoyable activities foster positive affect, which is linked to greater resilience and stress relief among older adults (Dingle et al., 2021; Wangliu, 2023). Structured play activities have shown promise in alleviating depression symptoms and enhancing quality of life, as they encourage active participation in social settings, allowing seniors to build support networks and camaraderie (Milani et al., 2025; Hirao et al., 2012). By fostering an environment where seniors can partake in playful activities, whether through traditional or digital formats, we can significantly enhance their quality of life and promote healthy aging.

Multigenerational Play

Multigenerational play, involving interaction between children and their grandparents or other elders (aka "Grandfriends"), offers numerous mutual benefits that support the developmental, emotional, and social outcomes for participants of all ages. Older generations have traditionally held many roles, such as providing supplemental caregiving, sharing wisdom, and passing down family traditions, while younger generations share up-to-date knowledge (Uhlenberg & de Jong Gierveld, 2004). One significant advantage is stronger social skills and emotional bonds within families. Interactions in play spaces designed for different generations create shared experiences that promote understanding and emotional connection between children and older adults (Farrell, 2025; Yohannan et al., 2025). They not only allow for skill transfer but also strengthen family ties, aiding in the emotional well-being of both age groups.

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Multigenerational play has been shown to positively impact child development. Older adults often serve as mentors or facilitators of play, sharing knowledge and experiences that enrich children's learning and socialization. This facilitative role provides cognitive stimulation for older adults, enhancing their mental health and well-being (Farrell, 2025). This intergenerational interaction fosters resilience and holistic development in children, as they benefit from the diverse perspectives and experiences of older generations.

The University of Alabama lab school pairs classes of young children with senior adults for music, movement, and story time. This interaction strengthens bonds, reduces isolation, and improves psychosocial well-being in older adults (Kaufman et al., 2016; Hirao et al., 2012), while also enhancing young children's experiences through "grandfriends."

Nurturing these intergenerational bonds is essential. Grandparents often play a critical role in their grandchildren's holistic development, leading to better outcomes in socialization and emotional stability while also promoting the continuity of cultural and familial traditions and giving children a sense of identity and belonging (Farrell, 2025). Additionally, children may experience fewer behavioral issues and develop improved coping strategies through the emotional support these meaningful interactions provide (Yohannan et al., 2025).

Implementing these communal strategies can significantly enhance the fabric of community life, creating networks of support that benefit all age groups (Farrell, 2025; Yohannan et al., 2025). Older generations' ability to contribute positively to children's lives underscores the importance of maintaining intergenerational relationships within modern family and community structures.

Conclusion of Benefits of Lifespan Play

Play is a fundamental aspect of human experience extending beyond childhood, offering invaluable benefits across various life stages. Research suggests that play significantly enhances cognitive skills throughout one's life, fostering problem-solving skills, enhancing cognitive flexibility, and encouraging critical thinking and creativity. The nature of play evolves, but the benefits are the same. Play supports cognitive agility

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and neural plasticity and serves as an essential outlet for emotional expression and regulation. Play relieves stress, providing relief and joy, thus improving mood, mental health, and well-being. It fosters connection, a sense of community, and belonging (Howes & Matheson, 1992). Play supports balance, strength, and coordination, encouraging physical activity. Playing outdoors offers unique benefits, including connection with nature, which also supports mental health and well-being. Regular physical play reduces the risk of chronic disease and supports long-term health.

Engaging in play throughout life fosters lifelong learning and adaptability. As individuals encounter new challenges, whether personal or professional, experiences gained through playful learning can help them adapt to new situations.

The stress-free nature of play encourages curiosity and exploration, facilitating continuous learning well into older age (Flack et al., 2023). By nurturing a playful mindset, individuals remain open to new ideas and experiences, enhancing their ability to cope with change (Guralnick & Groom, 1987).

In conclusion, play is a lifelong necessity—an essential component of human growth, connection, and well-being. From prenatal movement to the cognitive and emotional enrichment experienced in older adulthood, play remains central to how individuals learn, adapt, and thrive. Play opportunities for all ages matter across contexts, from learning and schooling to work, hobbies and pastimes, and community-building settings. Recognizing play as a fundamental human need across the lifespan requires shifting societal attitudes, educational practices, and community planning. We invite readers to consider how to integrate play into the settings and contexts we move through daily, from our workplaces to family reunions. By valuing and nurturing play across developmental stages, we promote healthier individuals, stronger families, and more connected communities.

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"How come we never do anything fun?" Inspiring Play Advocates in the College Classroom

Stephanie Kuntz-McAllister, PhD

Introduction

One day, my undergraduate students came into my classroom already engaged in a fervent discussion about the struggles they are having in their classes. I heard the usual complaints: too much reading, unfair grading, and long lectures. What I then heard from them completely reshaped my teaching philosophy:

> "How come we never do anything fun? All we ever talk about is how kids learn best, but I don't think they [instructors] even care about how we learn best."

This statement shook me to my core. I had to pause and reflect on my own practices. *Do I do fun things in my class? Is my class engaging? Am I teaching in a way that is actually conducive to learning? Am I actually modeling what I want my students to be? Will my teaching inspire my students to be play advocates?* I was inspired to be better, and frankly terrified by the possibility that I could evolve into the type of instructor I hated as a college student. I chose to critically evaluate how aligned my beliefs about teaching and play were with the practices I was *actually* engaging in. I also began to consider how my actions were influencing the professionals my students will become. This paper will discuss strategies I have used to integrate play into my college classroom to promote learning and inspire my students to become play advocates, and the reflection process I underwent to develop those strategies.

Problem Statement

As college instructors, we have a responsibility to support our students' educational success and help prepare them for their careers beyond the classroom. As play advocates, I believe we also have a responsibility to inspire students with the power of play in our classrooms so they can learn better and become play advocates themselves. This is a challenging task, as academia and play are two words often not used in the same sentence. Play and work are often perceived as contrary forces that cannot coexist in the same activity and space. However, in the wise words of Dr. Stuart

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Brown, “The opposite of play is not work; the opposite of play is depression.” (Brown & Vaughan, 2009, pg. 126). Bringing play into spaces designed to shut it out takes intentionality and creativity. Through critical reflection, innovative and creative strategies, and lots of trial and error, we can help play infiltrate the ivory tower of academia.

Background

Play is widely undervalued and underutilized in the college classroom (Forbes, 2021). Play offers many benefits and can help create a classroom environment conducive to learning (Hasheem, 1994). Playful practices in the college classroom can enhance learning, ignite motivation, improve student affect, and cultivate a warm, safe classroom climate (Forbes, 2021). Play offers many learning benefits, and by modeling playful practices in the college classroom, we can help students understand the power of play and become advocates for it in the field.

Appropriate Approaches/Strategies

I will outline the process I used to create a classroom that integrates playful practices and inspires students to become play advocates, starting with my inspiration and beliefs, then how I set the classroom tone, and how I structure my assignments to integrate play.

Find Your Inspiration and Reflect on Your Beliefs

The first step I took to integrate more playful practices was to reflect on what I believe about play and learning. I looked at the Who, What, Where, When, Why, and How of my play story in the classroom. If you are thinking about integrating more play into your classroom, I encourage you to take some time to reflect on your own play story by asking yourself the following questions:

What is play? Outlining what I view as play helped me form a clearer vision of what play could look like in my classroom.

My students know I am a perpetual seeker of definitions. This is a fault when it comes to defining play, as play does not fit neatly into a definition, and some play

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theorists oppose an absolute definition of play. Instead, I explored characteristics of play identified by play theorists (Brown & Vaughan, 2009; Johnson et al., 2005) and identified the recurring characteristics that resonated most with me. For me, play sparks joy, engages me to the point where I enter a flow state and lose track of time, allows for flexible or creative thinking, is voluntary but can happen during a compulsory activity, and, most of all, *feels like play*.

Why do I care so much about play? Identifying my "why" helped motivate me to change. I often look back to my "why" for continuing inspiration.

I tried to explore my "why" beyond the empirical support for the benefits of play. On a personal level, I care about play because it has changed my life. Play has helped me find resilience in hardship, brought me joy to the mundane, and served as a tool for connection with others. Play has done so much more than just influence my life; play has given me life.

Who inspired me as a play advocate and instructor? According to Bandura's Social Learning Theory, we learn by observing others (Bandura, 1977). Consider who you admire and whose behavior you would like to model in the classroom.

I think of the instructors I had in school who made coming to class exciting, the mentors who have demonstrated the joy and resilience of play, and the children who play fervently. Those individuals have gained more than my respect; they hold my reverence for their passion for play.

Where and When am I already integrating play into my teaching practice? Identifying where you already integrate play can help you engage more intentionally and build on it. Sometimes, we develop playful practices organically. If you can identify those naturally playful opportunities, you can engage in them more intentionally and more often.

When I started teaching, I had misguided concerns that playfulness could be considered "unprofessional." I tried to teach the way I thought a college instructor should. Despite my efforts to be someone that I am not, my playfulness often came out

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in humor and opportunities for creative expression. It was much more natural for me to build on the playful practices I was already using than to integrate new ones.

How can I integrate play into my classroom better?

This question, along with copious amounts of brainstorming and tapping into my roots in early childhood education, led me to some of the playful practices I will outline next.

Setting the Classroom Tone

I believe the first step in creating a culture of play in the classroom is building relational safety and belonging, starting on day one. I typically start the semester by greeting each student individually as they enter the classroom. Students create nametags on the first day of class. They have free rein to do whatever they want with their nametag, as long as it is readable; this includes the option to NOT decorate it because play is not compulsory. I provide markers, stickers, crayons, cardstock, and other miscellaneous craft supplies. To encourage conversations and collaboration among students, I provide a limited number of supplies. If a student wants a dinosaur sticker, they have to find the student with the sheet of dinosaur stickers and ask them to share. I have seen this strategy spark conversations between students and ultimately create community in the classroom.

For our introductory online activities, students can write a paragraph or create a visual in response to prompts. I provide students with an example visual to introduce myself using a collage of words, photos, and playful humor. On snow days when class is asynchronous, I award extra credit to students who submit a photo or description of how they played in the snow. You may notice all of these activities allow students to opt in or out of creative expression and playfulness, without fear of it lowering their grade.

I regularly bring manipulatives to class for students to play and learn. One of my favorite activities in my Child Development class is having students pick some household materials (without knowing what they are for). Then, they must come up with ways to play with a child using those materials to promote a specific domain of

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development. If you do this activity, I highly encourage you to include a lint roller and see how creative your students can be!

Creating a culture of play is hard to accomplish midway through a semester, as I have unfortunately learned from experience. I recommend integrating playful practices on the very first day of class.

Empower Students as Advocates

In every course I teach, I give my students an inspirational pep talk. In this talk, an adult in a position of authority tells them they are important, that their work will change children and families' lives, that they have incredible power to do good, and that their careers will shape the world we live in. For some students, this is the first time they are told that they matter and can make a difference in their communities. This sentiment continues throughout the course.

Model Skills You Want Your Students to Develop

Consider the skills you want your students to leave your class with. What you choose to model depends on what you value. Since I want my students to leave my course empowered as play advocates to the children and families they serve, I must model that I am a play advocate through my approach to teaching. I try to keep my lectures playful and engaging. For example, I teach classical and operant conditioning using pictures of my dogs. I also throw in the occasional comic, meme, and bad joke in a slideshow to keep humor woven into our class. I want my students to be lifelong learners who find joy in what they do. When I attend conferences, I often share photos and something I learned that relates to our course content. I want my students to be flexible when they face challenges, which means I have to be flexible when things don't go as planned, especially with classroom technology.

Structure Your Assignments to Integrate Play

Once a playful classroom tone is established, students flourish when given opportunities for play in their assignments. I reshaped the core assignments in my Child Development course to let students choose how to demonstrate their understanding of course content through an open-ended assignment format. Students are given a list of

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several questions they would typically answer in an essay format. With the option of an open-ended assignment format, students can choose to write a traditional essay, create a podcast, an informational booklet, a recorded presentation, or, if they have an alternative idea, run it by me for approval. Students have developed infographics, an advertisement for their future business, a song, a website, and an informational social media post to demonstrate their learning. Importantly, students can complete a traditional essay format if they prefer. This approach lets students play, be creative, and choose their own format. In an anonymous survey collecting feedback on these open-ended format assignments, 96% of students said they enjoyed having the option to choose how they completed their project, 92% of students believed the open-ended format helped them learn better, and 92% of students felt proud of the work that they submitted.

Conclusion/ Recommendations

How you choose to integrate play into your classroom will be unique to you, your course material, and your students. What works well in my classroom may not work well for you. I encourage you to experiment with different strategies and approaches to find what ignites your students' passion for play. Integrating play in the ivory tower of academia is a challenge that requires innovation, passion, and sometimes failure. It may be hard, but our students are desperate for play. Our world needs more passionate play advocates, and you have the opportunity to shape the next generation of play advocates. So, ask yourself: *do we ever do anything fun in my class*?

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Being Fully and Vibrantly Alive Through Play: Play in the College Classroom

Sharon M. Peck, PhD

Introduction

Higher education is one of the least playful environments that adults encounter, despite a growing body of research demonstrating the developmental, cognitive, and social benefits of play across the lifespan. This white paper refleacts on my experience engaging college students in studying the role of play in their lives and using improvisation games as a catalyst for playful writing. While the course was intended to support novice writers through freewriting, applied improvisation, and playful exploration, the most profound outcome was the educator's unexpected transformation. Integrating play reshaped classroom dynamics, strengthened relationships, and challenged entrenched academic norms. It clarified for me the power that play has for teaching, learning, and living fully.

Problem Statement

This white paper examines how improvisation and playful learning transformed a freshman writing seminar and, unexpectedly, my own teaching identity. Drawing on research on mindset, applied improvisation, and play, I argue that play is not only beneficial for college students — it is essential for educator vitality and the humanization of higher education.

In my quest to understand how play supports learning, I explored many avenues. I did a deep dive into Fred Rogers, fun (Price, 2021; Rucker, 2023), serious play, humor, and ultimately improvisation (Applied Improvisation Network, 2014; Koppett, 2025). This paper focuses on my experiences exploring how improvisation and spontaneity support learning and development in play across the lifespan. I did not expect to be led to lifespan studies; however, the more I explored, the more I learned about the value of play for all ages. The research is definitive on the role of play in development for young children, elementary-age children, and even middle and high school students. I have focused my work on how play supports learning (Holzman, 2017; Peck, 2022; Playworks, n.d.; Sandel, 2019). I've developed frameworks for incorporating aspects of

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playfulness into classroom instruction. Implementing a play-based curriculum policy led me to a deeper understanding of what needs to be in place to support teachers in enacting play-based learning. This led me to team up with IPA colleagues to study the role of the playful mindset in teachers and how to support developing teachers in embracing playfulness. This work also led me to the power of play across the lifespan.

Background

Play is so often treated as something we leave behind when we enter adulthood, as if the moment we step into a college classroom, we are expected to trade spontaneity for seriousness, curiosity for compliance, and joy for productivity. Yet improvisation and spontaneous play remain essential for human growth across the entire lifespan. Scholars like Sawyer and Henriksen (2023/2024) and Russ (2013) have long argued that improvisation is not a childish indulgence but a sophisticated cognitive process that strengthens the brain's ability to shift strategies, generate ideas, and respond to the unexpected. Adults never outgrow the need to explore, adapt, imagine, and connect. In fact, these capacities become even more important as the world grows more complex and unpredictable.

And yet, higher education — the very place where adults come to stretch their thinking — is one of the least playful environments they encounter. The pressures of assessment, efficiency, and academic performance have squeezed out the qualities that make learning meaningful: Wonder, experimentation, and the freedom to try something without knowing exactly where it will lead.

Universities are often structured around values that run counter to the conditions that support play: Competition, evaluation, hierarchy, and efficiency. Students learn early that success depends on correctness, compliance, and productivity. Faculty, too, are shaped by institutional expectations that reward seriousness and discourage vulnerability or experimentation.

This culture of performance has consequences: Students become risk-averse, fearing mistakes and prioritizing grades over learning. Creativity and intrinsic motivation decline, replaced by strategic compliance among students hoping to create what the professor wants, and by professors trying to meet obligations. Belonging

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suffers, particularly for first-generation students, international students, and those who feel alienated by academic norms. And faculty experience burnout, isolation, and a narrowing of their professional identities. Opportunities to connect and share are no longer prioritized in a system of do more now.

Students arrive expecting rigor to mean stress. Faculty internalize norms that equate professionalism with restraint. In this context, play is often dismissed as frivolous or childish, rather than recognized as a powerful mode of learning and human flourishing. But play — especially improvisational, spontaneous play — is not childish. It is not frivolous. It is a biological, cognitive, emotional, and social engine for human development across the lifespan. And higher education lacks it in ways that impoverish both teaching and learning.

Play — with its emphasis on exploration, joy, and relational connection — offers a counterbalance to these pressures. Yet many educators hesitate to integrate play into their teaching, fearing it will be perceived as unprofessional or insufficiently rigorous.

This tension is not merely pedagogical; it is cultural. Bringing play into higher education challenges deeply held assumptions about what learning should look like and who educators are allowed to be.

This white paper argues that play is not only compatible with higher education — it is essential to it. Through a reflection on integrating play into my freshman seminar, I explore how integrating play, spontaneity, and improvisation reshaped student engagement, strengthened community, and, most unexpectedly, transformed my own identity and experience as a professor. The findings suggest that integrating play into adult learning environments can humanize higher education, support well-being, and create conditions for deeper learning.

Appropriate Approaches/Strategies

Reflecting on my experience pulling together a freshman seminar in a few short weeks before the semester began, I turned to what I know works in learning: play. I decided to center the course on exploring play and using improvisation to examine key aspects of writing and building an argument. My hope was that by integrating play as a

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content and play as a pedagogical tool, we could explore the outcomes together. I wanted to model the opportunities playfulness as an attitude provides—a stance of openness, curiosity, and willingness to engage with uncertainty. This mindset is as essential for educators as it is for students.

Applied Improvisation, Games, and Unstructured Expression

Each class began with a timed free-write — an improvisational writing technique that encourages spontaneity and reduces self-censorship (Burrell, 2020). Students wrote continuously for increasing intervals, responding to prompts about play, stress, flow, and identity. I wrote alongside them, modeling vulnerability and presence.

Freewriting functioned as a playful warm-up: It lowered the stakes of writing. It encouraged experimentation with ideas and language. It built stamina and confidence. It created a shared ritual that grounded the class.

Students often revisited their free-writes during peer discussions, using them as seeds for longer essays. Over time, they became more comfortable taking risks, embracing imperfection, and exploring their voices. Improvisational techniques made writing feel exploratory and low-risk. Freewriting can empower students to engage more meaningfully with academic writing while reducing anxiety and self-censorship (Burrel, 2020; Chen & Li, 2022; Velasquez & Peterson, 2023).

Applied improvisation became one of the most powerful tools for cultivating playful thinking in the course. Rooted in the principles and practices of improvisational theater, applied improvisation brings theatrical mindsets — presence, acceptance, spontaneity, and collaborative creation — into non-theatrical settings to support personal development, creativity, innovation, and group cohesion. In the classroom, these structures created a low-stakes environment where students could experiment with ideas, take intellectual risks, and engage with uncertainty in ways that traditional academic tasks rarely allow. Research on improvisation shows that these practices strengthen cognitive flexibility and problem-solving by requiring individuals to shift strategies and respond in real time (Graff et al., 2021; Ross, 2023; Sawyer & Henriksen, 2023/2024). They also support emotional development by offering a safe space to try

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out new responses, practice regulation, and build resilience (Lillard, 2017; Pellegrini, 2009).

In our course, improvisation served as both a warm-up for playful thinking and a direct bridge to academic writing. To question the role of play as a developmental tool for adults, we explored research on fun, intrinsic motivation, and play cues — small reminders to stay playful. Students shared their own ways of playing, from music to cooking to gaming. We incorporated active games from *Playworks* and *Professors at Play* (Forbes & Thomas, 2023), using them as warm-ups and community-building tools.

These activities strengthened relationships, increased engagement, and helped students get "out of their heads." It was a gift to help students get into a space where they weren't critiquing themselves but were wholly creating together. They began to accept play as a valid and valuable part of adult life

We used classic improv structures such as "Yes, And", one-sentence story building, and embodied role-play to help students practice accepting ideas, building on them, and co-constructing meaning. These activities foregrounded the core improvisational tenets of listening deeply, agreeing to the reality offered, and responding with openness — habits that map directly onto the intellectual moves required in writing. As Drinko (2018) argues, improvisation strengthens the neural pathways that support spontaneous thinking, narrative construction, and on-the-spot synthesis. When students practiced "Yes, And," they were not simply being playful; they were rehearsing the rhetorical moves of acknowledging a claim, extending it, and adding their own voice — the very moves foundational to academic argumentation.

Improvisational games also helped students grapple with not knowing. Rather than freezing in the face of uncertainty, they learned to treat ambiguity as an invitation. This aligns with Beghetto's (2019) work showing that improvisation encourages learners to test hypotheses, revise ideas, and embrace uncertainty as part of the creative process. In role-play activities, students tried on different perspectives — administrators, campus squirrels, imaginary committees — which supported perspective-taking and empathy, capacities Goldstein and Winner (2012) identify as central to social-emotional development. These playful structures lowered the stakes of participation, making it

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easier for hesitant or anxious students to contribute. Over time, the classroom became a space where students felt comfortable getting up, moving, experimenting, and laughing together — a shift that not only supported their writing but also strengthened their sense of belonging (Secker et al., 2025).

By integrating applied improvisation into the course, I invited students to experience learning as a dynamic, relational, and embodied process. Improvisation helped them access the spontaneity, flexibility, and collaborative creativity that fuel playful thinking. It also helped them internalize writing concepts in ways that were memorable, joyful, and deeply human. In this way, applied improvisation did far more than energize the room; it provided a research-supported pathway for students to think, write, and relate to one another with greater openness, curiosity, and confidence.

Our explorations reinforced for me the power of improvisational play to fuel creativity by encouraging imaginative thinking, narrative construction, and divergent idea generation — capacities that Csikszentmihalyi (2014) and Kaufman and Beghetto (2013) argue remain essential for adult learners navigating complex, uncertain futures. Socially, improvisation fosters collaboration, empathy, and shared meaning as people co-construct ideas, negotiate roles, and build collective understanding. Goldstein and Winner (2012) show that shared imaginative play strengthens social cognition and perspective-taking, while Sawyer and Henriksen (2023/2024) demonstrate how group improvisation builds the relational scaffolding necessary for deep collaboration.

Because improvisation is open-ended, it encourages risk-taking and exploration, helping learners of all ages test hypotheses, revise ideas, and embrace uncertainty—a process Beghetto (2019) describes as central to creative development. Improvisational play integrates cognitive, emotional, social, and physical domains, making it a powerful mechanism for holistic development (Whitebread & Basilio, 2013a, 2013b). Adults rarely encounter learning environments that engage the whole self. Play offers that integration of “all of our selves” — and that integration is what makes learning feel alive.

Improvisation is not a personality trait. It is a practice — one that adults can cultivate through small, intentional habits. The foundational move of “yes, and…” from improvisational theater builds openness, flexibility, and collaborative creativity. The

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central concept is that when someone makes an offer- our role is to accept it, “Yes,” then to amend it, “And.” Amending means adding to it by honoring the first suggestion and building on it. The key to improvisation is acceptance rather than negation. Johnstone (1999) and Sawyer and Henriksen (2023/2024) both describe “Yes, and…” as a cognitive stance that shifts individuals from defensiveness to generativity, from protecting ideas to expanding them. This changes our mindsets from immediate judgment or rejection of another’s ideas to acceptance and wonder. This teaches us to be careful listeners who are present, rather than planning a clever response. It helps students embrace spontaneity, as they must think on the spot rather than plan ahead. This is not easy for many of us, but with practice, it can lead to richer contributions and more adventurous writing.

Low-stakes creative play — doodling, freewriting, tinkering, moving — reduces performance pressure and activates exploratory thinking. Russ (2013) shows that unstructured creative expression strengthens imaginative capacity, while Csikszentmihalyi (2014) links such activities to flow states that enhance learning and well-being. Behavioral science shows that adults grow more improvisational when they engage in small, low-risk “micro-experiments,” such as trying one new teaching move or altering a familiar routine. Kolb’s (2015) experiential learning cycle and Edmondson’s (2019) work on psychological safety both emphasize that experimentation drives adult learning.

Practices that build tolerance for ambiguity, like delaying judgment or sitting with unresolved questions, help adults stay present and responsive rather than defaulting to rigid responses— a skill Furnham and Marks (2013) identify as central to adaptive expertise. This helped students craft responses more carefully and feel more comfortable letting the creative process unfold. Collaborative creative spaces — improv groups, writing circles, maker communities — provide social scaffolding that encourages risk-taking and shared play. Sawyer and Henriksen (2023/2024) describe these environments as “distributed creativity systems,” where ideas emerge through interaction rather than isolation.

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Improvisational games also helped us adopt a growth-oriented stance toward mistakes. The games and play made it easier to take risks, make mistakes, or catch yourself saying no. It reframes errors as learning data, reducing fear of failure and opening the door to experimentation, a principle central to Dweck's (2006) mindset theory and Beghetto's (2019) work on creative risk-taking. Together, these playful practices create a rich environment where improvisation becomes not just an occasional behavior, but a sustainable habit woven into daily life. As I learned from balloon twisting, when a balloon pops, as it often does when one is learning to twist, we exclaim, "Pop Happens." If we minimize the emphasis on what feels scary or wrong, we help others acknowledge it and move forward. If we can learn from our mistakes and persevere, we are much more likely to succeed.

And yet, for all the research, nothing taught me more about the power of improvisation than one particular class session — a moment that has stayed with me, not because it was extraordinary, but because it was so ordinary and yet so alive. It began, as every class did, with freewriting. The room settled into that soft, collective hush that happens when twenty people are writing at once — pencils moving, keyboards tapping, bodies leaning forward. Freewriting had become our ritual, our way of entering the space together. Students wrote about their play histories that day: The games they invented with cousins, the imaginary worlds they built in backyards, the sports or songs or secret hideouts that once made them feel free. I wrote alongside them, rediscovering my own childhood play — the cardboard-box puppet theaters, the elaborate pretend worlds, the hours spent making up stories. When we finished, students shared lines that surprised them. One student admitted she hadn't realized how much she missed drawing. Another said he couldn't remember the last time he had played anything that wasn't on a screen. A third said she felt "lighter" after writing. Already, the room felt different — more open, more human.

Then we moved into an improvisational game to explore argumentation. Students stood in a loose circle, tossing ideas back and forth, building on one another's claims using "yes, and…" as their only rule. They role-played campus administrators, mischievous squirrels, overworked students, and imaginary committees. They invented arguments about installing a giant slide between academic buildings, instituting a

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campus-wide nap hour, and replacing final exams with scavenger hunts. It was silly, yes, but also deeply intellectual: Students practiced rhetorical moves, tested claims, responded in real time, and revised their thinking as the conversation unfolded. The room felt warm, almost sizzling with energy. Students who had been quiet at the beginning of the semester were now leaning forward, laughing, listening to each other with enthusiasm, and offering new stances. I remember looking down at my homage to Mr. Rogers' red sneakers — a playful choice I had made that morning — and realizing how different I felt in my own body. Lighter. More present. More myself.

And when I looked around the room, I didn't see first-generation students, or the high school valedictorian, or the shy commuter. I saw "It just joy". I saw risk. I saw humor. I saw "ah-ha's" and wonders. One student even mentioned that the class was "fun." She said it as an aside, almost sheepishly, as if fun were something forbidden in academic spaces. That moment landed in me with surprising force. It reminded me that play is magnetic. Play is human. Play is alive. And it reminded me that I wanted to feel alive in my teaching again.

That class reinforced for me more about the affordances of play than any article or study ever could. It showed me that teaching becomes stagnant when it becomes scripted. Play interrupts the script. Improvisation keeps teaching fresh because it requires presence, invites surprise, encourages experimentation, builds relational energy, and makes room for joy. When educators improvise — even in small ways — they disrupt the monotony that leads to burnout. They create conditions for curiosity, connection, and vitality. Play is not a break from teaching. Play is a way of teaching that keeps us awake. It reminds us that learning is not merely the transfer of information but the co-creation of meaning between human beings.

The invitation, then, is simple and profound: Let yourself play. Not because it is trendy, not because it is cute, but because it is necessary. Play is how we stay human in systems that often forget humanity. Start small. Try a micro-experiment. Shift one routine. Say "yes, and…" once a day. Invite surprise. Let a student's idea reshape the plan. Follow an unexpected thread. Allow yourself to be delighted. Make space for joy, because joy is not the opposite of rigor; joy is what makes rigor sustainable. Let yourself

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be seen, because students learn more from our humanity than from our perfection. And remember that play is your birthright. You did not outgrow play. You simply stopped being given permission. Give it back to yourself.

Perhaps the most unexpected outcome was the impact on my own well-being. I found myself looking forward to class with anticipation and joy. Freewriting became a moment of reflection for me, too. Improvisation energized me. Play reminded me why I teach.

I realized that my previous reluctance to bring play into higher education limited not only my students but also me. By embracing play, I rediscovered the joy of teaching and the purpose that brought me into education in the first place.

Conclusion/Recommendations

Implications for Higher Education

This case study suggests that integrating play into higher education has far-reaching implications:

- *Play Supports Student Learning*: Play reduces anxiety, increases intrinsic motivation, and supports deeper engagement with content. It helps students take risks, develop voice, and build community.
- *Play Humanizes Educators*: When educators embrace play, they model authenticity, vulnerability, and joy. This strengthens relationships and creates more inclusive learning environments.
- *Play Counters Burnout*: Play offers a pathway to professional renewal, helping educators reconnect with their purpose and creativity.
- *Play Challenges Rigid Academic Norms*: Integrating play disrupts assumptions about what learning should look like. It invites institutions to reconsider how they define rigor, professionalism, and success.
- *Play Is a Lifespan Need*: Higher education must recognize that adults need play just as children do. Universities can become spaces where play is not only permitted but celebrated.

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Higher education does not need more efficiency. It needs more aliveness. Improvisation and spontaneous play offer a pathway — not only for student learning but also for educator well-being, creativity, and joy. They remind us that teaching is a relational, imaginative, deeply human act. When we allow ourselves to play, we create classrooms where everyone can breathe again, where curiosity returns, where connection deepens, where learning feels like discovery, and where we — educators and students alike — feel fully, vibrantly alive. Play is not a luxury. Play is a lifeline. And it is available to all of us, at any moment, if we are willing to say: yes, and…

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Playful Pedagogies and Preservice Teachers' Mindsets

Sharon M. Peck, PhD; Tabitha Dell'Angelo, PhD; Tugce B. Arda Tuncdemir, PhD; Ruth V. Guirguis, EdD; & Akosua Obuo Addo, PhD

Introduction

Although play is widely recognized as central to early learning, higher education often treats it as incompatible with rigor. Grounded in play-based pedagogy and growth-mindset theory, this multisite pre–post study examined whether embedding playful elements in teacher preparation programs [TPPs] shifts preservice teachers' [PSTs] attitudes toward play. Using MANOVA, we found a significant reduction in non-playful attitudes after the intervention, but no statistically significant change in playful attitudes. Age mattered: PSTs aged 18–22 and over 38 showed the highest playful attitudes, with a dip among those aged 28–33. Findings suggest mid-adulthood pressures may suppress playfulness, while targeted curricular and environmental strategies can help revitalize it. Results underscore the value of experiential, play-infused learning for creativity, engagement, and reflective practice across teacher education and professional development (Dweck, 2006; Mezirow, 2018; Sutton-Smith, 1997).

Problem Statement

Despite abundant scholarship on the benefits of play (Hirsh-Pasek et al., 2009; 2020; Lunga et al., 2022), many faculty still deem play frivolous, limiting its use in higher education classrooms. Implementing playful curricula requires transformative approaches—sustained experiences that shift perspective—supported by growth mindset principles (Dweck, 2006; Dweck & Yeager, 2019; Mezirow, 2018). In teacher preparation programs (TPPs), play can drive creativity, problem-solving, and real-world transfer, improving engagement and outcomes (Blinkoff et al., 2024; Forbes, 2021). Yet pre-service teachers (PSTs) often enter with narrow or compliance-driven understandings of play shaped by prior schooling and policy contexts. This reinforces the need for making intentional, research-informed integration of play into teacher education programs essential (Dogan Altun, 2018; Rodriguez-Meehan, 2022).

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Beyond individual lessons, a culture of care and joy matters: environmental signals, spontaneity, informality, flexibility, and psychological safety help adults experience learning as both challenging and enjoyable (Noddings, 2002). Studies show teachers value play but struggle to connect it to measurable outcomes or to integrate it confidently in practice without hands-on training (Blom & D'Amico, 2020; Jung & Jin, 2014; Lobman, 2005). When TPPs model playful pedagogy directly, PSTs become more prepared to enact it and advocate for it (Canaslan-Akyar & Sevimli-Celik, 2022; Galbraith, 2022).

Background

Conceptual Framework: The Playful Mindset

The study synthesizes Sutton-Smith's rhetorics of play (1997)—which explain cultural resistance in academic settings—with Dweck's growth mindset (2006) to articulate a Playful Mindset: Curiosity, flexibility, risk-taking, and openness to new experiences, supported by environments that normalize iteration and error (Yeager & Dweck, 2012). Five illustrative "playful elements" guide application across content areas: playful literacy (Cunningham, 2019; Han, 2021), "true fun" as the intersection of playfulness, connection, and flow (Price, 2024), musical engagement that builds resilience and artistry (Davis, 2017; Hare, 2024; Koops & Taggart, 2011; O'Neill, 2011), creative drama for perspective-taking and improvisation (Heathcote, 1984; O'Neill, 1995; Peter, 2003), and curricular/environmental design that bakes play into routines, materials, and assessment (Hirsh-Pasek et al., 2009).

Appropriate Approaches/Strategies

Methods

PSTs in Early Childhood and Elementary programs at five U.S. institutions completed an online Play/Playful Mindset Survey at semester start and end (Fall 2024–Spring 2025 cycle). Convenience sampling yielded 115 pre-test and 97 post-test responses, primarily from students aged 18–22, with representation across academic levels. The six-item survey adapted items from Dweck's Mindset Scale and similar instruments (Dweck, 2006; Dweck & Yeager, 2019). Exploratory factor analysis

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supported a two-factor solution—Playful Mindset and Non-Playful Mindset—with acceptable sampling adequacy (KMO =.654), significant Bartlett's test, strong loadings (.63–.78), and good internal consistency (α =.81). Faculty at each site implemented play-integrated curricula (e.g., movement, music, storytelling, role play, open-ended materials; parallel process in field tasks). Analyses used MANOVA to test effects of pre/post status and age group on both factors.

Conclusion

Results

RQ1: Change in playful attitudes over time. The multivariate effect of pre/post status was significant (Pillai's Trace = .039, $F(2,188) = 3.852$, $p = .023$). Univariates showed no significant change in playful attitudes ($F(1,189) = 1.028$, $p = .312$), but a significant reduction in non-playful attitudes ($F(1,189) = 7.710$, $p = .006$), with post-test scores lower ($M = 2.57$, $SD = .78$) than pre-test ($M = 2.75$, $SD = .82$).

RQ2: Age differences in playful attitudes. Age yielded a significant multivariate effect (Pillai's Trace = .259, $F(10,378) = 5.617$, $p < .001$). Playful attitudes were highest among PSTs over 38 ($M = 3.83$, $SD = .59$) and 18–22 ($M = 3.62$, $SD = .57$); lowest for 28–33 ($M = 2.94$, $SD = .57$). Non-playful attitudes also varied ($F(5,189) = 6.378$, $p < .001$), highest over 38 ($M = 3.46$, $SD = .71$) and lowest 28–33 ($M = 2.15$, $SD = .64$).

RQ3 (Interaction). No significant interaction emerged between time and age for either outcome (all $p > .24$), indicating age did not moderate pre–post patterns.

Two takeaways stand out. First, a single semester of play-integrated coursework reduced resistance (non-playful attitudes) but did not yet significantly boost playful mindsets. Transforming adult beliefs likely requires multi-semester, program-level commitments with iterative practice and reflection (Dweck, 2006; Mezirow, 2018). Second, age patterns suggest a dip in playfulness in the 28–33 range—possibly due to career-family pressures and institutional norms that valorize control and outputs—followed by a rebound after 38 as confidence and autonomy grow. This arc echoes scholarship on how formal constraints can narrow play perspectives over time (Sutton-

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Smith, 1997; Zhulamanova & Raisor, 2020) and how guided, hands-on exposure can renew advocacy for play (Canaslan-Akyar & Sevimli-Celik, 2022; Galbraith, 2022).

The "true fun" triad—playfulness, connection, flow—offers a practical lever (Price, 2024). Classrooms that normalize risk, embed authentic tasks, and structure connection enable deeper engagement; movement, attention breaks, and light-touch games can scaffold flow (Bloomer & Marchese, 2016; Bonilla, 2024; Lengel & Kuczala, 2010). In music and arts contexts, aligning growth-mindset practices with playful making can democratize artistry and build resilience (Hare, 2024; Koops & Taggart, 2011; Yeager & Dweck, 2012).

Recommendations Include

- ***Program-wide infusion.*** Move from isolated "play units" to a coherent, longitudinal sequence in coursework, fieldwork, and reflection. Treat play as a pedagogical stance—not an add-on—supported by transparent rationales and outcomes (Forbes, 2021; Hirsh-Pasek et al., 2020).
- ***Culture of care***. Engineer environmental signals—spontaneity, informality, flexibility, psychologically safe risk-taking—to counter rhetorics that frame play as unserious (Noddings, 2002; Sutton-Smith, 1997).
- ***Age-sensitive design.*** Offer differentiated pathways: mentoring and flexible formats for mid-career PSTs; leadership and co-design roles for older PSTs; structured reflection for younger cohorts to connect play with learning evidence (Rodriguez-Meehan, 2022; Zhulamanova & Raisor, 2020).
- ***Professional development.*** Extend playful pedagogy into in-service learning to refresh practice and reduce burnout through creative, collaborative professional development opportunities (Slade & Gallagher, 2021).

Embedding playful elements across TPPs can dislodge resistance to play even within a semester, a promising first step toward culture change. Achieving measurable gains in playful mindsets likely requires sustained, program-level design that blends growth-mindset practices, hands-on creative work, and reflective cycles (Dweck & Yeager, 2019; Mezirow, 2018). When teacher education treats play as rigorous, relational, and

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purposeful, future educators are better equipped to cultivate classrooms where curiosity, experimentation, and joy fuel deep learning (Hirsh-Pasek et al., 2009; 2020).

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Play as a Biological Necessity

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Play Is for Everyone, or Is It?



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The Role of Purposeful Play in Promoting Neurocognitive Development

Stephanie Adams, DHSc, OTR/L, OTA

Introduction

Play is a fundamental childhood occupation and a critical context for learning, growth, and development. All children are born with an internal drive to play, which is imperative for all developmental milestones. Beyond enjoyment, play serves as a powerful mechanism for children to develop essential cognitive, social, emotional, and language skills (Bodrova & Leong, 2003).

In recent years, attention has increased to neurocognitive development and executive functions (EF). They are a set of higher-order cognitive processes necessary for goal-directed behavior, self-regulation, and adaptive responses (Berk & Meyers, 2013). Emerging evidence consistently demonstrates that play not only supports the use of executive functions but also actively facilitates the development of EF in the prefrontal cortex (Hughes, 2011).

Problem Statement

Despite this growing body of research on the importance of developing EF through play experiences, play is often undervalued or underutilized in educational environments, particularly as academic pressures increase at younger ages.

Children today have fewer opportunities for meaningful, self-directed play at home, at school, and in the community. Several factors influence this shift, including increased academic demands, amplified screen use, structured schedules, and an emphasis on performance-based outcomes. As a result, children may have difficulty with executive function skills and challenges with social engagement and interaction with peers (Dawson & Guare, 2009).

Challenges associated with underdeveloped executive functions may present as:

- Difficulty following rules or routines.
- Poor emotional regulation and increased frustration.
- Limited problem-solving and planning skills.

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- Reduced ability to engage in cooperative peer play.
- Academic struggles related to attention, organization, and task completion.

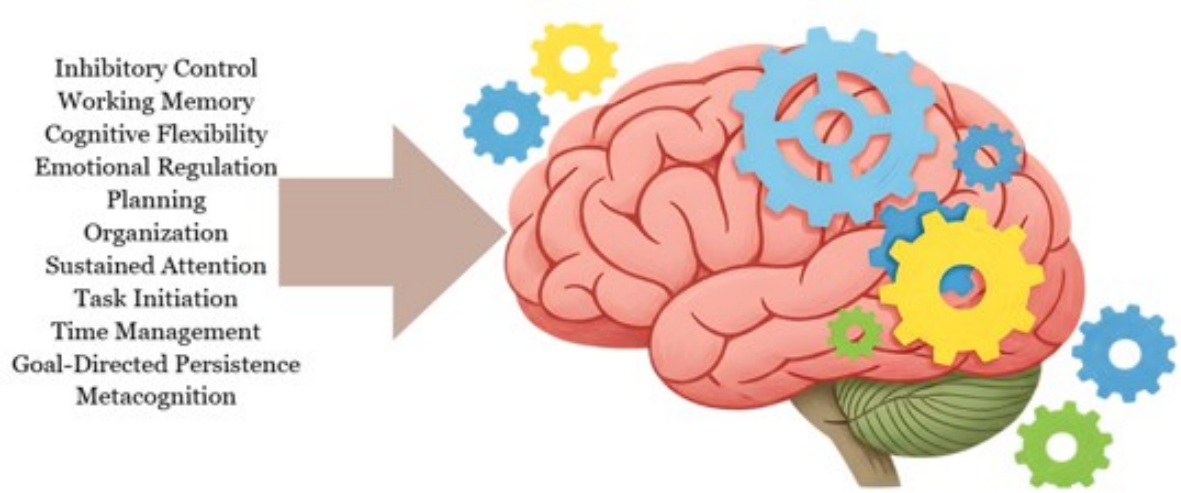
While executive function challenges are often addressed through direct instruction or behavioral interventions, these approaches may overlook the natural, developmentally appropriate role of play as a primary context for learning these skills. The lack of intentional integration of play-based strategies represents a missed opportunity to support children holistically and prevent long-term functional difficulties (Gibb et al., 2021).

Background

Executive Functions are a cluster of cognitive processes in the prefrontal cortex. Figure 1 shows the characteristics of EF in the brain.

Figure 1

Characteristics of Executive Function

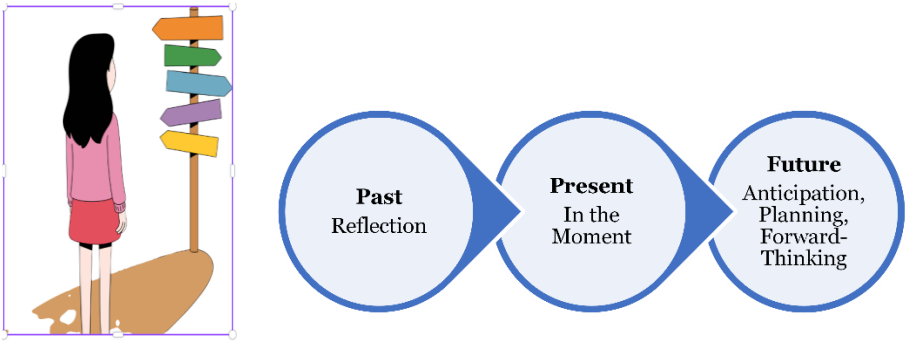


These skills develop gradually over time through brain maturation and repeated experiences that challenge children to think, adapt, and self-regulate. Executive Functions allow you to connect past, present, and future experiences. Figure 2 shows how EF helps people connect to their experiences through time.

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Figure 2

Connection to Experiences Through Time



Child-centered play helps the brain to develop executive function skills. Developmental theorists such as Lev Vygotsky emphasized that higher-order cognitive abilities emerge through social interaction and imaginative play (Diamond et al., 2007).

During play, children naturally practice:

- Following and creating rules
- Negotiating roles and goals
- Managing emotions and impulses
- Remembering sequences and adapting strategies
- Reflecting on outcomes and adjusting behavior

Different stages of play-from solitary and parallel play to cooperative peer play-support increasingly complex executive function demands. Games, pretend play, and hands-on exploratory activities are particularly effective in promoting EF because they can be intrinsically motivating, socially meaningful, and cognitively challenging (Yogman et al., 2018).

From an occupational therapy perspective, play is the primary occupation of childhood and a critical contributor to participation, well-being, and lifelong competence (AOTA, 2020). When play opportunities are intentionally designed and supported, they become powerful tools for strengthening EF in authentic and flexible ways. Both structured and free play opportunities are necessary for children to develop EF skills for future academic success.

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Table 1 provides examples of how play, through games, helps children develop EF skills. You may also think of many other examples! (Toglia & Katz, 2018).

Table 1

Play and the Development of EF Skills

Development of EF Skills through Play using Games as a Therapeutic Tool
1. Games provide natural experiences of winning and losing, which build sportsmanship and support cognitive flexibility while inhibiting control.
2. Games help students learn to shift between tasks, make appropriate choices, and solve problems.
3. Games provide opportunities to develop patience and continue an activity even when they are not winning, building emotional control.
4. Games help develop working memory by requiring players to remember steps during an activity and recall details for future play.
5. Games support planning, thinking ahead, and anticipating others' actions, which are strategies needed before taking the next step in a turn-taking game.
6. Games provide a hands-on way to develop organizational skills to follow the appropriate sequence of steps for an activity.
7. Games build sustained attention, while a turn may be missed or waiting for a turn may be required when engaging in a small group.
8. Games support task initiation, such as starting or continuing an activity, especially when motivation or interest is low.
9. Games help you understand the "big picture" of time management during an activity with a start and finish.
10. Games support the development of goal-directed persistence when motivation or competition drives a desire to win.
11. Games support self-understanding, relate to behaviors during social interactions, and encourage reflection on how the activity went overall. This is the highest form of EF-metacognition.

Appropriate Approaches/Strategies

To support executive function development through play, embed intentional, purposeful strategies across environments.

The following approaches are recommended:

1. Use games as an Executive Function tool: Board games, card games, and movement-based games naturally support EF development. Choosing games with rules, turn-taking, and problem-solving components lets children practice EF skills in a low-risk, engaging way.

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2. Integrate play-based experiences across settings: Children benefit from both guided and free play opportunities. Adults can scaffold play experiences by modeling, asking reflective questions, and gradually increasing complexity while preserving a child's choice and autonomy.
3. Design play-enriched learning environments; if appropriate, provide loose parts to support imagination and creativity. Flexible spaces help children to plan, organize, adapt, and develop sustained attention-all EF skills.
4. Promote reflection and metacognition: Metacognition is the highest EF skill; allowing for reflection before, during, and after play experiences helps a child to build this awareness. To develop future-oriented thinking, ask questions such as "How did that activity go?" "What was your plan?" "What would you do differently next time?"
5. Align play with developmental stages: Understanding the developmental stages of play helps adults match play opportunities with expectations. Scaffolding can be accomplished with games to support children at their individual ability levels.

Conclusion/Recommendations

Play is not a luxury or a break from learning. It is a critical foundation for executive function development and overall child well-being. When children engage in meaningful play, they are actively building the cognitive, emotional, and social skills necessary for success in school, relationships, and daily life.

To address current challenges and support optimal development, the following recommendations are proposed in Figure 3.

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Figure 3

Recommendations to Support Development

	Recognize play as an essential component of executive function development. Brain illustration by holdendrils on Pixabay
	Embed intentional child-led strategies into educational programming. Connector toy by TheGreatKai on Pixabay
	Provide training and resources to support adults in facilitating child-led play. Books by cinderella518 on Pixabay
	Advocate for policies that protect and promote play across the lifespan. Girl playing with abacus by Yan Krukau on Pexels

By reframing play as a powerful and purposeful developmental tool, professionals and caregivers can create environments that naturally nurture executive functions, laying the groundwork for resilient, capable, and engaged learners.

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The Missing Link: How Physical Play Solves Today's Classroom Behavior Crisis and Prepares Children to Learn

Preston Blackburn, BA

Introduction

Young children crave physical play. How do we know? If you open a classroom door to the hall, the gate to the playground, or the door to the gym, what do they do? They take off running and screaming in delight. Their bodies were designed to move in big-body physical play.

Today, however, children are more sedentary than ever, both in and out of school. Academic pressure has made preschool the new first grade, and elementary school has become more academically stressful as teachers fight to meet standardized testing benchmarks. This shift has led to a sit-to-learn philosophy in which children spend more time at desks, focused on worksheets and other academic pursuits, rather than running, climbing, playing tag, hopscotch, or jump rope. After school, long hours of neighborhood play are gone, replaced by enrichments, extras, extended child care, and perhaps the biggest culprit: screens.

Problem Statement

Students need self-regulation skills in order to learn effectively. However, from preschool to elementary school, teachers are seeing a marked rise in behavior challenges among their students. (Gonser, 2023; Langreo, 2025). Poor self-regulation requires more redirection from teachers, wasting precious instructional time and leading to chaotic, unhappy classrooms. Students struggle to learn, leaving teachers frustrated and driving many to leave the profession (Williams, 2018).

However, there is hope. A strong connection exists between the decline in physical activity in young children and the increase in dysregulation. So, a key part of improving the learning environment for students and teachers is increasing physical activity from the earliest years of school. Repeatedly, schools that incorporate more movement and physical play into the school day have seen marked improvements in both behavior and learning.

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Background

An Australian study in 2013 found that cardiovascular endurance in children is declining by 5% per decade (Tomkinson et al., 2019). As a result, in 2013, it took children 90 seconds longer to run a mile than same-age children of the 1980s. Since that study was released, we have had another decade and a pandemic. The trend has likely worsened.

Another UK study from 2014 shows a similar decline in children's core strength (Sandercock, 2019). This study found that between 1998 and 2008, core strength fell 2.6% per year. The decline accelerated in the following years. Between 2008 and 2014, it fell 3.9% per year. As with the cardiovascular endurance study, there is no reason to believe core strength has improved over the last decade.

What do these studies tell us? Children's bodies are weaker than they were in prior generations, largely due to a lack of physical play. While physical weakness is detrimental to children, it is only part of the problem. The lack of movement that leads to poor cardiovascular health and weak cores also adversely affects the development of the brain.

Ninety percent of brain growth happens in the first five years of life. At birth, the only connections in the brain are those needed to sustain life. Further neural wiring needed to function in the world comes from new experiences, each one growing and changing the brain. These new experiences happen through movement, whether it is waving tiny fists as an infant, rolling down a hill as a preschooler, or learning to ride a bike in elementary school. Movement provides input to the brain, helping it make sense of the world and the body's place in it, while teaching the body and brain to work together effectively. The brain needs movement to grow, and play provides that movement. Simply put, if children aren't moving, their brains aren't growing.

Movement also builds the physical strength children need to sit upright in a chair, hold a pencil with an appropriate grip, and control their bodies as they walk down the hallway. Without the needed strength, school tasks are harder than they need to be, distracting the student from the academic tasks at hand. It is far more difficult to attend

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to a math worksheet if you cannot hold your body comfortably in a chair or you can't grip a pencil.

Here are some specific examples of how movement prepares children for school success.

To read:

- Eyes need a focal point and need to be able to move left to right across the page.
- The core needs to be strong enough to hold the head steady and erect.
- Arms and hands need to be strong enough to hold a book.

To write:

- Hands and arms need to be strong enough to grip, move, and control a pencil.
- The body must understand how much force to apply to the pencil.
- The brain must have directional and spatial understanding to estimate how much room a letter or word takes up on the page and which direction to write.

To solve a math equation:

- The brain must recognize patterns.
- The brain must also understand and repeat a sequence of steps.
- The brain must understand a series and the order in which to execute it to be successful.

These skills, essential to building an academic foundation, develop through physical movement. What looks like "just play" is actually bodies and brains developing key skills needed for school success. Table 1 offers some examples.

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Table 1

Examples of How Play Helps Develop Academic Skills

Play Activity	Classroom Skills Developed
Throwing, catching, and kicking a ball	Tracking an object with the eyes to follow letters across a page
Spinning, swinging, sliding, logrolling, and hanging upside down	A strong focal point for focusing on letters and numbers
Climbing, pushing, and pulling	Strong upper body, hands, and core, key for sitting upright and using school materials
Digging, hanging, and crawling	Understanding the appropriate amount of force needed for a task, from opening a heavy door to writing with a pencil
Playing hide-and-seek, moving through play tunnels, or playing in large boxes	Learning the body's position in space to effectively move through a classroom or hallway. Also, understanding and estimating relative space for writing.
Jumping, skipping, and pumping legs in a swing	Practicing sequencing and patterning, essential for reading and math
Riding a bike, swimming, and climbing	Coordinating both sides of the body and the brain, needed for complex thinking and problem-solving

Children crave physical activity that feeds their brains. How do we know?

- Leave a ball on the ground, and what do they do? They pick it up and throw it or kick it to a friend.
- Put them near a large rock, a curb, or a knee wall, and they climb up and balance on it. Then they jump off.
- Take them to a playground, and they climb, hang from the monkey bars, slide down the slide, swing, and dig in the sand.

So, to feed their brains and build their bodies, adults must provide ample time and space for the play children need.

When adults crowd out physical play with sedentary activities like seat work or screen time, children will seek the movement they need, often at inappropriate times and in inappropriate ways. For example, they will:

- Ping-pong down the halls in transitions, smashing into the walls and into their classmates

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- Donkey kick and push against their friends at circle time
- Wiggle and slump at their desks
- Use too much force to tag a friend on the playground

These actions look like bad behavior, an inability to self-regulate, or poor self-control. More likely, however, it is simply the brain seeking information from the body on where it is, what it is doing, and how much force it takes to move and control it.

When we limit play and view it as frivolous, we treat children's bodies and brains as if they are separate, as if the body's only job is to carry around the brain so it can think big thoughts. Instead, we are ignoring the fact that the brain needs the body to perform at its highest and most effective level. Further, failing to give children ample time to move is like giving them half of what they need to learn – half of a book, half of a pencil, half of a desk, half of an equation – and still expecting them to be successful. It is an impossible task, and it leads to frustration for children and for educators.

If we want children to be successful in their learning journey, we have to help them build a foundation on which they can learn. Both physical skills and academic skills start with something basic and move to something more complex. If we want to run, we have to walk first. If we want to skip, we have to gallop first. If we want to read Chaucer, we have to be able to read Dick and Jane first. If we want to learn algebra, we have to understand how to add, subtract, and multiply first.

Often, these processes are shown as a pyramid. For example, two common pyramids used in education are Maslow's Hierarchy of Needs and Bloom's Taxonomy. Maslow's pyramid shows that food and shelter form the foundation for safety, followed by love and belonging (Maslow, 1943). Bloom's pyramid shows that the foundation for learning is the ability to recall basic facts, and on that foundation, learners can build towards more creative, innovative work (Bloom, 1956). These pyramids show that each layer must be stable and secure for the layers above to be strong. Any weak layer weakens the layers above.

When we consider these two pyramids together, we know that children must have strong, secure layers of Maslow's Hierarchy of Needs to start at the bottom of Bloom's.

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We cannot expect a hungry child to recall facts, let alone understand them. Most school districts provide lunch and breakfast programs to serve this unmet need, strengthening these weak pyramid layers and filling the gap between Maslow's and Bloom's.

Just as adequate food and safe shelter are foundational, movement is also foundational to building bodies and brains ready to learn. A lack of physical movement further widens the gap between Maslow and Bloom and affects almost every child in this nation, contributing to most of the behaviors educators see in the classroom. Students are in constant motion in class and require continuous redirection. They push, slam, and tackle in and out of the classroom because their brains don't understand force. They move and wiggle incessantly because their eyes haven't developed a focal point, so reading, writing, and math are harder than they should be. When children don't get enough time to move during and after school, this sedentary lifestyle has far-reaching effects. However, when we give them ample time to move the way their bodies and brains are designed, they are more prepared to recall basic facts, understand them, and apply them. In other words, they can more successfully start the learning process at the bottom of Bloom's Taxonomy when we fill the gap between Maslow's and Bloom's with big body physical play.

Appropriate Approaches/Strategies

More physical play during the school day has been shown repeatedly to build strong bodies with well-developed body-brain connections and strong neural wiring, resulting in less chaotic and more productive classrooms. Schools that have incorporated more physical play have reported reduced behavior challenges (Ratey, 2012) and referrals (Toporek, 2011), less tattling, more eye contact (Pawlowski, 2016), and greatly improved academics (Freishtat, 2012). Investing in more time for this kind of play, movement, and exercise might seem like it takes time away from learning. But in fact, children learn more in less time when they are allowed to move their bodies.

Closing the gap between Maslow's and Bloom's and giving our children the tools they need to succeed in school starts with adding more physical play throughout the school day. For example:

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- More recess time for unstructured, self-directed play will fill the after-school play void. Add heavy loose parts (planks, logs, large buckets, sand, water, large cooking pots) to the play space to make play more physical.
- More PE programming will teach children what their bodies can do and how to use them. Focus on non-competitive, high-energy games to keep children engaged and moving, rather than traditional sports that might discourage some children from participating.
- More physical play and movement in the classroom routine is needed. Incorporate physicality into lessons, transitions, waiting, circle time, table time, or desk time. Have children carry their chairs between learning centers. Do wall push-ups while waiting in the hall. Add movement to rhymes, math, language arts, and stories.

Expanding movement time will make learning more effective and enjoyable for everyone.

Conclusions/Recommendations

For now, schools bear the burden of filling the play gap. Schools must adjust schedules to accommodate more playground time and provide materials that encourage creative, active play. They must incorporate more PE each week and shift the traditional sports focus to a movement-focused one. Possibly the most challenging aspect is supporting overburdened, overextended teachers so they can plan for more movement during class time. Administrators should look for ways to ease teachers' burdens in other areas to give them time to develop movement-based learning. School systems can also bring in training from play professionals to help teachers learn strategies and techniques for adding movement to the classroom.

Physical play is inexpensive, readily available, easy to implement, apolitical, and something children's bodies and brains crave. When we lean into their need to move, we have the power to fill the gap between Maslow's and Bloom's in a way that supports ALL children in their development and ultimately on their learning journey.

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Why Play Is a Public Health Necessity

Tony Christopher, MBA, National Institute for Play

Substack version – shorter and without references

Introduction

Watch a couple of young children playing. They chase each other, laugh, invent rules, argue about the rules, and start over. Most adults watching see fun — loud, messy, slightly chaotic fun. What they don't see is the learning that is happening.

Those children are reading faces, tones, and boundaries — figuring out when to push and when to ease off. They test cause and effect, handle excitement and frustration in the same five minutes, and learn to stay in the game without turning it into a fight. When one trips, loses, or gets left out, they practice something even more valuable: recovering and rejoining.

No one is teaching them any of this. There is no lesson plan. Yet they are building foundational skills they will use for the rest of their lives — and when adults play, they refresh and sharpen those same capacities.

That scene, in miniature, is the argument of this essay. Play is not a break from real life or a reward for finishing the important things. It is one of the main ways human beings develop and maintain the abilities that keep us mentally and socially healthy. And because those abilities are visibly weakening across our whole population — children and adults alike — play deserves a place beside sleep and nutrition as a genuine public health necessity.

If that sounds like a stretch, stay with me — starting with what "public health" actually means.

What Public Health Is

The American Public Health Association describes its mission as promoting and protecting the health of people and the communities where they live, learn, work, and play (American Public Health Association, n.d.). Notice that play is already in the

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sentence. In plain terms, public health is the organized effort to prevent disease, prolong life, and promote health — not one patient at a time, but across entire populations.

Your doctor treats you; public health looks after all of us at once. Its experts include disease researchers, as well as restaurant inspectors, school nurses, and policymakers — anyone addressing health at the level of whole communities. That wide-angle view matters: patterns invisible in one exam room become obvious across millions of people.

Dr. Camara Jones, a former president of the American Public Health Association, captures the field with a simple picture (Jones, 2014). Imagine our communities built near the edge of a cliff. When someone falls off, an ambulance meets them at the bottom and rushes them to medical care — good, but people would rather not fall at all. So public health builds fences along the edge and nets partway down: prevention — clean water, vaccines, seatbelt laws, anti-smoking campaigns — everything that keeps people from needing the ambulance.

When public health decides something is essential, ordinary life changes. Two familiar examples show how.

How Sleep and Food Became "Health"

We sleep in order to be fully awake and alive. Cut sleep short, and we become irritable, slow to react, and easily triggered; over years, chronic shortfalls raise the risk of obesity, heart disease, depression, and accidents. That knowledge did not spread on its own. As the science piled up, public health translated it into guidance any family can follow: adults need 7 or more hours, and teenagers need 8 to 10 (Watson et al., 2015; Paruthi et al., 2016). The Centers for Disease Control and Prevention has even called insufficient sleep a public health problem (CDC, 2016).

Nutrition traveled the same road. When science showed that vitamin D deficiency causes rickets, which softens children's bones, public health had vitamin D added to milk in the 1930s — and rickets nearly vanished (Rajakumar, 2003). Iodized salt eliminated most cases of goiter; folic acid in flour sharply reduced devastating birth defects (CDC, 1999). Dietary guidelines, food labels, the food pyramid and MyPlate,

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school-lunch standards — all one pipeline: science produces knowledge, public health turns it into simple guidance, and the guidance becomes the daily habits of millions.

That is why today's parents receive official guidance on vaccines, well-child checkups, car seats, screen time, tooth brushing, water safety, sleep, food, and sixty minutes of daily physical activity. The machinery exists, and it works.

Which raises a question: is anything essential missing from that list?

The Problem: A Population in Trouble

Here is why the question is urgent. By nearly every measure, the mental health of our population — beginning with our children — is a slow-moving public health disaster.

In 2019, before anyone had heard of COVID-19, the CDC surveyed a large, demographically representative sample of American high school students. According to their own reports, 36.7 percent had experienced persistent feelings of sadness or hopelessness in the past year. Nearly one in five — 18.8 percent — had seriously considered suicide. Another 15.7 percent had made a suicide plan; 8.9 percent had attempted suicide; and 2.5 percent had attempted suicide seriously enough to require medical treatment (CDC, 2022). The pandemic pushed those numbers higher still, and they have barely come back down.

Nor is it a recent blip. Researchers have compared teenagers' answers to identical questions on standard psychological assessments across the second half of the twentieth century, and the change is stark. In 1948, 16.2 percent of fourteen- to sixteen-year-olds agreed with the statement "I work under a great deal of tension." By 1989, 41.6 percent agreed. Agreement with "Life is a strain for me much of the time" rose from 9.5% to 35%. Agreement with "I am afraid of losing my mind" rose from 4.1 percent to 23.4 percent — more than a fivefold increase (Gray, 2011).

Adults are struggling too. More than one in five American adults now experiences a mental illness in a given year. In 2023, Gallup found that 29 percent of adults had been diagnosed with depression at some point in their lives — the highest figure it had ever recorded (Witters, 2023). Suicide took about 49,000 American lives in 2022, the most ever counted (CDC, 2023). In 2023, the U.S. Surgeon General declared an

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epidemic of loneliness: roughly half of adults experience it, and weak social connection damages health on a scale comparable to smoking up to fifteen cigarettes a day (U.S. Surgeon General, 2023).

We have responded just as the cliff picture predicts: more ambulances, more therapists, more medications, more crisis lines—all badly needed, all worth funding. Yet the stream of people going over the edge keeps growing. Public health asks a different question: where is the fence?

Background

What Changed

To find it, compare two childhoods. A child growing up between the 1950s and the 1970s had hours of unscheduled time — roaming the neighborhood, organizing games, picking teams, settling arguments, taking small risks, mostly out of adult sight. Today, a child moves between supervised settings on an adult-managed schedule: school, organized activities, homework, screens.

Psychologist Peter Gray and other researchers have documented this transformation (Gray, 2011). Since about the 1980s, children have experienced steadily more adult direction and oversight, more pressure to achieve grades and performance milestones, less self-directed free play, and fewer opportunities to do anything independently. Over the same decades, anxiety, depression, loneliness, and difficulty coping with ordinary stress have kept climbing.

Every one of those changes was well-intentioned. More achievement feels like success. More supervision feels like care. More structure feels like help. But added together, they quietly removed one of the main ways young humans learn to handle life.

One honest caution: correlation is not proof, and other forces — smartphones and social media, academic pressure, economic insecurity — surely contribute. Careful researchers call the loss of free play a major contributing factor, not the sole cause. But public health has never waited for perfect certainty. It acts on large, well-documented, plausible, and changeable risk factors. The decline of play is all four.

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Strategies

What Play Actually Builds

Why would losing play damage mental health? Because play is how nature teaches us.

Watch a baby in her first year: she plays with her hands until she can grasp a toy, rocks side to side until she can roll over, drives herself to crawl, stand, and walk, and babbles her way into speech. No instructor assigns any of this; an inner drive supplies the motivation, and the practice looks exactly like delight. At the beginning of life, play and learning are one and the same.

They never fully separate. Free play — self-chosen, self-directed activity done for its own sake, which sets it apart from adult-run sports and lessons — is a complete training program hiding in plain sight. Cognitively, players solve problems, invent scenarios, and hold their own attention. Socially, they read people, negotiate rules and fairness, and repair conflicts so the game can go on. Emotionally, they handle excitement, frustration, and disappointment, and take on uncertainty and mild fear in doses they choose. Physically, they build strength, coordination, and endurance while burning off stress.

Those self-chosen doses of risk deserve special attention. Climbing a little too high or wrestling a friend is safe practice at feeling afraid and staying in control anyway — and researchers who study such "risky play" find that it appears to protect children against anxiety, not create it (Sandseter & Kennair, 2011). Animal research points in the same direction: juvenile rats deprived of play grow into adults who overreact to stress and misread social signals (Pellis & Pellis, 2007). And when Dr. Stuart Brown, founder of the National Institute for Play, studied incarcerated young murderers in Texas, one common thread stood out in their histories: severe childhood play deprivation (Brown, 2009).

Above all, play installs an inner voice that no lecture can: "I can handle this. I can try again. I can figure it out.” Sleep and nutrition let us survive; these capacities let us thrive. Consider what a hard moment demands of a teenager or an adult — a harsh boss,

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an unfair call, a plan collapsing in real time. Getting through it means staying calm enough to think, reading the situation accurately, adjusting on the fly, and recovering when something comes out wrong. Someone who never gets the practice meets each moment badly, grows more anxious, avoids the next one, and gets even less practice. That downward spiral, multiplied by millions, is what the statistics are showing us.

And this is not only about children. Adults who keep playing—a hobby pursued for its own sake, unscripted time with friends, low-stakes experimenting—maintain the same equipment. Adults who stop find that work turns rigid, relationships narrow, and stress accumulates with nowhere to go.

From Private Struggle to Public Priority

Individual gaps scale up. When millions of people miss this practice, whole communities show higher baseline anxiety, more brittle interactions, less trust and cooperation, and less creativity and adaptability. Play is not just personal; it is part of our social infrastructure.

Pediatricians have started to say so. The American Academy of Pediatrics now urges doctors to write "prescriptions for play" at checkups (Yogman et al., 2018) and has repeatedly defended recess as essential, not optional (Murray & Ramstetter, 2013). What is still missing is the full public health treatment — the "eight hours of sleep" of play, what we might call Play Hygiene: simple guidance, repeated everywhere, treating daily free play as a basic requirement of a healthy life. The question shifts from "How do we fit play in?" to the one public health always asks: "What happens to a population that doesn't play?"

Conclusion

What This Would Mean

For parents, it means protecting genuinely free time, stepping back so children can work things out themselves, and treating play as preparation, not distraction. It also means weighing risk honestly: a scraped knee heals; a childhood without practice at handling life leaves a lasting mark. For schools, it means guarding recess and unstructured social time as fiercely as math class, because they build the self-regulation

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that makes math class work. For workplaces, it means proactively fostering a culture of playfulness—leaving room for informal connection and unscripted time, where adaptability actually grows. And for policymakers and health leaders, it means putting play into the pipeline that served sleep and nutrition so well — guidelines, well-child visits, school policy, public campaigns — and measuring it the way we measure diet and rest.

The Bottom Line

Watch those children again. They are not wasting time. They are building the equipment for a workable life — steadiness, flexibility, connection, and the quiet conviction that they can handle whatever comes next. At the National Institute for Play, we put it simply: play is productive; play is learning.

When opportunities for that learning shrink across a whole population, the effects show up everywhere — in classrooms, workplaces, emergency rooms, and loneliness statistics. Sleep restores us. Food fuels us. Play prepares us in youth and restores us as adults. That is why play is not merely important, enriching, or a nice-to-have.

Play is a public health necessity.

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Lessons from the Laboratory: Not All Rats Benefit from Play and Why That Matters for Children

Jackson R. Ham, PhD

Introduction

Play is widely recognized as essential for healthy child development, supporting emotional regulation, social skills, and executive function. As opportunities for free and risky play have declined over recent decades, educators and policymakers have increasingly promoted play-based approaches to support children's well-being. However, most discussions assume that play is universally beneficial—that simply providing opportunities to play will produce positive outcomes for all children.

Research from animal models challenges this assumption. Studies of juvenile rats show that while play typically supports healthy brain and social development, a substantial minority of individuals do not benefit in the expected way. In controlled laboratory settings, about 20% of rats showed poor social-emotional regulation and atypical brain development despite normal access to play. These differences were not due to how much the animals played, but to how they engaged socially during play and/or to insufficient play opportunities.

These findings have important implications for children. Observational research suggests that some children—particularly neurodivergent children—may struggle to engage in peer play even when opportunities are available. Simply placing children together does not guarantee meaningful or beneficial interaction. Evidence from structured interventions, such as integrated play groups, shows that intentionally designed social environments can help children who might otherwise withdraw from play gain its developmental benefits.

This white paper argues that play should be understood not as a one-size-fits-all solution, but as a powerful developmental tool that requires thoughtful support. Policies and practices that focus solely on increasing access to play may leave some children behind. Instead, attention should focus on how play environments are structured, how

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children are supported within them, and how individual differences shape developmental outcomes.

Problem Statement

The question for this problem is: Do all individuals benefit equally from play? Play is often promoted as a universal solution for supporting children's social, emotional, and cognitive development. As a result, many educational and recreational policies focus on increasing opportunities for free or risky play, assuming that access alone is sufficient.

Emerging evidence suggests that this assumption may be incomplete. Research using animal models indicates that while most individuals benefit from play, a significant minority do not show the expected improvements in social behavior or brain development—even when given ample opportunities to play. These individuals often engage in play differently, withdrawing from intense social interactions or struggling to regulate emotional responses.

Comparable patterns are observed in children. Some children, particularly those who are neurodivergent, may be motivated to play with peers but struggle to do so successfully. Without guidance or support, these children may disengage from play and miss out on its potential developmental benefits. Simply providing opportunities for play does not guarantee positive outcomes for all children.

This white paper addresses whether current play-based policies adequately account for individual differences. If not all children benefit equally from unstructured play, how can social environments be designed to ensure play supports healthy development for everyone?

Background

Records of human children engaging in play date back to the second millennium BCE (Artemidorus, 1975; Catalano, 2021; Dolansky, 2017), and evidence suggests that non-human animals have engaged in play behavior since the Permian period, long before dinosaurs roamed the Earth (Bolton et al., 2025). It is, therefore, highly likely that prehistoric humans also engaged in play. Proposed functions of play range from

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training for the unexpected to practicing social and motor skills (Špinka et al., 2001), to the possibility that play has no single function at all (Lewis, 2023; Pellis & Pellis, 2021).

Since the middle of the last century, opportunities for children to engage in free play—defined as play with little to no adult supervision—have declined significantly (Gray, 2011; Gray et al., 2023; Singer et al., 2009). This decline has been attributed to multiple factors, including increased participation in structured activities (e.g., music lessons, organized sports), reduced time for free play during recess, diminished trust in public spaces, heightened parental safety concerns, and a broader societal intolerance of play that may be perceived as aggressive or risky, even when the risk is minor (Baines & Blatchford, 2011; Pellis et al., 2025). Despite these restrictions, when children are asked what kinds of play they would like to engage in, they often report wanting more unrestricted play (Skenazy et al., 2025).

In recent years, there has been a growing emphasis on encouraging "risky play" (Brussoni et al., 2012), and for good reason. Play that includes physical, social, and cognitive challenges has been shown to support executive function development. Children who participate in programs designed to enhance executive function through play perform better on related cognitive tasks (Diamond et al., 2007; Gibb et al., 2021). Notably, free play—and especially risky free play such as rough-and-tumble interactions—has been suggested to be a particularly potent driver of executive function development (Pellegrini, 1988). While research in humans is still emerging, studies using animal models have provided some of the clearest evidence of the neurobiological changes associated with play.

Many rodent species engage in play (Pellis & Iwaniuk, 1999), but the laboratory rat has been studied most intensively (Pellis et al., 2023). Once weaned, juvenile rats spend approximately an hour per day engaging in rough-and-tumble play, which involves attacks and defensive maneuvers directed toward the nape of the neck and often results in energetic bouts of wrestling (Pellis et al., 2022). Rats deprived of play during the juvenile period show poorer social skills, impaired executive function, and atypical brain anatomy, as Pellis et al. (2023) reviewed.

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However, in our experiments, we observed substantial individual variation in these outcomes (Ham et al., 2024; Stark et al., 2021, 2023; Stark & Pellis, 2020). Some rats deprived of play were less affected than expected, while some control rats—those with typical play experiences—exhibited unexpectedly poor outcomes. In other words, not all rats appeared to benefit equally from play. This observation raises an important question.

Appropriate Approaches/Strategies

To investigate this issue, I reared male rats in large social groups to maximize play opportunities and later assessed their social competence and medial prefrontal cortex (mPFC) development. Despite having equal access to play, 11 of 54 rats (approximately 20%) exhibited poor social-emotional regulation in adulthood, escalating to overt aggression in situations where typical rats would engage in play (Ham et al., 2026).

Examination of pyramidal neurons in the mPFC—a brain region involved in executive function and emotional regulation—revealed atypically large neurons in these rats. Behaviorally and neurologically, these animals resembled rats deprived of play during the juvenile period. This finding raised a critical question: What were these rats like during development?

Surprisingly, these 20% of rats engaged in just as much play as their typically developing peers. The difference was not in the quantity of play, but in its quality. These rats were more likely to withdraw or hide when play became highly energetic, preferring smaller or more controlled interactions.

These findings suggest two possibilities. First, it may be that not all individuals benefit from play, even when they actively engage in it. Alternatively, some individuals may require specific social conditions or group compositions (Ham et al., 2025; Ham & Pellis, 2023, 2024, 2025) in order to benefit fully from play.

If the latter explanation is correct, then social environments could be optimized to improve developmental outcomes. If the former is true, and some individuals do not benefit regardless of social structure, then earlier or more targeted developmental

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interventions may be necessary. These possibilities have important implications for children, particularly neurodivergent children. Although inclusive education policies promote integration with neurotypical peers, it remains unclear whether all neurodivergent children benefit equally from such approaches (Cologon, 2022).

Observational studies indicate that some children fail to engage in peer play during recess (Blurton Jones, 1976), a pattern analogous to the socially withdrawn rats described above. These findings suggest that merely providing opportunities for social interaction does not guarantee beneficial developmental outcomes. Instead, social groups may need to be intentionally structured to promote positive interactions. One example of this approach is the use of integrated play groups for children on the autism spectrum (Wolfberg et al., 2012).

Children with autism are often motivated to play but may engage in social interactions in atypical ways, using overtures that are not readily recognized by peers (Jordan, 2003; Wolfberg et al., 2012). Without support, these children may withdraw from social play, and their attempts to initiate interaction may be ambiguous, making sustained peer play difficult (Schuler, 2003; Sigman & Ruskin, 1999). With guidance, however, children can learn social cues and strategies that allow them to participate more successfully.

Integrated play groups provide structured opportunities for mutually engaging play experiences. In these settings, trained adult facilitators pair children with developmental delays with more socially competent peers (Wolfberg et al., 2012). These interventions have been shown to improve the quality of social interactions and help children develop social skills that peers understand (Wolfberg & Schuler, 2006). These findings suggest that intentionally structured social environments can help children, including those with developmental delays, derive meaningful benefits from play. The following are suggested strategies.

1. **Recognize Individual Differences in Play**
   Policies should acknowledge that children vary in how they engage with peers during play. Some children thrive in highly physical, unpredictable play

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environments, while others may find such contexts overwhelming. Recognizing these differences is a critical step toward inclusive play practices.

2. **Move Beyond Access-Only Models**
   Increasing access to play spaces matters but is not enough. Play environments should be designed with attention to group composition, adult support, and opportunities for gradual engagement. Simply placing children together does not ensure meaningful interaction.

3. **Support Structured and Guided Play When Needed**
   Evidence from integrated play group models demonstrates that structured, supported play can help children—particularly those with developmental delays—learn social cues, regulate emotions, and sustain peer interactions. Trained adults can scaffold play without undermining children's autonomy.

4. **Use Peers as Partners, Not Just Participants**
   Pairing children who struggle socially with more socially competent peers can promote positive interactions when done thoughtfully. Peer-mediated approaches allow children to learn social strategies in naturalistic and supportive contexts.

Conclusion/Recommendations

In rats, social play shapes social behavior and brain development, and the same seems to be true for humans. Research from both animal models and human studies shows that play strongly drives emotional regulation and executive function. However, evidence from rats also shows that play is not universally beneficial in its default form (Ham et al., 2026).

A significant minority of individuals—both rats and children—do not experience the typical benefits of play, even when they have access to it. These findings highlight the limitations of one-size-fits-all approaches. When play environments are intentionally structured and supported, children who might otherwise withdraw can engage more successfully and derive meaningful developmental benefits. Key recommendations include:

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1. Policy frameworks should recognize that access to play alone is not sufficient.
2. Educational and recreational programs should incorporate flexible, inclusive play models that account for individual differences.
3. Provide structured, guided play interventions for children who struggle with peer interaction.
4. Educator and play facilitator training should include strategies to support diverse play styles without suppressing autonomy.

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Play in Kindergartens in Greece

Evanthia Synodi, PhD

Introduction

In many parts of the world, play, in terms of time, space, resources, and children's control over it, diminishes in the daily routines of children's lives, both in and out of school. Although play has traditionally been a basic feature of education for young children in Western countries, many factors in recent decades have pushed it aside and even undervalued it in early years education (Brostrom, 2012; Sahlberg & Doyle, 2019). Articles 12 and 31 of the Convention on the Rights of the Child (United Nations, 1989) state that children have the right to play in and out of school (article 31) and to have their opinions seriously considered when decisions about their lives are made (article 12). Instead, official and centrally imposed early years policies tend to emphasise teachers' obligation to teach what out-of-school agents have decided, which at times devalues or ignores play, the individual interests of children, and their pace of development (on top of devaluing the education of the professionals working with young children).

Kindergarten teachers in Greece are responsible for working with children ages 4 to 6. These kindergarten teachers are under pressure to teach specific information and cultivate specific skills in children. However, the official curriculum does not clearly link children's right to play and participation to the learning process.

Problem Statement

In many kindergartens, play and teaching are disconnected for various reasons (e.g., a lack of understanding, diverse perspectives on childhood and early childhood education, and excessive demands on teachers). However, this harms children's learning and development, as play is how humans are meant to learn, bond, and thrive (e.g., Brown with Vaughan, 2010; Gray, 2013). Research shows that young children distinguish between their self-initiated activities, which they call play, and teacher-initiated activities, which they call work (e.g., Howard, 2010). This separation between play and instruction is problematic. The problem is exacerbated by reduced time for

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play in kindergartens' daily routines. This limits the scope and contexts in which children naturally learn, bond with others, and feel competent (Ryan & Deci, 2018), with implications for all aspects of their development and learning.

Traditionally, the assessment of children's progress has been based on observations of children's free play, and these observations are then linked to adults' planning and organising activities for young children (Sylva, Roy, & Painter, 1980; Wood, 2009). Unfortunately, how this is supposed to be achieved has lacked clarification or has been misunderstood and misused, as noted by critiques of what is termed play-based pedagogy (Brooker, 2010; Pramling et al., 2019; Wood, 2010, 2013). This approach uses play to meet the requirements of official curricula, rather than allowing children's play to lead their learning with the help and knowledge of caring adults. It removed the importance of observing and analysing play in defining teacher-led activities in favor of an instrumental use of play (Murphy, 2016; Rogers, 2011; Smith, 2010). For example, when Jones and Reynolds (2011) describe teachers' roles in relation to children's play, particularly the teacher's role as a planner, they call for an emergent curriculum. However, what is expected of teachers is planning towards 'agreed upon goals that are aligned with state child outcome standards' (NAEYC, 2009 in Jones & Reynolds, 2011, p. 95).

Adults' intrusion into children's play to control it has negated the value of free play for children's development. There is already (before increased state prescription and after it) excessive control and influence of adults, and not only of their teachers, on the life of children in a kindergarten. The values based on which children are expected to behave and resolve disagreements, the materials/resources offered to them, or not, due to scarcity or risk avoidance, the space offered, the daily routine, the number of children and adults in every setting, the restrictions on or obstacles to children's contact with nature or visits to places they find interesting, events in the lives of all in the community (e.g. celebrations, anniversaries, different cultures in school and society) have become inescapable influences of adults on children and their play. This is understandable to a degree (Quennerstedt & Quennerstedt, 2014) because education is supposed to initiate children into the knowledge reserve of the society in which they are raised. However, how this initiation is achieved at kindergarten must also contribute to children's optimal

development and be attuned to such individual development for every child, especially since children are right holders and beings as well as becoming.

Background

Greek kindergartens have some peculiarities compared with what we usually read about pre-primary education in the Western world. Attendance at kindergartens for children aged 4-6 is compulsory, and kindergarten is the first step on the education ladder. However, until 2017, kindergartens were small schools with one or two classes. Nowadays, kindergartens can have more classes because of the large number of children in certain areas. Small schools with up to three classes in Greece, again by law (Law 4589, 2019), are not to have principals/headteachers but directors. One member of the teaching staff, usually the one with more years of teaching experience, is assigned as the kindergarten director and is responsible for the school budget, the coordination of school life, and compliance with legislation, without any leadership or teacher appraisal jurisdiction, in accordance with the existing tight, centrally controlled legislation. This means that a shared play vision among all teaching staff can only be created and followed if all teachers, as colleagues, agree to it. This entails the potential for different levels of access to play for the children, even within the same kindergarten. On the one hand, this supports teachers' autonomy and acknowledges their professionalism; on the other, it does not necessarily foster collegiality or ensure that all children can access the advantages of play.

The newly introduced curriculum (Ministerial Decision 13646 / Δ1, 2023, p. 6422) refers to a *Teaching (pedagogical) framework - Planning of Learning*, part of which is what it names *learning processes* in kindergarten and *learning frameworks*.

According to the document, learning processes include:

- exploratory learning
- playful learning
- cooperative learning
- learning for all children.

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Learning frameworks include:

- free and organised by the teacher play
- explorations to solve problems, to teach, and for children to learn about a theme decided either by the teacher or the children or mutually by both parties
- projects
- everyday or randomly occurring situations
- activities to support individual children and activities for all of them to assist with issues requiring prevention or interventions,
- the daily routines,
- the breaks/recess and transitions from one activity to another.

All of these are individually described in the document, but only minimally linked, so that all aspects of pedagogy and the organisation of learning are unified. There is no clear, specified starting point for the organisation of pedagogy.

This means that children's interests as expressed in free play do not *necessarily* become the content of education and the basis of teachers' work especially as play is described most times as a means for teachers to teach the content and skills described in the curricular document (Ministerial Decision 13646 / Δ1, 2023, p. 6423; for similar situation in other countries see Laas, 2018; Wood, 2013). It alludes to play-based or playfully based teaching. Therefore, children's free play is used to teach the official curriculum through play/games, or other playful activities, but this is not only the case in Greece. However, a play-responsive pedagogy (Pramling et al., 2019) offers an alternative way to link free play to pedagogy and learning.

Appropriate Strategies

Pramling et al (2019) discuss the play-responsive approach to early childhood education rather than the recent versions of play-based pedagogy. This approach is based on 'listening to the children's perspective and allowing them to influence their daily life' (Brostrom, 2012, in Pramling et al, 2019, p. 4). According to them, teachers' observations of children's free play and teachers' participation in it are integral parts of life in kindergartens and their pedagogy. So far, this sounds like play-based pedagogy.

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However, teachers' observations of the information and skills that would enable children to further develop their play should serve as the compass for teacher-organised activities. A play-responsive pedagogy respects children's participation in what takes place in school and acknowledges:

- the difference between matter to be taught and the meaning people, children or adults, make of this matter, which varies, and
- the gap between teaching something and learning it (Hopmann, 2007); that is, you cannot make someone learn if they do not want to learn what you teach them.

This approach links to the central role of *communication* in education as a 'collaborative sense-making activity' (Pramling et al., 2019, p. 10). It is advocated that the goals, aims, or learning outcomes of any kindergarten curriculum or program be seen as goals to strive for rather than as goals for children to achieve. A play-responsive pedagogy aims to broaden children's cultural experience by helping them access cultural tools to facilitate their agency. This is achieved by attending to the as-if aspect of play (play based on children's imagination) and the as-is aspect of play (play based on the reality of children's experience), and to children's movement from one aspect to the other when they play.

When paying attention to this shift from the *as-if* to *as-is* aspect of the play activity, teachers must observe and understand that:

- players' intersubjectivity, that is, players having sufficient, even if it is partial or temporary, co-ordination to participate in a joint activity, such as play, and
- players' alterity, the different perspectives and understandings of the players, which lead to play not just being repeated but enriched and developed.

Observing these shifts in the *as-if* and *as-is* modes of play, in intersubjectivity and alterity, shows what children need to keep playing and thus learning. These observations and understandings lead to successful ways to implement a play-responsive pedagogy. They have to do with teachers' (a) entering children's play, (b) establishing narrative

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frames, and (c) introducing learning content into play. Teachers can enter children's play by:

- asking permission from the children to play with them,
- asking questions about their play,
- taking up a role in the play without asking children, or
- accepting the children's invitation to join their play.

Establishing narrative frames for children's play is based on the concept of *playworlds* (Lindqvist, 1995, in Nilsson, 2010), in which teachers and children role-play fictional stories that address problems to be solved. Ways of establishing narrative frames for children's play include teachers:

- engaging children in a playful dialogue to clarify the plot of the play and introduce new props, so that children give new direction to their play (co-creation of play),
- acting as directors or narrators,
- acting as actors who allow greater agency to the children and
- assuming the role of guiding participants or coordinators of children's roles, thus allowing children to see new directions for their play to choose from.

Finally, teachers introduce content (information or skills of any nature) into play either while play is taking place or when they organise other activities to help children learn new information or practise skills to become better players (see also Cutter-Mackenzie et al., 2014). A useful skill that teachers with a play-responsive approach to pedagogy can introduce is *what-if thinking*. This means that during play, teachers can help children think about and realise that when something changes, there are consequences, and, to some extent, by using what-if thinking, these consequences can be imagined as the play is being negotiated.

Conclusion

Early years teachers need to help ensure play finds its appropriate place in young children's lives and education. Professional development for teachers, as well as courses on the latest knowledge about play in initial teacher education, are necessary.

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Campaigns to inform the public and parents are also required. Children's freedom to play needs to be understood more deeply, thus providing not only for article 31 of the Convention of the rights of the child (United Nations, 1989) but for articles 5 and 12 as well, that is, children's right to adults who help them learn their rights (including that of play), form informed opinions and consult them and seriously take their views into account when decisions about things that affect children's lives are made.

Finally, I need to clarify that the above analysis is based on my disagreement with teachers who treat play merely as a delivery mechanism for teaching predefined adult learning outcomes or state standards and appropriating play; another term for this is colonizing play. Still, I agree with the idea of children becoming master players (Reynolds & Jones, 1997). I also agree with Sicart (2017), who describes play as a way of being in the world, involving freedom and subversion, moral development, and creativity and personal expression. Such a conceptualisation of play is way beyond what the official curricula demand of teachers, because it indicates the value of play to the human species and is based on a holistic view of children, their development and learning. Children's control over their play and the advantages of the play they engage in need to be reflected in how adults teach them and what they teach, rather than in a curriculum that defines and directs almost everything adults do in kindergartens, which children have to follow.

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Play Is for Everyone, or Is It?

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Introduction

Play is far more than a leisure activity; it is a fundamental human right and the primary vehicle for early childhood development. For children aged three to eight, play is essential to healthy physical, social, emotional, cognitive, and moral growth (Else, 2014; Isenberg & Quisenberry, 2002). This necessity is universally recognized, with the United Nations Convention on the Rights of the Child (Article 31) declaring that every child has the right to rest, leisure, and recreation (United Nations Committee on the Rights of the Child, 1989). In Early Childhood Education (ECE), play is a dynamic process in which children discover, learn, and interact with the world around them.

However, play is not a one-size-fits-all model. It exists on a spectrum, ranging from child-initiated, spontaneous, unstructured play to adult-facilitated guided play focused on specific learning outcomes. For children with special needs, these experiences are transformative. Inclusion in Early Childhood Education (ECE) involves accepting, understanding, and attending to individual differences across physical, cognitive, and social domains (Division for Early Childhood & National Association for the Education of Young Children, 2009). When play is purposefully planned and scaffolded, it allows children with disabilities to function as equals alongside their typically developing peers, preparing them for lifelong inclusion in a diverse society (Moore & Zweig, 2021).

Problem Statement

Despite the overwhelming evidence supporting play, several critical issues hinder the successful implementation of inclusive play-based learning in modern classrooms:

- **Academic Pressure and the Neglect of Play:** A growing trend prioritizes rigorous academic standards and rote memorization over developmentally appropriate practices (Allee-Herndon et al., 2019; Copple & Bredekamp, 2009; National Association for the Education of Young Children, 2019; Weisberg et al.,

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2016). Educators often view play as irrelevant to "real" learning, leading to its neglect in Individualized Education Plans (IEPs).

- **Social Neglect and Isolation:** Children with special needs are frequently placed in situations that make them appear passive or less curious, leading to social neglect. Without intervention, these children may be ignored, teased, or bullied, which can prevent them from developing essential prosocial behaviors.
- **The Inactivity Crisis:** Daily schedules often require children to remain sedentary for long periods, which is particularly detrimental for children with special needs, who may become fidgety and disengaged. This inactivity contributes to rising rates of childhood obesity, with current data showing that nearly 14% of children aged 2-5 are considered obese.
- **Accessibility Barriers:** Many outdoor play environments are not compliant with ADA Accessibility Guidelines. A lack of funding for modified equipment and accessible routes prevents children with mobility or visual impairments from participating in vigorous physical play.
- **Deficit-Based Perspectives:** Educators often focus on what a child with special needs cannot do rather than utilizing a strengths-based approach that identifies their interests and preferences.

Background

Inclusive play is grounded in legal mandates and developmental theories that emphasize the adult's role in scaffolding the child's experience.

Legal Mandates

The Individuals with Disabilities Education Act (IDEA, 2020) requires that children with disabilities receive a free appropriate public education in the least restrictive environment. Furthermore, joint position statements from organizations such as the National Association for the Education of Young Children (NAEYC) and the Division for Early Childhood Education (DEC, 2009) urge educators to move away from isolating children with disabilities and instead focus on access, participation, and social justice.

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Theories of Play

Theories provide a lens for interpreting play behaviors and planning interventions (Frost et al., 2012). Some of the major contributing theorists include:

- **Jean Piaget** (1976)**:** Identified cognitive stages of play, from functional play (repetition) to symbolic pretend play and eventually games with rules, which build a foundation for moral development.
- **Lev Vygotsky** (1976)**:** Viewed play as a means to fulfill desires through imaginary situations, where interactions develop language and reasoning. He emphasized that adults must scaffold learning by providing organized environments and guidance.
- **Mildred Parten** (1932)**:** Described six levels of social participation—uninvolved, onlooker, solitary, parallel, associative, and cooperative play—which involve group decisions and common goals.

Developmental Benefits

Play offers holistic benefits across four primary domains:

1. **Physical:** Mastering fine and gross motor skills, improving balance, and building bone health.
2. **Social-Emotional:** Developing empathy, practicing turn-taking, and building a sense of community belonging.
3. **Cognitive:** Enhancing executive function, including working memory, self-regulation, and planning.
4. **Language:** Providing a "language-rich" environment where children practice vocabulary and express choices in words.

Appropriate Approaches/Strategies

To address the challenges of inclusion, educators who understand and support play must assume diverse roles and implement specific environmental and instructional strategies to facilitate children's play activities (Ashiabi, 2007; Jones & Reynolds, 2011).

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The Six Roles of the Educator

Educators must fluidly interchange these roles to support play successfully (Bodrova & Leong, 2007), including:

- **Stage Manager:** The educator intentionally arranges the environment into learning centers (e.g., art, blocks, science) and provides age-appropriate, multi-sensory materials. They schedule adequate time for play and set the ground rules for the "play frame."
- **Mediator:** The primary focus is maintaining physical and emotional safety. The Mediator helps children enter play groups, suggests alternatives to extend play, and helps interpret peers' intentions or words.
- **Co-player:** The educator joins the play without taking it over. By following the child's lead, they model prosocial behaviors and offer ideas to enhance the complexity of the play.
- **Scribe or Recorder:** This role involves documenting play through words, pictures, checklists, and anecdotal records. This documentation is essential for formative evaluation and tracking progress.
- **Observer and Assessor:** The educator monitors children to identify their strengths and interests and sets individualized goals based on these observations.
- **Planner:** Using gathered information, the planner develops an emergent curriculum, introduces new props, or organizes field trips to deepen the children's inquiry (Jones & Reynolds, 2011).

Inclusive Indoor Environments

Classrooms should be organized into clearly defined learning centers with accessible, culturally responsive materials. For children with sensory impairments, materials must have multi-sensory appeal, such as varied textures for those with visual impairments. Educators use a "system of least prompts" to teach play skills, starting with the minimum help needed to encourage independent problem-solving. This approach is particularly effective for young children with disabilities, as systematic instruction can increase object play skills and engagement with peers (Barton et al., 2020). To combat sedentary behavior, educators should integrate "Brain Breaks" (2-5

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minute vigorous exercises) and music-based transitions, such as five-minute dance parties, which energize the classroom and improve academic focus (Action for Healthy Kids, 2019; Centers for Disease Control and Prevention, 2018; Frost et al., 2012).

Outdoor Environments: Nature and Accessibility

Outdoor space design is critical for children with special needs, as they are often more engaged outdoors than indoors.

Accessibility and Safety: In accordance with ADA guidelines, playgrounds must provide accessible routes for wheelchair users and inclusive equipment, such as nest swings or swings with harnesses (United States Access Board, 2007). Active supervision is required to prevent accidents and ensure all children are included in social interactions.

- **The Therapeutic Power of Nature:** Children's interactions with the natural world can be supported when outdoor spaces offer a variety of learning experiences (Herrington & Brussoni, 2015). Access to green spaces and engagement with nature support every domain of children's development (Keeler, 2008; Keeler, 2020). Exposure to natural settings significantly reduces symptoms of Attention Deficit Disorder (ADD) by helping children focus and inhibit impulses. Natural Outdoor Classrooms (Dennis et al., 2019) foster resilience and calm, providing a peaceful environment that limits distractibility.
- **Scientific Inquiry:** Educators should provide tools like magnifying glasses, binoculars, and rain gauges to encourage investigation. Natural "loose parts" (sticks, pine cones, stones) stimulate exploration and symbolic play far more effectively than fixed plastic structures.

Recommendations

1. **Professional Development:** Pre-service and in-service training must move beyond basic development to focus on integrating play and physical activity specifically for children with disabilities.

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2. **Health and Wellness Policies:** School districts and childcare facilities should mandate regularly scheduled outdoor play and active indoor breaks to mitigate obesity and improve mental health.
3. **Priority Funding:** Allocate financial resources to ensure all public and school playgrounds meet ADA accessibility standards, with an emphasis on natural elements and multisensory components.
4. **Advocacy:** Educators and families should join national and international organizations, such as the International Play Association, to protect play as a social justice issue and a fundamental right.
5. **Strengthened Research:** Future studies should focus on observational data of peer interactions in inclusive settings and incorporate the "voices" of children themselves to determine their play preferences.

Conclusion and Call to Action

Successful inclusive education is fundamentally achieved by accepting, understanding, and attending to the diverse needs and differences of all children within the learning community. By fluidly interchanging the professional roles of stage manager, mediator, co-player, scribe, observer, and planner, educators can effectively facilitate both unstructured and guided play-based learning that reaches across the developmental spectrum. These intentional strategies and environmental arrangements ensure that children with special needs are not merely present, but are fully engaged in activities that support physical health, social competence, cognitive function, and creative problem-solving.

Because all children are naturally born to be "discoverers, thinkers, and problem solvers," childhood must be protected as a treasured time to experience the joy of shared adventure and mutual endeavors, regardless of ability. Educators, families, and policymakers must therefore join together in a **call to action** to appreciate, advocate for, and preserve every child's **fundamental right to play**. Only through this commitment to inclusive, play-based practices can we prepare every child for lifelong participation in a diverse and equitable society.

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Play and Climate Change

Upcycled Materials for Play Equipment to Expand the Benefit of Playing in Nature in Urban Areas

The Impact of Environmental Changes on Children's Play Experiences

The Taiwan Children's Play Declaration and Protocol for Replication



IPA CHRISTCHURCH 2026

USA IPA American Association for the Child's Right to Play

Upcycled Materials for Play Equipment to Expand the Benefit of Playing in Nature in Urban Areas

Ananta Hari Noorsasetya, PhD; Anna Sutanto, MEM; & Veronica Purwaningsih, LLB

Introduction

While many Indonesian cities claim to be child-friendly, play equipment and playgrounds remain limited in number and access. In general, two types of playgrounds are available in Indonesia's urban areas. First, privatized playgrounds are either in outdoor fenced areas or inside air-conditioned rooms, accessible by ticket or membership. Second, public playgrounds are located in green outdoor spaces or as part of public facilities. While public playgrounds are widely accessible, many have inadequate play equipment and limited opportunities to interact with nature because of constricted space and resources, concerns about changing weather, and the practicality of "clean" play (Shafira & Pramitasari, 2024; Tiara & Dwiputri, 2025).

While Dankiw et al. (2023) define nature play as playing activities in an outdoor setting with opportunities to interact with nature elements (e.g., water, soil, leaves); we propose that nature play also includes utilizing what is available in the surrounding area of the green space. In addition to standard play equipment, selected upcycled materials could be redesigned as permanent or pop-up play equipment, inspiring other possibilities for playing in nature.

Problem Statement

To support Indonesian cities in becoming more child-friendly, we need to ensure play experiences are supported and maximized in terms of accessibility for further interaction with nature. This can be done through two pathways.

1. Redefine the concept of playing with nature in urban green spaces.
2. Enrich play experiences in urban areas through upcycled equipment and pop-up play equipment made from natural materials.

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Background

Indonesia is targeting 2030 as the year to achieve child-friendly cities and subdistricts. One requirement for a child-friendly city is ensuring children's right to play in a supportive environment, either natural or constructed.

According to the Child-Friendly Play Space (CFPS; RBRA in Indonesia) guidebook, published by the Ministry of Women's Empowerment and Child Protection, the principles of CFPS include free access, non-discrimination, the best interests of the child, child participation, safety, comfort, creativity and innovation, and health and protection, although the latter remains largely at the level of policy discourse (Deputi Bidang Pemenuhan Hak Anak, 2021). In line with this idea, we recommend using upcycled materials in playground design. The guidebook requirements suggest materials should be durable, toxin-free, affordable, and locally available (RBRA Guidelines, 2021).

To develop the idea, we observed three public spaces in Yogyakarta. The first two were inspired by the research of Shafira & Pramitasari (2024), while the third was selected because of its proximity to one of the author's daily routes.

Yogyakarta is the mini-Indonesia, located on the south coast of Central Java. Yogyakarta was selected because it is known for its creativity, with a large university student population from across Indonesia, relatively high community participation, a widely embraced slower pace of life, and numerous green spaces ripe for further development of play equipment.

These three public spaces have limited play equipment or limited interaction with nature and represent different playgrounds across urban Indonesian landscapes. This white paper prioritizes expanding the definitions and described benefits of playing in urban areas, where the limitations of different outdoor play spaces become additional advantages that support creativity.

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Table 1

Summary of the Selected Playgrounds

Name of Park	Brief Description of Location	Accessibility	Interaction with Nature
Bakung	• Public green space • 700 M² • jogging track • gazebo	• Surrounded by residential area	• 4 play equipment pieces • Adequately shaded by large trees • some grass and soil surfaces
Rejowinangun	• Public green space • 660 M² • badminton court • community meeting hall	• Strategically located • free entrance	• Limited vegetation • no play equipment • mostly concrete surfaces
Pakuncen	• Community open space • outdoor and indoor space	• Located in an urban village	• Limited vegetation • 3 pieces of play equipment • concrete surfaces

We also believe pictures speak louder than words; therefore, we provide further descriptions of each location in the figures below.

Figure 1

Bakung Park

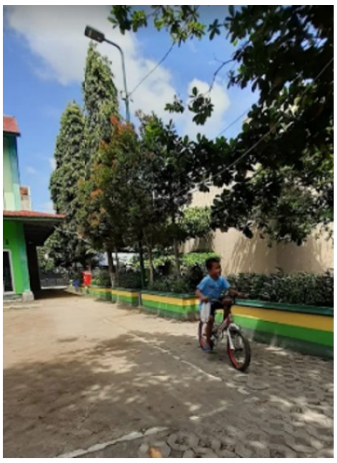


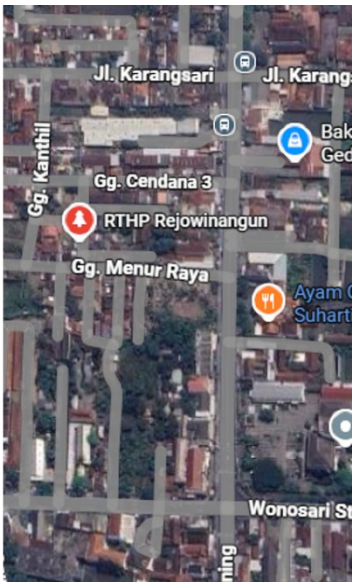
Bakung Park
Source: Aldi Thursha

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Figure 2

Rejowinangun Green Space





Rejowinangun Green Space
Source: R Kakung Wahyu W

Figure 3

Pakuncen Green Space





Pakuncen Green Space
Source: Rio Ananda Adriana

Appropriate Approaches & Strategies

Over the past 20 years, children's play has shifted from activities that require movement and exploration to more sedentary, predictable activities, whether playing computer games or spending time at the playground (Fjørtoft, 2001).

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How a playground is designed influences how the children will play. For children living in urban areas, outdoor play is defined as playing with provided equipment or games with sets of rules. Based on the authors' findings in Jakarta, Denpasar, and Yogyakarta, Indonesia, where urban playgrounds are attached to designated green spaces, the characteristics of the playgrounds are mainly as follows:

1. Constructed in a controlled environment to guarantee practicality in maintenance. For example, they have concrete-based flooring and manicured vegetation grown in concrete boxes.
2. Equipped with similar play equipment. Priorities often begin with swings, slides, and see-saws.
3. Designed to ensure clean play (i.e., non-messy).
4. Provides limited opportunity to interact with nature.

Playing in nature benefits children by improving motor skills, developing balance and coordination, enriching creativity, and strengthening the immune system (Fjørtoft, 2001).

However, because of safety and cleanliness concerns (Nusantara et al., 2023), we need a middle ground to promote and reap the benefits of playing in nature. Using upcycled materials addresses some concerns about expanding children's play in nature, including affordability, adaptability to space, and a channel for children's creativity.

By using locally available, locally sourced "unused" materials, we can create affordable, unique play equipment. The custom-built design is adjustable to the available playground space. By offering different play equipment, we pique children's curiosity to stay outdoors and nourish their creativity in play.

With these considerations, our expanded definition of nature play involves playing outdoors using play equipment made from upcycled materials from the surrounding area to maximize interaction with the ever-changing landscapes of both the natural and man-made world.

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Based on our experience working with communities in Indonesia, the best approach is to provide samples of the play equipment, along with facilitation for playing together, to expand the nature elements during the play experience. Here are some ideas to jump-start the process (adjusted to Indonesian contexts), drawing inspiration from community-based playground design approaches that emphasize low-cost, locally sourced, and recycled materials (Playground Ideas, n.d.).

1. Climb the Cliff: Made from old tires, piled up or tied up together. Tube shape with arms for smaller spaces, cone shape for medium areas, and spider web for larger areas. Children can climb, hang, and hide using the tire structures.
2. Our World: Providing and utilizing wooden crates (unused wood or bamboo), stones, and cardboard boxes with decorative art, numbers, colors, and safety measurements as basic structures to build their own world or role-play. These structures can be built around movable vegetation (potted) for children to use as part of creating their world. This idea serves as a temporary pop-up play equipment piece, as some materials are not long-lasting (e.g., cardboard); therefore, the play equipment can change consistently.
3. Growing You: Two structures from upcycled steel, 170 cm high, side by side. One can be used for children to climb, with some numbers to measure their height, and the other can be used for a plant to climb as a comparison of how different species grow.

To incorporate safety-first concerns, we recommend using both natural elements and upcycled materials to create landing beds under the play equipment. Ideally, the landing bed should be made of grass or sand. For lower-maintenance options, chopped upcycled tires are another option.

These ideas are deliberately open in design to respond to the shifting availability of upcycled materials for future design augmentation and to accommodate possible suggestions from the community. The children can also serve as designers.

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Conclusion & Recommendations

In creating child-friendly cities and communities, nature play is limitedly fostered in Indonesia. Often, nature play occurs in a controlled environment where nature is a mere background for shade and views, without nature elements being part of the play activity.

To address this, we proposed a middle ground that responds to concerns about safety, resources, and cleanliness in nature play by harnessing upcycled materials from the surrounding area to create additional, customizable play equipment and expand the benefits of playing in nature. In addition, upcycled tires are an excellent option for safe landing beds.

The design incorporates natural elements as a bridge to build familiarity with nature. The three proposed basic designs described here serve as a starting point for further development based on material discoveries and suggestions from parents, children, and future designers.

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The Impact of Environmental Changes on Children's Play Experiences

Ridhi Sethi, PhD Human Development, MSc Child Development, MEd

Introduction

Play happens naturally for children and opens their world by stimulating their imagination. Play provides us with a joyful way to connect with, relate to, and interact with the world**.** A child's healthy development depends on play. It makes learning fun while fostering moral, social, emotional, cognitive, and physical development. Regular playtime helps children grow into competent, self-assured, well-rounded adults. Regular play and exercise are essential for children's development and have many advantages, from better mental and social skills to better physical health (Berk et al., 2006).

Early childhood development is built on play, and having the opportunity to play is a fundamental human need. For children, it is seen as a fundamental right. From a child development perspective, outdoor play is characterized by flexibility, inventiveness, spontaneity, intrinsic drive, and nonliteral or symbolic use of items (Bäckström et al., 2024). Current outdoor trends in early childhood education indicate that these spaces are becoming increasingly bereft of opportunities to experience nature, despite abundant evidence of nature's importance to children's well-being (Dowdell et al., 2011). When used as learning spaces, outdoor spaces can give children the freedom to use their bodies and imaginations to create, invent, and change their surroundings. Additionally, natural materials offer children many opportunities for creative play (Kiewra and Veselack, 2016). They emphasized that young children must experience things firsthand, digest knowledge in ways that suit them, grapple with issues, and develop original, creative solutions to learn (Kiewra and Veselack, 2016).

Today, nearly every child is exposed to at least one of the following climate risks: sand and dust storms, tropical storms, riverine floods, drought, high heat, fire, and heatwaves. At least three overlapping climate threats endanger the health, education, and survival of 1.1 billion children worldwide. Up to six overlapping hazards affect nearly 4 million children worldwide. The paper also examines children's exposure to climate-sensitive risks, including air pollution and vector-borne illnesses such as malaria (UNICEF, 2026).

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Problem Statement

Children's outdoor play involves a broad spectrum of activities, skills, and interactions rather than a single characteristic. It encompasses multiple forms of play, including physical, constructive, social, imaginative, and structured games. Consequently, outdoor play environments should be intentionally designed to support a variety of play experiences rather than focusing exclusively on physical activity or one particular type of play. Effective play spaces give children opportunities to climb, jump, run, balance, create, imagine, explore sensory experiences, manipulate objects, and construct with different materials. By offering rich and varied play opportunities, outdoor environments enhance the value of play and better support children's holistic development.

Therefore, the equipment, materials, and features incorporated into outdoor play spaces should be versatile and encourage diverse interactions, enabling children to engage in multiple forms of play that align with their interests and developmental needs. (Ramsden et al., 2025). Environmental changes, including extreme heat, floods, and climate change, have influenced outdoor play. Extreme weather events such as heatwaves, storms, and floods are becoming more frequent and more intense due to climate change, a human-caused global health concern. These events can indirectly affect food security, air and water quality, human and animal security, and health. These affect children’s lives the most. According to the Asia-Pacific Regional Network for Early Childhood (ARNEC, 2023), young children are among the most vulnerable to the impacts of climate change and environmental degradation, despite contributing the least to greenhouse gas emissions.

Climate change adversely affects all five components of nurturing care—health, nutrition, safety and security, early learning, and responsive caregiving—through increased exposure to air pollution, extreme weather events, food and water insecurity, displacement, and disruptions to education and family wellbeing (ARNEC, 2023). It also affects children’s play experiences.

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Background

Experts in the field have made several suggestions regarding climate change and play. In a study conducted within the Occupational Therapy Programme at Lund University, Sweden, twenty professionals from Australia, France, Sweden, the United Kingdom, and the United States raised important issues (Bäckström et al., 2024). They discussed how climate change significantly affects children's play options, making outdoor spaces more dangerous, inaccessible, and ill-suited to a variety of play experiences. Rising temperatures, prolonged heatwaves, floods, storms, increased UV radiation, and poor air quality reduce the time children can safely spend outside. Additionally, damage to schoolyards and playgrounds disrupts normal play opportunities. These environmental changes especially threaten unstructured and dangerous play, which is crucial for children's physical, cognitive, social, and emotional development.

The study also emphasizes how traditional playgrounds, with their hard surfaces, sparse foliage, and uniform equipment, are particularly susceptible to the effects of climate change and provide less play value. In response, the authors support nature-based play spaces that are climate-resilient and include trees, natural vegetation, permeable surfaces, biodiversity, and loose natural materials. Beyond offering shade, cooling, and protection from severe weather, these settings foster children's creativity, imagination, physical activity, and connection to nature, helping preserve play opportunities in a changing climate. The authors also concluded that without meaningful climate adaptation, meaningful outdoor play becomes increasingly limited, and children risk greater occupational deprivation and inequality (Bäckström et al., 2024). The climate crisis is not a single event. It triggers a cascading impact on healthcare, education, WASH, nutrition, and child protection and social protection services (Ahuja, 2026).

Appropriate Approaches

Play is linked to environmental impacts in two main ways: how nature and outdoor spaces affect play, and how play activities affect the planet. Natural play areas improve health and climate resilience, whereas heavy production of sports and toys can

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harm ecosystems (Schmidt, 2006). Ambient environmental conditions affect many aspects of daily life, including active and recreational activities, and both influence and contribute to climate change (Lee et al., 2025). Nanda (2024) reports that rising temperatures, prolonged heatwaves, and increasingly unsafe outdoor conditions are limiting children's opportunities for outdoor play in several countries, including India, with potential consequences for their physical health, social development, and overall well-being.

Summer vacations used to be spent playing outside from dawn until dusk, riding bikes, racing, playing games like hide-and-seek and tag under the fading orange sky, taking walks in the cool morning breeze, climbing trees in the afternoon, and playing matches on roads and backyards. The children would come home for a few snacks, lots of tales about their adventures in the neighbourhood, and new discoveries. During summer vacation, people learned life skills and developed well-rounded personalities while spending time outside.

Children's daily routines have changed significantly over the past 20 years; many now spend much more time indoors engaged in screen-based activities, including watching television, using smartphones, playing video games, and interacting with digital devices. This is a significant shift from earlier generations, when kids spent more of their free time playing outside and engaging in physical activities. Fewer opportunities for regular physical activity and active play stem from increasingly sedentary lifestyles driven by greater dependence on screens.

Reduced outdoor play and exercise significantly affect children's physical health. The increasing incidence of childhood obesity and overweight, which is strongly linked to inadequate physical activity, is one of the most alarming results. Additionally, chronic health issues like cardiovascular disease, type 2 diabetes, poor musculoskeletal development, and decreased physical fitness are all made more likely by sedentary behaviour. Excessive screen time has been associated with negative impacts on children's mental health, sleep quality, social relationships, and general well-being in addition to physical health.

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These patterns emphasize the importance of providing children with opportunities and nurturing environments that support regular outdoor play and physical activity for healthy development.

Concern over the rising incidence of lifestyles that lead to the development of non-communicable diseases is growing on a global scale. Physical inactivity and childhood obesity have become significant public health issues, underscoring the need for interventions that take a life-course approach and encourage healthy behaviours from a young age. Globally, childhood obesity rates have risen to previously unheard-of heights, and more kids are falling short of the required levels of physical activity. This trend is especially troubling because sedentary behaviour and physical activity habits formed in infancy often carry over into adulthood, affecting long-term health. Dwindling opportunities for active outdoor play and a diminished emphasis on healthy, active living during childhood have also raised concerns about children's right to play, health, and holistic development (Tremblay et al., 2015).

Conclusion

Children are especially vulnerable to climate change. Schools frequently close and playgrounds vanish during floods. When youngsters should be studying and playing with friends, they spend weeks indoors, miss school, and lose their routine. Climate change is also affecting their sense of security and childhood, as well as their immediate surroundings. To protect children from the effects of climate change and air pollution, we must prioritise their environmental health. UNICEF cautions that we are already witnessing changes in children's health and communities in a climate-changed world.

The desirability and viability of outdoor learning are influenced by various contexts and conditions worldwide. Numerous contextual elements, such as weather, culture, safety, and the availability of nearby outdoor spaces, shape its practice (Kiviranta et al., 2024).

In the era of climate change, supporting children's play requires balancing environmental protection with its positive developmental benefits. Educators, families, legislators, and communities should implement measures to foster safer, more resilient, and more adaptive play environments rather than limiting outdoor play (UNICEF,

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2026). Governments must introduce a wide range of measures to ensure the fulfillment of all Article 31 rights, and to ensure that children's experience of place informs decision-making. Children need to be at the heart of the global response.

Play areas that are climate-resilient should be accessible, safe, and entertaining even amid shifting weather. Incorporating natural shade through trees and vegetation, offering covered outdoor areas and shelters, and utilizing a variety of natural elements like gardens, logs, rocks, and loose parts that promote different types of play and improve kids' interaction with nature are all ways to accomplish this (Kiviranta et al., 2024; Ramsden et al., 2025). To reduce the effects of heat stress and flooding while allowing kids to play outside safely, outdoor environments in areas with rising temperatures and extreme weather events should also incorporate climate-adaptive design elements like heat-reducing surfaces, permeable materials, and enhanced drainage systems (Lee et al., 2025; UNICEF, 2026).

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The Taiwan Children's Play Declaration and Protocol for Replication

Wei-Shun Tseng, OT; Jen Hsiu-Chuan Wang; Xiang-Ru Lin, LLB;
Eugenia Lin; & Elsie Shih-Hua Chang

Introduction

Article 31 of the United Nations Convention on the Rights of the Child (UNCRC) states that "children have the right to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts" (UNCRC, 1989).

Because of their age, children are still trying to understand the world and explore themselves. No one must overlook their inherent rights. Children's right to rest and play should be equally prioritized. Outside school and home hours, children should be allowed to engage in physical activity and play that suit their interests and allow them to socialize with their peers.

The fourth edition of the Occupational Therapy Practice Framework: Domain and Process is an official document of the American Occupational Therapy Association. (Occupations are the activities people engage in every day to give their lives meaning and purpose. Occupations can be done alone or with family members and friends; occupations can be done at home, at work or school, and in the community.

Every individual should participate in purposeful, meaningful activities that promote physical and mental health and overall quality of life. These activities should be emphasized across nine key occupations that evolve with age: activities of daily living, play, social participation, rest and sleep, work, education, health management, and others. Among these, the Play & Leisure domain is especially critical for children and adolescents. Play is an essential part of children's lives, serving as the most natural means of communication, self-discovery, emotional expression, and exploration of the world.

Play Taiwan was officially registered as a non-profit organization in 2017. A group of parents concerned about children's play spontaneously initiated a revolution across Taiwan, advocating for the most fun activities and playground changes. Through

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their actions, they aim to amplify children's voices and ensure more people hear them. We prioritize policies and legislation for children's play and safeguard children's right to play, supporting a childhood filled with unrestricted play.

To ensure children's right to play and the time they need to play, we must understand their needs and listen to their voices. This aligns with Article 12-1 of the Convention on the Rights of the Child, which asserts that " the child who is capable of forming his or her own views has the right to express those views freely in all matters affecting the child, the views of the child being given due weight in accordance with the age and maturity of the child" (UNCRC, 1989). In recent years, playground and park design, urban planning, and policy in many countries have begun to prioritize children's participation by actively listening to their needs and opinions.

Problem Statement

According to statistics from the Ministry of Health and Welfare (Taiwan, 2023), the number of children with developmental delays receiving early intervention increased from 26,392 in 2021 to 34,781 in 2023. A report from the Hsin-Yi Foundation (2022) indicates that after COVID-19, the overall motor skills of children aged 2 to 6 have declined. This is particularly evident in mobility skills (such as walking, running, jumping, hopping on one foot, climbing, etc.) and stability skills (such as balancing, rotating, stretching, swinging, etc.), which are worse than pre-COVID levels.

Although playgrounds have become more playful and diverse, with nearly 500 playgrounds renovated and more than 20 child play rights advocacy campaigns carried out, the COVID-19 pandemic temporarily closed many playgrounds and outdoor spaces. Because of the pandemic's severity and school closures, children spent more time at home, reducing outdoor playtime and physical activity. Consequently, children's physical fitness and development have deteriorated.

Based on Play Taiwan’s 2022 survey of 2467 questionnaires, we found that children's playtime was insufficient: preschool children went to outdoor playgrounds 1–2 times per week, whereas school-age children did so only 1–2 times per month. This suggests that school-age children's weekly playtime may be less than 25% of preschool children's. Compared to the minimum weekly play/physical activity time recommended

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by WHO (2020) and UNICEF (2019), the duration observed in this study is substantially less.

Background

Various factors influence this discrepancy in playtime. For example, these include academic pressures, parental safety concerns, and limited accessible play spaces. Additionally, past research shows that reducing playtime negatively affects children's development. In the United States, recent evidence indicates that state recess requirements can support the provision of daily recess: a 2025 cross-sectional study of Arkansas elementary schools found that 85.5% of schools met the state's 40-minute daily recess requirement, although implementation gaps persisted across school contexts (Howie et al., 2025).

Graham et al. (2022) emphasize that adequate physical activity is essential for school-aged children and contributes to cardiovascular and metabolic health, musculoskeletal development, and psychological well-being. A complex interplay of biological, psychological, sociocultural, and environmental factors shapes physical activity behaviors.

Strategies

What are the reasons behind the lack of playtime for children at school and at home? What do children have to say about their rights and needs regarding play? Through a research approach centered on child participation, we aimed to develop a systematic methodology for converting child input into actionable policy documents. This framework aims to restore children's fundamental right to express their needs for play, ensure their direct participation, and culminate in a formal declaration.

Lundy's (2007) Model of Participation operationalizes the four key elements of UNCRC Article 12 (1989): *Space* (opportunity to express views), *Voice* (facilitation of expression), *Audience* (listening to views), and *Influence* (acting upon views). This model addresses common limitations in child participation research by ensuring authentic rather than tokenistic involvement (Lundy, 2007). The social-ecological model (Bronfenbrenner, 1979) provided additional theoretical grounding, recognizing that

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children's play experiences are influenced by multiple interconnected systems, ranging from individual factors to policy environments (Sallis et al., 2008).

Based on these models, our preliminary study used focus group interviews and supportive tools (Figure 1) with 22 children aged 6 to 12 to explore outdoor play experiences and the "barriers" school-aged children face (Figure 2). The interview results revealed the status of their visits to outdoor playgrounds, including duration and travel distance—as well as the factors that hinder access. Common barriers identified include insufficient time, excessive distance, and unengaging playground facilities. These findings enabled the development of evidence-based policy recommendations.

Figure 1. Five supportive tools to help children express themselves



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Figure 2. Children actively participating in focus group discussions, using drawings and verbal expressions to articulate their play experiences and barriers.



Barrier Category	Specific Issues	Children's Voices
School Constraints	• Limited recess time • Multiple competing activities • Classroom duties • Homework requirements	• "Teachers make us stay inside for discipline" • "We have to clean classrooms during break" • "Too much homework on weekends"
Adult Restrictions	• Conservative safety attitudes • Age-based limitations • Supervision requirements	• "Adults think climbing is too dangerous" • "Older kids cannot use playground equipment" • "Need parents to go to parks"
Environmental Factors	• Weather constraints • Poor playground design • Overcrowding • Transportation barriers	• "Too hot and get sunburned" • "Playgrounds are boring and repetitive" • "Too many people make it dangerous"
Policy/Structural	• Inadequate space allocation • Safety regulations • Scheduling conflicts	• "Not enough space to run on campus" • "Many fun activities are 'forbidden'" • "After-school tutoring takes play time"

Drawing on the "Play Pyramid" (Gill, 2021) concept from Tim Gill's Urban Playground, we identify time, space, other children, and adult attitudes as the four critical factors influencing the realization of children's right to play. Furthermore, a comparative analysis of research from Taiwan and the UK reveals that the primary divergence between the two nations lies in the degree of "adult intervention" (Graham et al., 2022).

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Our findings align closely with international research examining playground barriers. We compare results with Graham et al.'s (2022) UK study of 65 primary school children.

Study	Location	Sample (N)	Method	Key Barriers Identified
Graham et al. (2022)	United Kingdom	65 children (9-11 years)	Focus groups	• Wet weather • Safety concerns • Playground hierarchy • Poor space design • Overcrowding • Staff supervision • Resource limitations • Need for quiet areas
Current Study	Taiwan	22 children (6-12 years)	Focus groups + tools	• Rain/weather • Activities deemed dangerous • Age restrictions • Poor design (boring/repetitive) • Overcrowding safety concerns • Teacher/adult limitations • Homework requirements • Disciplinary restrictions

The remarkable similarity across cultural contexts suggests universal challenges in children's play experiences and supports the need for systematic policy intervention.

Drawing on the perspectives of 22 children, we developed a child-voiced declaration (Figure 3) that focuses on children's own experiences and priorities. This declaration aims to prompt responsive action from caregivers, practitioners, and policymakers, enabling them to address and improve the structural and policy-related barriers that currently constrain children's opportunities for play.

No.	Original Version (Mandarin)	Translated English Version
1	我知道學習很重要，請大人相信遊戲對我也一樣重要。	I know learning is important—please trust that play is just as important for me.
2	我們有我們的創意，我們有我們想玩的方式，但是我們需要快樂遊戲，但是我們也會注意安全，請大人們不要限制我們。	We have our own creativity and our own ways of playing. We want joyful, happy play, and we will stay safe—please do not limit us unnecessarily.
3	我需要準時下課，我需要玩，需要自己決定要做甚麼的時間，請大家把時間還給我們。	I need to finish class on time. I need time to play and choose what I want to do. Please give our play time back.

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No.	Original Version (Mandarin)	Translated English Version
4	請大人保證我們能擁有足夠奔跑遊戲的校園空間。	Please make sure we have enough space on campus to run and play freely.
5	我想有伴一起玩，增添遊戲樂趣。	I want to play with friends—it makes play more fun.
6	給我我想玩且涼快的公園！請大人為我們玩的地方想辦法。	Give me a nice, shady park that's cool to play in—not too hot! Please help find us great places to play.
7	我會在有點刺激的遊戲中成長，請不要剝奪我長大的力量。	I grow strong through exciting, challenging play—please do not take away my chance to grow.

Figure 3. Taiwan Children's Play Declaration (Mandarin version)

The declaration was developed through an intensive, multi-stage process, including child-participatory workshops, critical play dialogues, and expert consultation sessions. Through these platforms, children actively identified the systemic issues impacting their daily play lives-ranging from severely limited access to safe, natural play spaces to the problem of academic over-scheduling.

Following the release of the Taiwan Children's Play Declaration, a legislator proposed a motion in the Legislative Yuan (the Parliament). Both the Minister of Education and the Premier (Head of the Executive Yuan) agreed to deliberate on a national policy on children's play and cross-ministerial cooperation (United Daily News, 2024).

Recommendations

From Research to Policy: Expert Policy Translation.

We consulted five experts from landscape design, an environmental NGO, a pediatrician, and human rights organizations who provided technical expertise to translate children's voices into feasible policy recommendations.

1. Promoting Unstructured Play

The intensity of advocacy targeting parents regarding the significance and benefits of unstructured play should be reinforced, comparable to the promotional efforts of public health campaigns (e.g., "5 A Day "). Furthermore, the core benefit of play, articulated as

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"Potential Development Originates in Play," should be officially integrated into a Parenting and Children's Health Handbook (or equivalent governmental guidance documents).

2. Enhancing Play Time and Framework

The guarantee of playtime and activities must be increased to ensure that after-school programs allocate sufficient time for activities, exercise, and free play. In parallel with the "After-School Sports Programs" model, "After-School Play Programs" should be established.

3. Safeguarding Recess Time

It is essential to guarantee that children are afforded a full and uninterrupted recess time following every instructional session.

4. Modifying Physical Activity Curricula

Revise existing school physical activity initiatives (e.g., the Sport & Health 150 Policy in Taiwan) to explicitly include diverse play activities as a key component, rather than focusing exclusively on structured exercises such as running and jump rope.

5. Mandating and Auditing School Playground Provision

Establishing two distinct playgrounds in Primary and Secondary Schools—one for upper/middle grades and one for lower grades, designed to accommodate children's developmental needs and promote age-appropriate segregation —requires a rigorous audit of implementation status. This is crucial to ensure children have access to adequate and appropriate recreational space.

6. Assessing and Optimizing On-Campus Play Accessibility

Conduct a comprehensive inventory of on-campus play. Strategies such as converting underutilized classrooms into multi-functional play spaces should be pursued to expand opportunities for children, particularly those housed on upper floors, to engage in physical activity outside the classroom.

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7. Inventorying Temporary Play Streets in School Zones

Pilot an assessment of the feasibility of temporarily converting the operational hours of School Access Routes across various municipalities into play streets. This initiative aims to increase access to play spaces and playmates, drawing on the "Streets for Kids" program developed by the National Association of City Transportation Officials (NACTO) in America.

8. Addressing Climate Change Impacts on Play

The UN Committee on the Rights of the Child's General Comment No. 26, issued on August 22, 2023, asserts that climate and environmental degradation compromise children's rights to engage in outdoor activities and interact with the natural environment. The government must adopt proactive measures, including installing cooling infrastructure, such as shading and water play facilities, to safeguard children's rights to health and play.

9. Institutionalizing Child and Youth Participation in Play Design

To align with the general principles of the Convention on the Rights of the Child—specifically the "Best Interests of the Child" and the Right to Express Views—it is imperative to develop "Child and Youth Participation Design Guidelines" and accompanying training programs. The objective is to institutionalize child participation in the creation of play spaces that are optimally suited to children's physical and mental developmental needs.

The Taiwan Children's Play Declaration is a landmark, child-led advocacy initiative fundamentally championing the right to play as an essential human right for every child. Co-created by children and the dedicated organization Taiwan Parks and Playgrounds for Children by Children, the Declaration is a powerful instrument that reflects children's genuine voices, distinct needs, and lived perspectives across the nation.

Their collective ideas were meticulously shaped into a Declaration that not only issues a firm demand for action but also inspires a necessary paradigm shift toward a more inclusive, child-centered approach in urban planning, education, and policymaking.

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REPLICATION PROTOCOL — SUMMARY

The Children's Play Declaration

A Short-Form Guide to the Focus Group Method and Expression Tools

Developed by Play Taiwan · Prepared for the International Play Association (IPA)USA, 2026

This is a condensed excerpt of Play Taiwan's full replication protocol, focused on the focus-group method and expression tools. A complete version — including the full timeline, team roles, expert consultation process, and appendices — is available on request.

About This Protocol

This protocol documents how Play Taiwan ran a national, child-led research project that produced the Taiwan Children's Play Declaration, written in children's own words. The Declaration prompted a motion in Taiwan's Legislative Yuan and public commitments from the Minister of Education and the Premier. It is written so that another country, city, or organization can run the same process and produce its own Declaration, adapting age range, group size, and number of sites to local context.

The process rests on Lundy's Model of Participation (2007) — children must be given Space, Voice, Audience, and Influence, all four — supported by Bronfenbrenner's social-ecological model (barriers exist at every level, from the child to policy) and Gill's Play Pyramid (2021): time, space, playmates, and adult attitudes.

Recruiting Child Participants

1. Age: primary/elementary children, ages 6–12 (grades 1–6), split into a lower-grade band (1–3) and upper-grade band (4–6), interviewed separately.
2. Outdoor play experience: screen for moderate, recent playground use — not children from families who already visit constantly, nor children with almost no outdoor play.

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3. Group size: 6–8 children per group (per grade band), including in the pilot test. Run in more than one city if resources allow, to check whether findings are local or general.

The Five Expression Tools

Children this age cannot express complex needs the way adults do in an interview. Taiwan's focus groups used five concrete, hands-on tools so children could think, remember, and speak in ways that suited them. Localize each tool (place names, local reasons children can't play outside) rather than inventing new ones, to keep results comparable across countries.

Tool 1 — My Play Diary

Each child logs 7 days of play: how long it lasted and whether it happened at a playground. Only time the child chose for themselves counts as "play" — adult-scheduled activities (sports class, tutoring, chores) are excluded.

Tool 2 — My Playground Map

Children list up to 9 parks/playgrounds they like, based on past experience and distance from home — surfacing which places they actually know, value, and can reach.

Tool 3 — Play Barrier Cards

A set of simple cards (six colors, plus blanks) covering where children play at school and after school, and the reasons they can't go outside. Children sort or point to cards — a low-pressure, non-verbal way in for shy or younger children.

Tool 4 — Opinion Hand-Cards

Each child holds a two-sided hand-card — thumbs-up on one side (agree), a question mark on the other (I see it differently) — so even quiet children can register a view in real time.

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Tool 5 — International Playground Case Sharing

Near the end of the session, the facilitator shows photos of distinctive playgrounds from other countries; children react, compare, and vote for favorites — surfacing desires ("I didn't know a playground could be that tall") children wouldn't otherwise think to name.

Running the Focus Group Session (90~120 minutes)

Time	Segment	Purpose & activity
10 min	Icebreaker	A short game (e.g. charades) to ease nervousness before serious discussion.
5 min	Anchoring	Confirm today's topic and how "outdoor play" is being defined.
15 min ×3	Divergence — school / after-school / weekend	Using Tools 1 & 4: for each time window, discuss where play happens, with whom, and what they play.
20 min	Divergence — play barriers	Using Tools 3 & 4: children choose or write reasons they can't go outside to play, and share why.
20 min	My playground sharing	Using Tool 2: children introduce their playground map and say why they like these places.
15 min	International case sharing	Using Tool 5: facilitator shows international cases; children vote their top 3, sparking discussion.
5 min	Break / close	Rest, thank participants, collect materials.

Facilitation tips from Taiwan's sessions:

1. Let children point to a card or poster before asking them to explain in words — this reliably draws out quieter children.
2. Ask about all three time windows (school / after-school / weekend) even if children volunteer information early — barriers differ sharply between them.
3. When a child mentions an adult rule ("we can't hang upside down on the bar"), ask what happened right before the rule was made — this surfaces the safety narrative behind restrictions, which experts can later respond to directly.

Beyond the Session: From Data to Policy Change

Code the Data

Group everything children said into a small set of barrier themes (e.g. school constraints, adult restrictions, environmental factors, policy/structural). Then draft

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Declaration articles in children's own first-person words — each one traceable to something a specific child actually said, not an adult's summary of what they "probably meant."

Validate the Declaration With Children

This step is easy to skip, but it is where the Declaration's legitimacy actually comes from. Invite all participating children — in person and online — to a joint validation session, and go through the draft article by article. Ask the children directly whether the tone, word choice, and sentences match what they meant. Revise or remove any article that doesn't pass this check with the children on the spot, before it goes to the expert panel.

Consult the Expert Panel

Consult a multi-disciplinary panel twice — once on the child-validated draft, once on final policy recommendations — spanning health, design, education, environment, rights/policy, and inclusion. The panel's job is to translate what children said into technically and politically feasible action, without overruling or softening it.

Release & Advocate

Release the Declaration at a public forum with participating children and media, alongside a short visual version and a full white paper for policymakers. Approach legislators directly — even without new legislation, a motion or committee question can compel a government re

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Play and Culture

Play as a Vessel for Justice and Belonging

Hiding in Plain Sight: Play and Culture



IPA CHRISTCHURCH 2026

USA IPA American Association for the Child's Right to Play

Play as a Vessel for Justice and Belonging

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Introduction

Across many education systems, play has been steadily displaced by policies and practices that prioritise standardisation, measurement, and early academic performance (Aiono et al., 2024; Paris & Alim, 2017; Pyle & Danniels, 2017; Hirsch-Pasek et al., 2025). In classrooms shaped by accountability pressures, children are increasingly expected to demonstrate proficiency in discrete skills long before they have had opportunities to explore, imagine, and connect with others. While these trends affect all learners, their consequences are most acute for children from Indigenous, minoritised, and historically marginalised communities.

For these communities, play has never been peripheral (Aiono & McLaughlin, 2018; Brown & Brown, 2022). It has functioned as a cultural practice through which knowledge is transmitted, relationships are nurtured, and identities are affirmed. When schooling systems marginalise play, they do more than narrow pedagogical options; they undermine children's opportunities to see themselves, their families, and their cultures reflected in learning. Repositioning play as a central and legitimate pedagogy is therefore not only an educational concern, but also a matter of equity and justice (Blucher et al., 2018; Paris & Alim, 2017; Penetito, 2010).

This paper draws on findings from a design-based research project conducted in Aotearoa New Zealand that explored culturally sustaining play pedagogies in an elementary (K– Grade 3) school serving predominantly Māori (indigenous New Zealanders) and Pacific Island children. While grounded in a specific Indigenous context, the findings speak to global challenges faced by education systems, including those in the United States, where similar tensions exist between accountability-driven reforms and culturally responsive practice. This paper shares key insights from the research and offers strategies for reclaiming play as a right that supports belonging, identity, and learning.

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Problem Statement – Issues

Over recent decades, play has increasingly been framed as supplementary rather than essential to learning. In many jurisdictions, early childhood and primary education have been reshaped by "school readiness" narratives that equate quality with early mastery of literacy and numeracy skills. As a result, child-led inquiry, imaginative exploration, and relational learning are often viewed as expendable when time and resources are constrained (Hirsch-Pasek et al., 2025; Fesseha & Pyle, 2016; Nicholson et al., 2016; Woodward, 2024; Whitebread, 2012; Martlew et al., 2011).

For Indigenous and minoritised learners, this narrowing of pedagogical space compounds existing inequities, particularly in communities already experiencing systemic disadvantage (Milne, 2020; Berryman et al., 2023; Penetito, 2010; Brown & Brown, 2022). Schooling systems historically designed around dominant cultural norms frequently marginalise the knowledge systems, languages, and values of Indigenous communities. When schools reduce or remove play, children lose one of the few pedagogical spaces where cultural expression, storytelling, collaboration, and intergenerational knowledge can naturally emerge.

The consequences are multifaceted. Children may experience school as a place of compliance rather than connection, limiting opportunities to develop a sense of belonging. Teachers, under pressure to meet external benchmarks, often report uncertainty about how to integrate play meaningfully without compromising curriculum expectations (Blucher et al., 2018; Davis, 2018; Aiono, 2020). Families, particularly those who view education as a pathway to social mobility, may support play in principle but worry that it detracts from academic success (Aiono et al., 2024).

These challenges do not result from individual teacher choices, but from systemic conditions that make play difficult to justify, difficult to measure, and culturally neutral. Without intentional efforts to reframe play as a rigorous and culturally sustaining pedagogy, existing inequities are likely to persist.

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Background

The research informing this paper was conducted through the project *Ko te tākaro te kauwaka e pakari ake ai te tangata* (Aiono, Waitoa Tuala-Fata, & McLaughlin, 2024). ("Play is the vessel through which children grow strong"). The study took place in a New Zealand primary school (Kindergarten to Grade 9) located in a low-socioeconomic community, where over 95% of students identified as Māori or Pacific Islanders. The project was developed in partnership with local iwi (tribal) representatives and was guided by Māori values and knowledge systems.

The project used a design-based research methodology, allowing iterative development, implementation, and refinement of a culturally sustaining play framework within authentic classroom contexts (Brown, 1992; Design-Based Research Collective, 2003). This approach enabled researchers, teachers, and community partners to co-construct practices that were responsive to local aspirations while remaining grounded in empirical inquiry.

Central to the project was the adaptation of an existing play-based learning observation and coaching framework to explicitly reflect Indigenous values. Through wānanga (collaborative knowledge-building forums) with teachers and cultural advisors, the project examined play not only as a pedagogical strategy but as a cultural practice connected to manaakitanga (care and reciprocity), whanaungatanga (relationships), and māramatanga (wisdom and understanding).

Data were gathered from multiple perspectives, including children, teachers, and families, using interviews, surveys, and structured classroom observations (Aiono et al., 2024). This multi-voiced approach provided insight into how play was understood, enacted, and experienced before and after introducing the culturally sustaining framework.

Appropriate Approaches and Strategies

Drawing on the findings of the research, this section outlines key approaches and strategies that support the reclamation of play as a culturally sustaining, equitable, and intentional pedagogy within primary education

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1. Affirm Play as a Right

One of the clearest findings from the research was the importance of positioning play as a non-negotiable component of the school day. When schools treat play as optional or contingent on completing "real work," it becomes vulnerable to removal under pressure. In contrast, when play is affirmed as a right, it creates protected space for exploration, creativity, and relational learning (Aiono et al., 2024; White & Ellis, 2007; Hirsch-Pasek et al., 2025).

In the research context, increasing opportunities for sustained play enabled children to articulate clearer connections between play and learning. Over time, children described play as a context for problem-solving, language use, and perseverance. These shifts suggest that when play is consistently valued, children come to recognise it as integral to their learning rather than separate from it.

2. Embed Cultural Knowledge Within Play

The project demonstrated that play is most powerful when it reflects the cultural worlds of the children involved. Teachers intentionally incorporated local stories, artefacts, language, and practices into play environments, ensuring that cultural knowledge was not treated as an add-on but woven into everyday learning.

Children responded by drawing on their own experiences and cultural references in imaginative play, demonstrating increased agency, collaboration, and oral language development. Construction areas became sites for building culturally significant structures, while dramatic play supported storytelling grounded in community narratives. These practices affirmed children's identities and positioned cultural knowledge as a legitimate and valued source of curriculum content.

3. Prioritise Relational Play

Relationality emerged as a defining feature of culturally sustaining play, with play functioning as a context for strengthening relationships, empathy, and collective responsibility (Berryman et al., 2015; Aiono et al., 2024; Aiono & Waitoa Tuala-Fata, 2025). Children consistently described play as a space to help others, resolve conflicts,

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and work collaboratively. Such interactions supported the development of empathy, leadership, and collective responsibility.

Teachers observed that play created opportunities for peer learning and mentoring relationships to emerge organically. These dynamics reinforced the idea that learning is a shared endeavour, aligned with Indigenous understandings of knowledge as relational rather than individual.

4. Support Teachers Through Coaching and Reflective Tools

Teacher confidence was critical to the successful implementation of culturally sustaining play pedagogies. Many teachers initially expressed uncertainty about how to honour cultural knowledge appropriately or how to balance play with curriculum demands.

Introducing a culturally adapted observation tool and coaching framework provided a shared language for discussing practice (Aiono & McLaughlin, 2018; Snyder & Wolfe, 2008; Aiono, 2020; Aiono et al., 2024). By translating abstract values into observable indicators, the coaching framework supported reflective dialogue and goal setting (Snyder & Wolfe, 2008). Teachers reported that this structure helped them see play as intentional and purposeful, rather than unstructured or incidental.

5. Address Systemic Conditions

Finally, the research underscored the need for systemic alignment. Teachers identified ongoing challenges related to time constraints, access to culturally relevant resources, and external accountability pressures. Without system-level support, individual efforts to sustain play-based pedagogies are difficult to maintain.

Policy frameworks that recognise play as legitimate learning, alongside investment in professional development and resources, are essential for long-term change (Milne, 2020; Ministry of Education, 2020; Bernt-Santy, 2024). Shifting dominant narratives about what counts as success in education is a necessary step toward greater equity.

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Conclusion and Recommendations

The findings from *Ko te tākaro te kauwaka e pakari ake ai te tangata* reaffirm that play is far more than a recreational activity; it is a powerful driver of learning, identity, and belonging (Aiono et al., 2024; Aiono & Waitoa Tuala-Fata, 2025; Hirsch-Pasek et al., 2025; Whitebread, 2012; Walsh et al., 2007). It is a pedagogical space where learning, identity, and belonging intersect. For Indigenous and minoritised learners, play offers opportunities to see their cultures valued, to build relationships, and to engage deeply with learning in ways that are meaningful and sustaining.

Reclaiming play as a right requires intentional action at multiple levels. Based on the research, the following recommendations are offered:

- Protect time for play by embedding it within the school day and not making it contingent on academic performance.
- Embed cultural knowledge through partnerships with families and communities, allowing local values and traditions to shape play environments.
- Invest in teacher learning through coaching models and reflective tools that make play-based pedagogy visible and actionable.
- Ensure resource equity so that play materials and environments reflect the identities of all learners.
- Shift accountability narratives to recognise belonging, wellbeing, and cultural identity as essential educational outcomes.

The Māori whakataukī, or proverb, that guided the research is *Ko te tākaro te kauwaka e pakari ake ai te tangata*, meaning “Play is the vessel through which children grow strong.” It reminds us that play is fundamental to children’s learning, identity, and wellbeing. When education systems honour this understanding, they create conditions for all children to flourish academically, socially, and culturally.

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Hiding in Plain Sight: Play and Culture

Anna Beresin, PhD

Introduction

Children's cultures are often missing from academic discussions of play, even though there is no activity without culture, and play abounds in cultural expression. This paper argues that children's play cultures are visible in objects, movements, sounds, jokes, games, and peer-created rules, but adults often overlook, judge, or absorb them.

Perhaps this omission is rooted in the psychological tradition of emphasizing universal development and individual differences. Perhaps it reflects discomfort with the idea that children have a cultural life without adults. Perhaps it is related to adult ambivalence about culture itself. Even spaces that appear sterile represent a form of cultural withdrawal.

Many discussions with educators regarding their confusion about inside jokes like "six seven" conclude with some variation of adults just not getting children these days. Yet, I have found that asking adults about the joke cycles and neighborhood play of their own youth quickly brings childhood cultures past and present into focus. "Six seven" is not far from "Guess what? Chicken butt." Just ask adults about what made them laugh or to show you how they would begin a game in their neighborhood when they were young.

Viewing childhood carefully from a distance helps, as travelers notice what is different and what is the same, but we may miss these things when we look at our everyday routines at home and at school. When we travel, we notice the handshakes, the melodies, the shapes of things. Children are travelers by design, and growing up means entering into new, confusing, cultural frames. To examine children's play without highlighting culture is to miss the taste of the everyday and the struggles these choices contain.

As with adults, children's culture includes both material culture—the objects made for children and those modified by children for their own use, from paper balls to

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go-karts—and immaterial culture related to motion and sound. Children still use found objects in novel ways: rocks for game pieces, string for handwrought string games, and electronic memes shared as if they were marbles. These tangible intangibles can disappear before they are studied; they are often kept secret from adults, typically for good reason. Grownups often pass judgment on children's peer cultures, take them over, or repackage them as novel toys for profit. Yet such bits of culture reveal what is valued in a specific locale and can serve as markers of social tension and humor.

Problem Statement

This paper will do two things: describe the author's own witnessing of cultural variation at play across several school playgrounds in one city and introduce some classics in this unfolding field of the cultural study of play. We will see that culture varies across playgrounds, sometimes within parts of the same playground, and even within a single game —each context has its own spoken and unspoken rules that are collectively crafted. Culture reveals itself in how things are done communally, in variation and always within a subset of power.

Background

Microcosms Within One City

When scouting out different regions for this potential study early in my research career, I first chose one small section of Philadelphia known for its racially diverse schools. This neighborhood had three public elementary schools with concrete schoolyards, all within walking distance of each other. Yet, their playground cultures were significantly different at the time.

- One school had a wide-open rectangular space, and the activities visible were reflective of the school's gym offerings- mostly sports variations and lots of milling around.
- A second schoolyard was partially obstructed by pillars from a section of the school building, keeping much of the area in shadow. Here, there was a lot of teacher presence and blatant teacher interference.

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- The third schoolyard offered an L-shaped concrete area wrapped around the building, with one section somewhat secluded. This playground was the only one with visible signs of youth culture: shoes dangling from the electric wires above, and fresh graffiti on the school walls. There was a sense of vibrancy that the space was used by children both during and after school. The third playground was selected as the study site.

With permission, I spent an entire year visiting that schoolyard multiple times per week, and that study bloomed into a longitudinal one, with me returning to observe for several years (Beresin, 2010). This schoolyard had distinct areas where different play cultures emerged. If we walked around the playground clockwise, the top was a full-sized basketball court, though it sometimes lacked its nets and hoops. The children, not the teachers, organized play, and each game had several cultural variations, including folk variations of basketball games that might have been played in the early 1990s, such as H-O-R-S-E and *Around the World*. Nearby was an area for small-ball play and foursquare games, though it was primarily used as a theatrical boxing ring, with a range of folk customs. The "fighting game," as it was called, was considered taboo, though the staff tolerated it. It was more of a slow-motion version of pretend fighting. The task there was to push the opponent out of the painted ring slowly, and the rule was that once a body part left the painted boundary, the person was out and the round was over.

The children and staff classified these activities as boys' games. Yet, several girls were seen bouncing a basketball nearby or challenging the boys in the fighting game area. The literature on playfighting, or "rough and tumble" play, had, up to this point, described this type of wrestling as a boy's thing, yet right in front of me, girls were demonstrating evidence to the contrary. At this school in the early 1990s, only boys were on the official basketball team, and the annual student-teacher basketball game featured no girls, even though some were clearly skilled. When texts describe "what girls do" or "what boys do," they deny the cultural reality of children's distinct play worlds.

A third game in this one playground was popular with girls and an occasional boy, and unlike the other two activities described, this game floated across the concrete, often in search of shade. The game was jump rope, with cultural variations in the lyrics,

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rhythm, and types of rope used. It varied by ethnic and racial groups, and within those groups, it varied by social class. White European American girls typically counted steps taken, "101, 102, 103. . .", and used short, individual ropes. This group did not use songs while jumping. A similar group of African American girls from the nearby middle-class neighborhood also used individual ropes and lacked an active repertoire of game songs. The rich tradition of jump rope rhymes came with African American working-class girls who jumped with longer ropes, typically made from laundry line and turned egg-beater style. These children, who were bused in from a more economically disadvantaged area about a half hour away, could be seen teaching their games to the others. Where these three jumping subcultures intersected most was with the jump rope rhymes of advertisements:

- Big Mac Fillet o Fish Foot, Big Mac Fillet o Fish Hop, Big Mac Fillet o Fish Bounce
- R-E-E-B-O-K, do your footsies the Reebok way.
- Hop to the N-I-K-E,
  Jump to the N-I-K-E

And yet, there was still room for in-game commentary:

> Criminal-minded, you've been blinded
>
> Looking for a shoe like mine, can't find it
>
> Mine costs more, yours costs less
>
> Mine Footlocker, Yours Payless

All of these elements intersected with adult culture: the sneakiness of corporations who co-sponsored double-dutch competitions, the style and wit of cultural traditions within Black communities.

When we remove culture from our discussion of play, jump rope becomes generic, homogenized, and often sterilized. Yet, like all play forms, children wrestled through these activities not only with cultural style but also with pride, skill, and psychological power. They said they learned these games from their mothers and their cousins.

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- Boots, boots, Gotta get Loose, We came Here to Knock some Boots
- 1, 2, 3, Hallelujah, 4, 5, 6 Hallelujah, 7, 8, 9 Hallelujah, 10 Hallelujah 10

Several years later, in a different section of the city, in a mostly African American working-class school with Asian, European, and Latin American students, they were tapping pens on the ground between art activities (Beresin, 2015). The pen-tapping was done sneakily, rapidly, competitively, with an undeniable musical quality. I naively asked if they pen-tapped in music class. In music class? " You can't pen-tap in music class." I asked if they pen-tapped at lunch in the cafeteria "You'd get suspended if you pen-tapped in the cafeteria." When examined alongside colleagues in anthropology and music production, it became clear that the exact patterns at play here were undeniably similar to those in pop songs and hip-hop on the radio. Again, to deny the opportunity to tap or drum was to erase cultural pride and remove a much-needed space for physically processing the multiple rhythms of a child's day. Gendered culture is not static, ethnic culture is not fixed, and all children's cultures are subsets of overlapping adult institutional frameworks.

Years later, during the post-quarantine period immediately after schools reopened, each school playground in Philadelphia had its own culture of COVID protection (Beresin, 2023). At the same school where pen tapping occurred, there was no open-ended play after school because the after-school program was shuttered. At the same time, another public school across town allowed children to play on the playground after it had been cleared following school dismissal, meaning they could leave and return but not linger, making it difficult for many families who lived farther away. A school in a third section of the same city had a robust after-school playground culture during this same period- three post-COVID public schoolyards with very different school cultures in one city. This third school in a middle-class neighborhood featured a child-invented snack bar with a sign that said "No mask no seRvice" in large mixed handwriting. The second playground was in a more affluent area in the city, and there the children played food tag, running when one's favorite take-out food was hollered: "Pad Thai!" "Pizza!" Sushi!" The after-school program in that underserved area was now online and quietly gave out free food to families in need. In all three places, families spoke about children modifying their play with pretend vaccines, improvised masks, and invented rules about

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what was considered safe. The pandemic has taught us much about our collective need for social time and about the significance of play as a vessel for emotional and cultural expression.

Strategies

University courses and programs on child development or education tend to focus on specific utilitarian aspects of play, if play is included at all. There are ones in Child Life (note the singular) that tend to focus on assisting individual children through medical challenges in hospitals, those that focus on behavioral interventions (which emphasize the negative aspects of individual children's expressions), or abnormal child development (which, on trend, can focus on both). The classics (Piaget, 1965; Vygotsky, 1978; Axline, 1964; Elkind, 2007, 2015) in psychology that have been associated with the play field have typically emphasized the individual's emotional life, cognition, or the individual as a navigator within a broader, comparable social context.

The history of cultural study is embedded in the nationalism of the nineteenth and early twentieth centuries, when colonial forces sought to highlight the uniqueness and presumed superiority of specific Western, white nations (Huizinga, 1938/2016). Comparative historians and the earliest anthropologists were interested in cataloging differences. After Franz Boas (1940) famously slammed the racist assumptions about comparative work and reframed anthropology as a study of descriptive cultural uniqueness, comparative work became rarer and ethnography, or thick description, became the norm. In the anthropology of childhood, comparative work remained focused on child-rearing. Works by Beatrice and John Whiting and later by Joseph Tobin, Yeh Hsueh, and Mayumi Karasawa attempted to compare children's worlds across different countries—from weaning to school arrival rituals (Whiting & Whiting, 1975; Whiting & Edwards, 1988; Tobin et al., 2009).

The emergent anthropology of play can be said to have been anchored by a small handful of scholars. Notably, Helen Schwartzman (1978), who wrote the classic *Transformations: The Anthropology of Play*, gave us these gifts: 1) to present psychological statements of universals as culturally framed rather than "true" per se, and 2) to include in her book a filmography of documentaries that study play

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ethnographically (Schwartzman, 1978). David Lancy's *The Anthropology of Childhood: Cherubs, Chattel, Changelings*, now in multiple editions, includes not just a subject index, but a culture index from Angola to Yaqui with much to offer the student of play (Lancy,1996; 2022)

Meanwhile, the folklorists of childhood awoke from their nationalist hunt, and though anthropologists tended to focus on daily routines, the folklorists emphasized play genres (Abrahams, 1969; Bronner, 2009; Dundes, 1989; Knapp & Knapp, 1978). Whereas an anthropologist might call themselves a specialist in Indian family kinship patterns, folklorists aligned themselves with specific forms of play: folk games, folk toys, folk speech, often framed by a particular region. Some studied specific ball games, such as the Scottish Ba, specific Caribbean Mardi Gras festivals, or materials made by American urban children for street play (Dargan & Zeitlin, 1990).

The most famous collectors of children's folklore genres on both sides of the Atlantic were Iona and Peter Opie (1959; 1969) of the United Kingdom, and Brian Sutton-Smith, originally from New Zealand and based in America. With the Opie's material now housed at the Bodleian Library at the University of Oxford, the most well-known of the Opie's available books include The Lore and Language of Schoolchildren and Children's Games in Street and Playground (Lancy, 1996, 2022).

As a folklorist and psychologist, Brian Sutton-Smith (1981, 1986, 1995) straddled the humanities and the social sciences, seeking to document, describe, and celebrate cultural differences while honoring the universals in children's development. He felt these two ways of thinking were compatible, and he looked at our general texts on child development as another form of cultural production. Building on the ambiguity within play and within children's cultures, he often cited William Wells Newell, who wrote of the "inventiveness of children" and the "conservatism of children" (Sutton-Smith, 1997; Newell, 1884; Beresin, 2024). For Sutton-Smith, play was a container for cultural paradox, as sophisticated and worthy of study as art or religion.

Recommendations

There is no play without a social life; even if toys are stand-ins for people, the players are online, or the "people" are AI bots. There is no social life without culture, so

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ideally there is no play study without play culture study. Avoiding it as a topic reflects cultural constraint.

A toy store is not the same as a hardware store because of the cultures of children, although both offer means of repair. What materials are used for playful improvisation? Is improvisation even allowed? Recess is not the same as gym because of children's culture. Who holds the chalk in the school yard? Who is in charge of the games?

Schools, hospitals, museums, play programs, and institutions of advanced learning miss out on so much by excluding the full range of children's cultural topics. Denying children's very identities as members of specific cultures (plural) disavows their skills in making meaning and making change, bit by bit, craft by craft, game by game, and also weakens broader commitments to equity, advocacy, and opportunity in play settings (Jarrett et al., 2023).

Children's cultures have been increasingly trivialized, and their playtime has been co-opted by adult-organized physical activity or passive entertainment, a colonization of play and acceptable play forms (Elkind, 2007 & 2015). When children's cultures are rendered insignificant, it sends the message that children's voices are unwelcome and can be seen as a personal rejection, potentially leading to a clash between the school and the child's home life. Without cultures in play, we lose not just the baby's bathwater, but the siblings in the tub and the rubber duck.

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Play in the Age of Algorithms

How Our Brains Develop Through Play, and What Happens When Screens Get Involved

Is Digital Play Really Play? Prioritizing Offline Play in a Commercialized World

Screens, Play, and the Developing Brain: Restoring Balance in Modern Childhood

Playful Parents in Technoference Times

Let's Grow Brain P.O.W.E.R.! What Kids REALLY Need to Thrive and How Screens Interfere

The Algorithm in the “Toy Box”: Navigating AI, Play, and Culture



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How Our Brains Develop Through Play, and What Happens When Screens Get Involved

Chima Abimbola Eden, MSc & Opeoluwa Ihediohia, MEd, BEd

Introduction

Today's children are born into a digital age and can swipe a screen before they learn to walk. This is a significant shift in kids' development as they begin to learn, play, and connect online. As they grow up, these kids have unprecedented access to screens. Unlike any generation before them, they see screens first, feel screens first, and hear screens first.

The young child's brain, with its tremendous plasticity, is particularly sensitive to environmental forces, including those conveyed through digital media (Hutton et al., 2020). Neuroplasticity has two sides: toddlers can quickly learn to use digital interfaces, but they are also vulnerable to the negative effects of excessive screen time. Parents, educators, and pediatric providers need to understand the competing pressures and challenges of balancing effective technology use with practices that support healthy development.

Studies have shown that digital media can be toxic to cognitive functioning, social connection, and behavioral adaptation (Paulus et al., 2019). Children's screen-time choices today will shape how an entire generation develops and relates to technology.

Problem Statement - Issues

Children's use of digital technology has become widespread, posing new challenges for parents. Additionally, a range of developmental issues has surfaced, including cognitive, social, emotional, and physical development.

Cognitive Development Concerns: "The Cognitive Impact of Video Game Culture."

As one might assume, the effects on cognitive development are vast, especially for motivationally and attentionally demanding tasks (Paulus et al., 2019). The frenetic speed of digital information teaches the brain to become intolerant of the quieter, less

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stimulating pace of reality. Many children with constant, high exposure to screens struggle with tasks that require sustained attention, such as creativity, critical thinking, and problem-solving.

Digital multitasking hinders memory consolidation and learning as children switch between applications and tasks. Shanmugasundaram, M., & Tamilarasu, A. (2023). This fragmented attention pattern can hinder the brain's ability to process and retain information effectively, potentially impacting academic performance and long-term learning outcomes. Vedechkina, M., & Borgonovi, F. (2021).

Social and Emotional Development Challenges

Screens also reduce social interaction with peers, which is crucial for learning social skills such as reading nonverbal cues and empathy. Children who spend too much time staring at screens often struggle to build successful relationships and interact face-to-face; this can affect their connection with others. Mee, R. W. M., Harun, N. H., Pek, L. S., Mohamed, S., Shahdan, T. S. T., & Ahmad, A. (2024). A dose of one-upmanship: Exposure to these fabricated social media posts may exacerbate feelings of inferiority and fear among kids as they try to live up to the example their friends set. The possibility of victimization, cyberbullying, and inappropriate content compounds the challenges of the online world, which can manifest in emotional and behavioural difficulties. Albino, D. (2021).

Physical Health and Sleep Disruption

Excessive screen time leads to sedentary behavior and reduced physical activity, and it reduces the time clients have to participate in active hobbies (Hutton et al., 2019). Blue light emitted by screens disrupts natural sleep cycles, worsening cognitive and emotional difficulties.

The Play Deficit Crisis

Play is a natural process that helps a child become aware, think, and imagine, but screen time has reduced and replaced it. This shift represents a significant loss because unstructured play stimulates the prefrontal cortex, builds problem-solving skills, and strengthens emotional regulation. Less physical and imaginative play limits children's

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opportunities to develop essential executive functions and social skills that digital interfaces cannot replace.

Background

The brain continues to develop during the formative years of human life, and neuronal connections develop rapidly in the early years. This rapid development of neuronal connections is marked by vulnerability, but it also represents a window of opportunity because environmental input largely shapes neuronal architecture (Shonkoff & Phillips, 2000).

Typical experiences during development, like touch, movement, and socialization, expose us to a rich, varied multisensory environment that we need to develop a normal-functioning brain. Digital screens have altered the developmental landscape.

The Evolution of Screen Exposure

Children's screen time today involves a variety of devices and content, each with different impacts on child development. Alpuğan, Z. (2024). People use screens and speakers largely passively today, and interactivity is already a bigger part of life than sitting in front of a TV (which is no longer the only place to watch TV, thanks to smartphones, tablets, and laptops). They provide access to entertainment, educational content, social media, and games, which can be both good and bad.

Screen exposure is unprecedented, with frequent, often lifelong exposure to multiple screens since infancy in developed countries. Qi, J., Yan, Y., & Yin, H. (2023). Technology in curricula has increased student exposure at the institutional level.

The Neuroscience of Digital Interaction

Playing digitally engages parts of the brain that other activities do not. Bateman, C., & Nacke, L. E. (2010, May). The visual processing areas are engaged, and information swapping is in full swing, which may enhance visual-spatial processing and hand-eye coordination. These interactions might not fully engage brain regions responsible for deep thinking, empathy, and reaching thoughtful conclusions.

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“There are instant feedback loops in digital media where dopamine gets fired, which is what produces the reward and joy that one wants to do it again. While it may be helpful for learning when suitably guided, overuse is suspected to lead to attentional deficits and apathy.

Appropriate Approaches/Strategies

Quality-Focused Screen Time Management

Screen time should be managed with an emphasis on quality, not merely on prohibiting apps and screen time, as per the screen time guidelines for children. With fewer options, it's even more important to choose interactive educational content that helps children develop their thinking skills. Digital Out-of-Home experiences should encourage active engagement as opposed to behaviour) that stimulates problem-solving, creativity, and cognitive participation.

Well-designed educational software can improve learning outcomes when used. Interactive content responds to children’s input and accommodates different learning speeds, offering a more personal and adaptive teaching experience than traditional methods.

Using Regular Breaks and the 20-20-20 Rule

Some screen time is important, and even essential, for brain health. The 20-20-20 rule is to take a 20-second break to view something 20 feet away every 20 minutes to prevent eye strain — it can also provide an important cognitive break.

The extended time with screens should be interspersed with physical movement, outdoor play, or social interaction, “to give your child varied experiences.

Balancing Digital and Traditional Activities

In general, child development is fostered by encouraging activities that combine screen time with traditional, book-based activities, which engage both brain and body systems in unique ways. Physical play, reading physical books, hands-on artistic play, and unstructured exploring give our senses a workout that cannot be fully replicated on a screen.

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Promote outdoor physical play and “green time” as an alternative to screen time, providing opportunities for physical activity, sensory experiences, and bonding with the natural world. Such are vital to normal brain development and emotional health, and can prevent injury from toxic stress.

Creating Screen-Free Zones and Times

Limiting screen time creates room for other fun, educational activities and sets boundaries for a good night's sleep. However, screen-free areas, such as family dining and bedrooms, make face-to-face interaction, restful sleep, and good old-fashioned togetherness more possible.

Even zero screen time, especially before bedtime, helps prevent sleep problems caused by blue light exposure. Nurture a mindful pre-sleep ritual that also limits screen time, which is essential for establishing good sleep habits vital to cognitive and emotional development.

Promoting Co-Viewing and Active Engagement

When children co-watch screens with adults, the educational value increases considerably (Zosh, J. M., Gaudreau, C., Golinkoff, R. M., & Hirsh-Pasek, K., 2022). The adult’s presence encourages conversation, explanation, and translation from digital screen to hands-on experience. This shifts the tactile experience of pushing buttons into human interaction. Another way parents can monitor their children's content and talk with them about it is through co-viewing. These shared experiences can strengthen relationships and make the most of screen time.

Supporting Unstructured Play Opportunities

We must support unstructured play to promote healthy brain development(Ginsburg, 2007). Play like this, free from adult direction or digital pressures, lets children exercise their imaginations, problem-solve, and practice dealing with and processing emotions. Playing for free activates the brain's powerful circuits essential for creativity, innovation, and understanding complex emotions, tasks, and situations.

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Parents and educators are prompted to deliberately create contexts that allow for unstructured play by organizing opportunities to use open-ended materials, providing an environment that offers both physical and psychological safety for individual exploration, and arranging unscheduled time for activities. These findings matter because such experiences support executive functions and social competence.

Conclusion/Recommendations

The connection between screen time and childhood development is complex and requires a nuanced approach, not quick fixes. Research and technology offer significant advances in learning and cognition, but excessive and inappropriate use of technology poses dangers to a developing brain. Instead, the answer is not to erase technology but to highlight approaches with evidence of success and the potential to reduce harm.

Primary Recommendations

For Parents:

- Decide on screen time quality over quantity; prioritize educational, interactive content, not passive entertainment
- Establish regular limits of screen time with zones and no-screen-time intervals
- Deliver incremental educational value and relational connection through co-viewing experiences on STEM content
- Work to ensure that the time they spend on screens is balanced by active exercise and outdoor activities that include social interaction.
- Set and maintain a good example of responsible technology use and hold family discussions about becoming responsible digital citizens.

For Educators:

- Using technology in a meaningful, curricular way. Technology should complement core experiences rather than replace them
- Build in real-life experiences with opportunities to talk with people to complement online learning
- Collaborate with parents and teach them about educational technology

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For Policymakers:

- Fund research so we can examine how, in the long term, exposure to screens will affect the development of children
- Establish evidence-based guidelines on the proper usage of educational technology in schools
- Develop public awareness campaigns for healthy screen time use.
- Provide high-quality educational materials and digital literacy resources for all kids.

Future Considerations:

Given the fast-paced advancements in technology, continuous research and guideline updates are essential. Emergent technologies such as virtual reality and artificial intelligence will require further research into the developmental impacts. Longitudinal studies at scale, starting at such a young age and following participants into adulthood, will be key to understanding potential long-term effects of digital childhood on the life course.

The goal should be to cultivate a generation of individuals who can leverage technology while maintaining cognitive flexibility, social skills, and emotional intelligence necessary to thrive in a complex world. This can only be achieved through the collaborative efforts of parents, educators, health professionals, and policymakers to create healthier digital environments that future generations will be grateful for.

With a focus on empirically supported tactics and a willingness to learn from fresh evidence as it surfaces, we can help kids find a healthy relationship with technology, and one to last a lifetime. Let us be sure the screen generation is not also the sacrifice generation. Let us support this generation in possessing the keys to a grounded integration of digital and analog learning that will produce the widest range of development in this digital-human life.

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Is Digital Play Really Play? Prioritizing Offline Play in a Commercialized World

Rachel Franz, M.Ed.

Introduction

Child development experts agree that the best practices in supporting young children's development are infused with child-led play. When educators provide children with the time and space to play with rich, open-ended materials and opportunities to connect with peers and trusted adults, children thrive. As children play, responsive caregivers follow children's interests, scaffold their experiences, celebrate their unique identities, and cultivate culturally responsive environments. This type of play– indoors and outdoors– meets young children's social, biological, and cognitive needs and is a critical part of childhood (National Institute of Play, n.d.).

Yet, there is a growing, powerful narrative that young children *need* technology early and often to thrive in our increasingly digital world; some scholars even argue that using tablets must be included as part of preschoolers' daily routine in order for educators to be responsive and culturally relevant (Chu et al., 2024; Rogow, 2023). Families have bought in on the need for early technology use, and a majority believe that their children need technology to learn and develop successfully (Fairplay, 2025). Another survey found that parents of young children believe that their children learn better from educational apps than hands-on toys (Radesky et al., 2016). Schools and popular childcare standards require educators to engage children with digital devices (NAEYC, 2020). Some researchers have added "digital play" to the list of long-recognized, evidence-based play types (Chu et al., 2024).

Problem Statement

Granting 'digital play' equal weight to traditional, sensory-rich play is more than a miscategorization; it is a false equivalence that can jeopardize children's development and well-being by displacing meaningful offline experiences that they need to thrive and exposing them to harmful corporate-driven design practices.

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This white paper argues that preschoolers' use of digital devices cannot replace (and likely works against) hands-on learning via play. It shows that "digital play" does not meet the criteria for meaningful, child-led play, and recommends ways educators can prioritize children's offline play in early childhood settings.

Background

The term "digital play" was popularized around 2014 and generally refers to engagement with tablets for play and learning (Fleer, 2014). Proponents say it is a distinct category of play (Chu et al., 2024). In one literature review on digital play, researchers wrote, "Digital play [is] a category of play existing in its own right alongside well-known and traditionally accepted forms of play such as socio-dramatic play, rough and tumble play and locomotor play" (Chu et al., 2024).

The increased call for digital play in preschools has occurred simultaneously with the heightened academic pushdown, where developmentally inappropriate practices are imposed on children, younger and younger (Harmon & Viruru, 2018). Pressure to get children ready for kindergarten and the very powerful marketing machine of "Big Tech" have driven families to believe early childhood screen time is essential for learning (Fairplay, 2025). Adding to that narrative, most popular apps and platforms for young children are advertised as "educational" or "for learning," even though scholars have found that "only a handful" of preschool apps are even remotely educational (Hirsh-Pasek, 2015; Meyer et al., 2021). Frequent false marketing is possible because no regulation currently defines the term "educational," which allows companies to prey on families' and educators' desire to do what is best for the children in their care. The myth that young children need digital experiences earlier in order to 'keep up' with the world around them has been debunked numerous times, but the narrative persists (Cantor et al., 2025; Fairplay, 2025).

Research supporting "digital play" is limited. For example, a recent literature review of digital play-specific studies found that only 8% of published articles on the topic mentioned potential harms (Chu et al., 2024). Those 8% noted significant harms, including less physical activity, distraction, addiction, violence, decreased ability to self-regulate, vision problems, and decreased time socializing, yet the overall tone of digital

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play scholarship has overwhelmingly promoted its benefits. Yet, "digital play" appears to be a niche term, and this research does not include the thousands of studies documenting substantial harm of excessive screen time on young children (see Muppalla et al., 2023). What's more, digital play scholars have yet to acknowledge the intentional manipulative design strategies (or intentional designs embedded in digital apps and platforms that manipulate a user into taking action by spending more time/money on the platform) rampant in early childhood apps (Mallawaarachchi et al., 2023; Radesky et al., 2022). In addition, no studies show that children benefit more from digital play than offline play, except for children who use technology as an assistive device to support their participation in play.

Appropriate Approaches/Strategies

Using Definitions of Play to Guide the Way

Early childhood professionals have a responsibility to ensure that their practices are child-centered and developmentally supportive. The push for more digital play has confused early childhood practitioners who want to stay relevant to children's interests while also supporting their well-being. To better understand why digital play can never replace traditional play, we can evaluate tablet-based activities, such as using an app targeted at preschoolers, by using best-practice definitions of play. For example, experts Dr. Marsha Nell and Dr. Walter Drew (2013) describe five essential components of meaningful play:

1. Children make their own decisions.
2. Children are immersed in the moment.
3. Children are intrinsically motivated.
4. Play is spontaneous (not scripted).
5. And play is enjoyable.

Below, I compare how each component is present (or not) in offline, hands-on play and in online, corporate-driven environments to support the call for less screen time in early childhood settings. Most high-quality educators treat the environment as the third teacher (Strong-Wilson et al., 2007). Early childhood providers diligently curate spaces that are safe, engaging, and enriching. Many adults assume that when children use

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devices, they remain in the safe, supportive environment where their bodies are. But digital experiences can transport children into whole new environments, not neutral play spaces, that are designed by corporations whose interests rarely align with children's developmental needs. These are often likened to shopping malls or casinos (Kou et al., 2025). From a developmentally appropriate early childhood perspective, the offline environment must be treated as distinct from a developmentally appropriate early childhood environment.

1. Children make their own decisions.

When children engage in traditional, hands-on play offline, they generally drive what happens. Adults may be present to follow children's leads or supervise from afar, but the child controls the pacing, choices, and direction of play. Through this independence, children problem-solve, experiment, and ultimately learn. For example, when playing with a favorite doll, a child can decide who the doll is, what it wants, where it goes, and how the story starts and ends. Since the rules are created by the child, the child can change them or discard them all together at his or her discretion. Sometimes, children's choices are limited by access to materials or availability for an adult to supervise (such as to go outside), but appropriate, child-based choices are available regardless of the circumstances.

In digital environments, it may seem like children are making choices, ranging from the games they play, the clothes they choose for a game character, or what they click on. But, for the most part, the company behind the app orchestrates the direction, pace, and choices. These choices are usually dictated by algorithms (recommendations made by the company based on what they know about the child and/or how they can best get them to take a certain action) and other manipulative design strategies (intentional ways a game is designed to push users into doing something particular, like staying on longer or watching an ad) that are beyond the awareness of most adults let alone children (Yang & Leiser, 2022).

Children's choices and creativity are further restricted as their play is limited to the script of the game. Closed-ended options, such as having only one particular way to

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go down a path, or a specific way to place a letter to get a reward, limit opportunities for imagination and problem solving.

2. Children become immersed in the moment.

When children are deep in traditional play, it's not unusual for adults or peers to have trouble getting their attention because they are immersed in the moment. Children may become frustrated or upset when play ends. But, because play happens at their pace and is driven by their decisions, this is not harmful. In fact, those reactions are linked to children's inability to self-regulate during early childhood, when making transitions in general are difficult (Munzer et al., 2021). Children's engagement in traditional play also flows with natural stopping points, like when they get hungry or tired or interested in something else entirely. Because play is sensory, most children are in tune with their bodies or surroundings (with adult prompting, of course).

In contrast, when children use digital devices like tablets, they engage at the mercy of the tech companies who design the device and apps. Since most tech companies' business models rely on monopolizing users' time and attention, it is most profitable for them to hook children so much so that they are mesmerized by or stuck to the game. Companies use manipulative design strategies called "engagement tactics" to intentionally extend the amount of time users spend on their game or platform. For example, popular early childhood app "ABCmouse™" deliberately makes it difficult for preschoolers to log out by giving them a prize when they try to sign out, thus, urging them to use the prize immediately instead of leaving the game. Some apps also trick children into clicking on ads or accessing outside content, much of which can be violent, sexual, or otherwise inappropriate (Radesky et al., 2020). Baiting children to click ads is common especially in free to play early childhood apps; around 93% of "educational" early childhood apps contain advertisements, but they cannot really distinguish them from their regular game play until they are much older (Hirsh-Pasek et al., 2015; Levine, 2023).

Other engagement tactics like autoplay on YouTube keep children scrolling from one video to the next, making it hard for children to disengage because there are no clear starting and stopping points. While offline play has natural stopping points, tech

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companies intentionally obscure or remove places to take breaks or for children to listen to their bodies. Research shows that the more engagement tactics like these there are in an app, the more likely children are to have trouble disengaging (Mallawaarachchi et al., 2025).

3. Children are intrinsically motivated.

When children are intrinsically motivated by their own ideas, values, goals, and curiosities, they are more likely to engage in deep, meaningful play, leading to a love of learning and increased focus skills (Kohn, 1993). During meaningful offline play, children are rewarded when they find meaning in their experiences, discover something new, and make connections. This internal drive helps children to develop resilience. They persist when things get difficult because the goal is *theirs*. Additionally, they develop a strong sense of self and personal values as they pursue their own interests (Deci et al., 2001).

In contrast, most apps for young children center on extrinsic rewards. These are often in the form of prizes like gems or stars or celebratory noises (bells, whistles) that appear when a child does something correctly in a game. In most cases, the rewards are frequent and are given even for the most mundane action. Yet, each reward triggers the release of dopamine and too frequent triggering can lead to habit formation. For example, children will want a dopamine hit more often, leading them to keep returning to the game or having trouble disengaging in the game (Kumar & Manohar, 2025). In the real world, children do not get stickers, exaggerated praise, or fun whistles every time they stack a block or get buckled into a car seat. Constant rewards during digital experiences can condition, or "wire," a child's brain to expect rewards; this can work against children's ability to work through hardship and create a reliance on rewards (Deci et al., 2001; Zicherman & Cunningham, 2011).

Some games take extrinsic motivation a step further by using gambling-like tactics called variable rewards. For example, in many apps, there are spinning wheels or treasure boxes filled with a very small potential to win big, and a large potential to win useless prizes. These can be even more addictive than frequent, expected rewards, especially for children who have not yet developed impulse control (Shultz, 2016).

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4. Play is spontaneous (not scripted).

Similarly to supporting children in their decision-making, meaningful offline play offers opportunities for children to follow where their imagination or the world around them takes them. The direction of the play shifts based on children's curiosities, mistakes, new ideas, moods. Inside, a collapsed block tower can become a fence for some toy cows. Outside, hours of play can erupt on a windy day, or a trail of ants emerges on the sidewalk. Children are not constrained by a script and can adapt in the moment (Linn, 2009).

Online environments inevitably provide a script. They are closed-ended in ways where there is only one right path to take, letter to choose, or food to feed a virtual pet. Games and platforms rely on predefined (and often commercial) characters, worlds, objectives, and storylines that shape how play unfolds. Favorite characters come with established personalities, narratives, and rules that dictate what is possible within the app. Spontaneity is replaced with selection among pre-approved options, limiting opportunities for open-ended invention and genuine creative surprise.

5. Play is enjoyable.

There are certainly times that children can have fun while using a tablet. Laughter, excitement, and a sense of accomplishment can occur both on and off a device. In offline play, enjoyment typically arises from exploration, social connection, imagination, and a sense of agency. The intrinsic nature of the play means that the joy is derived from self-satisfaction.

In "digital play," extrinsic-driven engagement means that sometimes this joy is engineered and more about what's provided by the app itself. As discussed earlier, the frequent and variable reward systems in popular apps can manufacture satisfaction (via dopamine). But that satisfaction is dependent on the reward system continuing to deliver stimulation. Children may appear happy while playing, yet feel irritable, empty, or dissatisfied once the experience ends, much like a sugar crash (Lembke, 2021). This doesn't support sustained well-being in the same way that hands-on, sensory-filled play does.

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Divesting in Digital Play

The technological design of digital play which targets children is unfair to children, caregivers, and educators. The good news is that there are a number of steps for those who care about children that can be taken in order to disrupt the adoption of "digital play" in early childhood:

Cultivate Early Childhood Settings as "Play Sanctuaries." Prioritizing multi-sensory, open-ended play is an act of resistance against all the systems that work against equitable, high-quality early childhood outcomes. Early childhood programs can ensure that children maintain their right to play by ensuring that play stays evidence-based and developmentally enriching (i.e., not digital). By serving as models, these programs can show families the deep engagement that happens for children as they play with mud, blocks, and fabrics, which can help to illustrate why offline play is irreplaceable. At the same time, tablet use must not be labeled as play. This prevents the "false equivalence" from taking root in curriculum standards.

Apply a "Play Lens" to Evaluation. Use Nell and Drew's (2013) "5 Essential Components of Meaningful Play" as not only a vetting tool, but a way to empower educators to advocate for why they choose not to embed play with tablets into children's daily experiences. If it doesn't meet the criteria, keep it out of the classroom. Practitioners can also take it a step further by evaluating all technology in the program using the Screen Aware Early Childhood Framework (SAFEC), introduced in a 2025 publication of the same title (Cantor et al., 2025). Alongside these lenses, additional education for both professionals and families on the corporate business model is essential to understand all the ways that most apps are designed against play.

Resist Technology Requirements. It's a common tale that early educators feel stuck because they are required to use technology in their early learning settings. Let's be clear: Technology related to accessibility is never an option. But so often this requirement has not been fully considered– especially when it comes to the manipulative, corporate design of so many digital experiences marketed to preschoolers. If a school or district insists on using technology, we must be clear that children's appropriate development takes precedence over all else.

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Advocate for research-informed child-care policies. In the United States, state child-care regulations are highly variable and often developmentally inappropriate. Learn your relevant requirements and be prepared to go above and beyond. Some states don't require programs to have any policies about tech use, even for babies and toddlers. It's important to fight for regulations that put children's development ahead of corporate interests and trends, especially those that forbid screen time for children under 2 (and under 6 is even better).

Advocate for safety by design legislation. This would ensure that companies design technology with children's development at the forefront and would hold accountable those companies who do not. Join the movement led by organizations like Fairplay, contact your legislators, and share your stories of success with offline, high-quality play.

Conclusion/Recommendation

While "digital play" continues to gain traction, we must recognize that digital platforms are not neutral tools; corporate environments put profit over kids. If we don't, we risk displacing the child-led, hands-on play that children need by exposing them to harmful manipulative design tactics and content. To protect children's well-being and right to play, we need to reject the false equivalence of digital play and reclaim early childhood settings as play sanctuaries to truly ensure that all children can thrive.

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Screens, Play, and the Developing Brain: Restoring Balance in Modern Childhood

Celia Hogan, Nature Education Specialist

Introduction

Children's daily environments have changed dramatically over the past decade. Across many countries, children spend more time on digital devices and significantly less time in free, imaginative, outdoor play. While digital technology offers benefits, increasing evidence suggests that excessive screen exposure, particularly in early childhood, can affect sleep, attention, emotional regulation, and social development.

At the same time, opportunities for play, movement, and exploration have declined. Research from neuroscience, psychology, and education shows that these experiences are critical for healthy brain development. Through play, children develop executive function, resilience, creativity, empathy, and the ability to regulate emotions and manage risk.

This white paper examines current research on the developmental impacts of screen exposure and the role of play in supporting healthy brain development. Drawing on international studies and practical examples from play-based programs, it highlights the growing imbalance between digital engagement and real-world play experiences.

The paper concludes that restoring balance in modern childhood does not require eliminating technology, but ensuring that children continue to experience the types of play that support their development. Recommendations focus on protecting time for free play, expanding access to nature-based play, supporting healthy screen habits, strengthening relationships, and designing learning environments and communities that prioritize play-rich childhoods.

Childhood is changing at a pace no generation has experienced before. Over the past decade, screens have shifted from being an occasional part of children's lives to an everyday presence woven into home, school, and social environments. At the same time, opportunities for free, imaginative, active, and outdoor play have steadily declined

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(Gray, 2011, 2013). Many children now spend more time sitting, watching, and swiping than exploring, creating, and connecting with others face-to-face (Rhodes et al., 2022).

From a New Zealand perspective, these trends mirror what is being observed internationally: Rising screen use across all ages, declining outdoor play, increased sedentary behavior, and growing concerns about children's well-being (Rhodes et al., 2022; Royal Children's Hospital National Child Health Poll, 2024). Neuroscience shows that these shifts matter. The developing brain relies on movement, rich sensory input, relationships, and unstructured play to build the neural pathways that support attention, emotional regulation, empathy, and resilience (Radesky & Christakis, 2023).

Research now links high screen exposure, particularly in early childhood, with challenges in sleep, attention, self-regulation, and social development (Domoff et al., 2020; Madigan et al., 2019; Radesky & Christakis, 2023). For older children and adolescents, heavy use of smartphones and social media is associated with increased anxiety, loneliness, and mood difficulties (Haidt & Rausch, 2026; Kelly et al., 2025; Twenge, 2020).

Alongside these concerns, a strong evidence base highlights the protective power of play. When children climb, imagine, negotiate, take risks, and explore natural or social environments, they strengthen the very skills and capacities that digital experiences often displace (Prins et al., 2022; Sandseter et al., 2021; Sandseter & Kleppe, 2024).

This paper explores what current research reveals about these contrasting developmental pathways and how families, educators, and communities can help restore balance in a digital age.

Problem Statement

Modern childhood is undergoing a profound shift. Across New Zealand and internationally, children spend more time on digital devices than ever before and significantly less time in free, imaginative, and active play (Rhodes et al., 2022; Royal Children's Hospital National Child Health Poll, 2024). This change is not simply a

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lifestyle preference; it is reshaping key developmental experiences that children's brains depend on (Radesky & Christakis, 2023).

A growing body of research shows that high levels of screen exposure, especially when introduced early, compete with the kinds of interactions that build foundational neural pathways (Domoff et al., 2020; Radesky & Christakis, 2023). Screen use displaces relational moments, reduces language-rich exchanges, and limits opportunities for movement, sensory exploration, and problem-solving (Domoff et al., 2020). Studies in the early years link high screen time with delays in communication, reduced attention, difficulties in emotional regulation, and disrupted sleep, core developmental capacities that typically emerge through play, social connection, and caregiver interaction (Madigan et al., 2019; Radesky & Christakis, 2023).

At the same time, many children have fewer opportunities for outdoor, social, or unstructured play (Gray, 2011; Louv, 2008). Families report time pressures, safety concerns, and increasingly device-centered routines (Haidt, 2024; Twenge, 2017). Schools, too, are navigating increased digital integration, often resulting in more sedentary learning and fewer extended periods of self-directed play or outdoor exploration (Rhodes et al., 2022). Together, these factors mean many children spend most of their day in environments that are passive, screen-based, and cognitively overstimulating, yet physically under-stimulating (Radesky & Christakis, 2023).

For older children and adolescents, the issues compound. The rise of smartphones and social media has introduced constant connectivity, comparison, and performance pressure (Twenge, 2020). A growing number of longitudinal studies link heavy social media use with increased symptoms of anxiety and depression, particularly among girls (Kelly et al., 2025; Twenge, 2020). Sleep disruption, driven by evening screen use and nighttime device access, is now widespread, and poor sleep further affects mood, attention, and self-regulation (Royal Children's Hospital National Child Health Poll, 2024).

These challenges do not arise simply because screens exist, but because they are now replacing essential developmental experiences. Play, especially physical, social, imaginative, and nature-based play, is one of the primary ways children develop

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executive function, resilience, creativity, empathy, and the capacity to manage risk (Prins et al., 2022; Sandseter et al., 2021). When play diminishes, children's opportunities to practice these skills diminish.

The issue, therefore, is not screens alone, but an imbalance: A modern childhood weighted heavily toward digital engagement and away from the types of play that support healthy brain development. Addressing this imbalance is central to supporting children's well-being in a digital age (Radesky & Christakis, 2023).

Background

Neuroscience over the past several decades has established a clear principle: Children's brains develop through experience (Radesky & Christakis, 2023). The wiring of neural pathways responsible for attention, emotional regulation, executive function, empathy, creativity, and resilience is shaped by the environments in which children spend the most time (Radesky & Christakis, 2023). Play, especially when it is active, social, imaginative, and grounded in the physical world, provides many experiences that support strong, flexible brain development (Prins et al., 2022; Sandseter & Kleppe, 2024).

The Neuroscience of Play

Play offers repeated opportunities for children to practice decision-making, problem-solving, risk assessment, collaboration, and emotional regulation (Sandseter et al., 2021). Through movement, sensory exploration, and social negotiation, children build the neural networks that enable executive functioning and self-control (Domoff et al., 2020). Research in developmental neuroscience and psychology shows that unstructured play strengthens pathways in the prefrontal cortex and supports the development of working memory, cognitive flexibility, and inhibitory control, skills essential for learning and well-being (Radesky & Christakis, 2023; Sandseter & Kleppe, 2024).

Active, imaginative, and nature-based play also exposes children to rich sensory input. These varied experiences help integrate different brain regions, supporting more

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adaptive responses to stress and challenges (Prins et al., 2022). Play with peers helps develop empathy, cooperation, and social reasoning (Sandseter et al., 2021).

Changes in Children's Environments

Over the past decade, children's environments have shifted dramatically. Digital devices have become embedded in daily routines across homes, schools, and early learning settings (Rhodes et al., 2022). As screen access has increased, opportunities for free play, exploration, and outdoor activity have declined (Haidt, 2024; Twenge, 2020).

These shifts matter because screen time often replaces the experiences play naturally provides (Domoff et al., 2020). Screens tend to offer fast-paced, highly stimulating input that requires little motor movement, minimal problem-solving, and limited social reciprocity (Radesky & Christakis, 2023). In contrast, traditional play supports slower, deeper, more varied engagement that helps children practice self-regulation and sustained attention (Prins et al., 2022).

Research on Screen Exposure

A growing body of peer-reviewed research highlights the developmental impacts of chronic or early screen exposure (Radesky & Christakis, 2023). Studies in infants and preschoolers link high screen use with reduced parent–child interaction, delayed communication skills, disrupted sleep patterns, and lower scores on developmental assessments (Madigan et al., 2019; Suryavanshi et al., 2024). For primary-aged children, increased recreational screen time is associated with difficulties in attention, emotional regulation, and executive functioning (Domoff et al., 2020).

Among adolescents, longitudinal studies increasingly show associations between heavy social media use and declines in well-being, increases in anxiety and depression, and challenges with sleep quality (Kelly et al., 2025; Twenge, 2020). These findings are consistent across multiple countries, suggesting that the effects are not specific to one culture or education system but reflect broader changes in childhood environments (Haidt & Rausch, 2026).

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The Role of Nature and Outdoor Play

At the same time, research on nature-based and outdoor play highlights significant benefits. Exposure to natural environments has been shown to improve attention, reduce stress, and support emotional regulation (Ernst, 2024; Prins et al., 2022). Outdoor play encourages risk-taking, physical competence, creativity, and collaboration (Sandseter et al., 2021; Sandseter & Kleppe, 2024). Studies demonstrate that children who regularly spend time in nature show improvements in executive function and overall well-being (Ernst, 2024; McDonnell et al., 2024).

A Developing Imbalance

Taken together, this research suggests that many children's daily experiences are becoming imbalanced: More digital stimulation, less real-world exploration; more passive consumption, less active play; more connection through screens, but less face-to-face social practice (Radesky & Christakis, 2023). Understanding this imbalance is key to identifying approaches that restore healthy developmental conditions in a digital age.

Appropriate Approaches/Strategies

Addressing the imbalance between rising screen use and declining play does not require eliminating technology or idealizing a past version of childhood. Instead, the focus is on restoring the conditions that support healthy brain development: Movement, connection, imagination, nature, and opportunities for children to practice self-regulation in real-world settings (Radesky & Christakis, 2023; Prins et al., 2022).

Evidence across developmental science, psychology, education, and public health points to several strategies that help children thrive in a digital age (Haidt, 2024; Radesky & Christakis, 2023).

Protecting and Prioritizing Free, Unstructured Play

Free play—where children choose their activity, pace, and style of engagement—offers developmental experiences that structured activities and digital environments often do not (Prins et al., 2022; Sandseter et al., 2021). Research consistently shows that

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unstructured play strengthens executive function, creativity, problem-solving, risk assessment, and social competence (Sandseter & Kleppe, 2024).

Increasing Access to Nature-Based Play

Nature-based play is a high-impact, low-cost strategy with strong evidence behind it (Prins et al., 2022). Studies show that time in natural environments supports attention, reduces stress, improves emotional regulation, and enhances physical and social development (Ernst, 2024; McDonnell et al., 2024). Nature also encourages play that is more imaginative, physically challenging, and cooperative (Sandseter et al., 2021).

Supporting Healthy Screen Habits

Screen use is now woven into modern life, and research suggests that the quality, timing, and context of screen use often matter more than rigid limits (Radesky & Christakis, 2023). Healthy screen habits help children develop digital literacy while protecting time for play, sleep, and social interaction (Domoff et al., 2020).

Strengthening Relationships and Connection

Strong relationships can buffer many developmental challenges associated with high screen use (e.g., reduced attention, emotional dysregulation, and loneliness) (Warburton et al., 2022). Play, especially social play, is a powerful way to build these connections (Sandseter et al., 2021).

Designing Learning Environments that Embed Play

Across early childhood and primary education systems internationally, there is growing recognition that play supports not only well-being but also learning outcomes (Prins et al., 2022; Sandseter & Kleppe, 2024). Schools can restore balance by integrating play-based and exploratory learning approaches throughout the day (Gray, 2013; Prins et al., 2022).

Engaging Communities to Support Play-Rich Childhoods

Communities play a critical role in shaping children's environments (Louv, 2008; Prins et al., 2022). When neighborhoods, councils, and organizations prioritize access to

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nature, outdoor play spaces, and family-friendly policies, children benefit (Prins et al., 2022).

Encouraging Small, Sustainable Shifts

Families and educators are often under pressure, and overhauling routines can feel overwhelming. Research suggests that small, consistent shifts in behavior and environment can produce meaningful developmental change over time (Domoff et al., 2020; Radesky & Christakis, 2023).

Conclusion/Recommendations

Children's developmental environments have changed rapidly, and the rise of digital technologies has outpaced our understanding of their impact on young minds (Radesky & Christakis, 2023). At the same time, opportunities for free, active, imaginative play have declined worldwide (Gray, 2011; Haidt, 2024). Research across neuroscience, psychology, education, and public health shows that this shift is not neutral: Chronic screen exposure and reduced play affect attention, self-regulation, emotional well-being, and the development of core skills children rely on throughout life (Domoff et al., 2020; Madigan et al., 2019; Twenge, 2020).

Yet the evidence also points to a clear path forward. Play, particularly unstructured, social, and nature-based play, offers powerful protective benefits (Prins et al., 2022; Sandseter et al., 2021). It supports healthy brain development, fosters resilience, and builds the cognitive and emotional skills that help children thrive in an increasingly complex world (Ernst, 2024; McDonnell et al., 2024).

When families, educators, and communities create environments that prioritize play and balance digital engagement intentionally, children experience measurable improvements in well-being and development (Warburton et al., 2022).

By restoring play to the center of childhood and guiding screen use with intention, we can help children grow up with the capacities, confidence, and connection they need to flourish.

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Playful Parents in Technoference Times

Miriam McCaleb, PhD

Introduction

It is a sad reality that not everyone understands the value of play as a conduit for learning and well-being (Bipath et al., 2022). As an advocate for children, an early childhood teacher, and a child development researcher, I have always found it necessary to help some parents understand what children's play means.

This might include explaining, in developmental terms, the value of children's play. Sadly, in this outcome-focused, hyper-busy, maximization-obsessed time in which we live (Paine, 2023), there is apparently more need than ever to justify play. It seems necessary not only to explain the benefits of play but also to clarify its definition as spontaneous, hands-on, and child-led.

Those who work with children and families must learn to communicate how a child's development is fostered when they build a fort, the skills a child develops when they build with blocks or model with clay, and how creative play prepares the brain for adulthood.

Having worked in this realm for more than 30 years, I find nothing new in this need to promote child literacy – that is, to support adults in becoming more literate and knowledgeable about children and explaining the "why" of play. Unfortunately, what is new is how many people seem to need support with the "how" of play.

Given the vital role of play in encouraging responsiveness and fostering warm, reciprocal connections between children and adults (Silton et al., 2026), supporting parents in recognizing the role serve-and-return interactions play in fostering healthy neurobiological growth is essential. Such serve-and-return interactions are exemplified in playful exchanges between the youngest babies and their loving families (Komanchuk, Letourneau, et al., 2023).

Into this already compromised play landscape comes a new threat: the Great Distractor. Nowadays, the use of smartphones is ubiquitous (Morris et al., 2022):

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distracting parents and displacing playtime (Hiniker et al., 2015; Lemish et al., 2020), and the downsides are mounting.

Problem Statement

Researchers have a variety of words and concepts to describe what the influx of digital technologies means for our day-to-day lives, our families, and our relationships. The term used here is *technoference*: coined by McDaniel (2015), it describes technology's interference in our interpersonal relationships.

While the phenomenon was first named as an issue within romantic partnerships, it has since been the subject of ongoing study in families (Komanchuk, Toews, et al., 2023). Parental distraction by technologies such as smartphones results in technoference within the parent-child relationship. Researchers have found this to create challenges for children's language development (Corkin et al., 2021), behavior (McDaniel & Radesky, 2018), and – by reducing parental sensitivity - the formation of secure attachments (Braune-Krickau et al., 2021). The absence of a secure attachment being formed early in a child's life has been associated with acute and multifaceted impacts—raising risks for emotional dysregulation, chronic illnesses, and substance use disorders, while reducing resilience (Fairbairn et al., 2018). Early relationships matter, and technoference is a modifiable risk factor (Toledo-Vargas et al., 2025).

This is not a criticism of parents, as the powerful pull of these distractions is intentional by design (Fogg, 2009). Distracted parents are largely at the mercy of broader systems that enable the current extractive attention economy, in which people and families are the product (Birch et al., 2021). Nothing happens in a vacuum, and today's prolific technoference must be understood to be intertwined with other fiscal, social, and domestic realities. Many of today's families are under huge economic pressure; we are living through a time of rapid change – geopolitically as well as technologically- and seemingly everyone leads such busy lives. Modern parenthood is stressful for many (Wiltshire et al., 2021), and it can be hard to feel playful for many reasons. To those day-to-day stressors, add technoference and a side order of undervaluing play. Mix that with a lack of how-to knowledge, and it becomes clear that many families could use some help being playful (Kumar et al., 2022).

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Approaches/Strategies

The Children's Screen Time Action Network (2026) is a not-for-profit organization that works to promote a healthy childhood by reducing the time kids spend on digital devices. They have a three-part plan for working with families, which I will refer to and expand on here, using our play promotion lens.

1. We must lead with the positive.

Wearing my health researcher hat, I understand this in terms of the value of promoting 'do more' health behaviors, rather than 'do less' health behaviors (Nemec et al., 2015). What do we want to encourage more of? The answer is, of course, more hands-on, hearts-on play (Ahmed et al., 2023).

This is the fun part. Instead of scolding parents about putting down their devices, we get to remind them about the joys of active play. Whether it is a backyard obstacle course or some spontaneous parkour on the walk home from the bus, moving our bodies is so good for us – at any age.

Similarly, we can enjoy flexing our brains by making up stories about experiences or daily events, or even have fun with our vocabulary choices. Some people might enjoy providing commentary for a pet's activities. We could all enjoy sharing books with the children in our lives (Krcmar & Cingel, 2014) - and doing all the silly voices is a vital part of the process!

Sure, some types of electronic play are less corrosive than others, and we can find studies pointing to the benefits of collaborative video game play (Alanko, 2023). However, it cannot be denied that these rob people of time outdoors and sleep (Hökby et al., 2025), both of which are recognized as indicators of a range of health and wellbeing outcomes (Oswald et al., 2020). There is no downside to purposeful digital hygiene habits, and In Real Life (IRL) play is a joyful part of that prescription.

From the start, learning how to connect with an infant and what baby play looks like will help new parents build those essential 'serve and return' relationships from day one. In terms of attachment relationships and neurobiology, this will benefit the next generation immeasurably throughout their lifespan.

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2. Acknowledge challenge in an attempt to avoid shame.

This is vital. After all: "It is unreasonable to design services to be compulsive, and then reprimand [people] for being preoccupied with their devices." (Kidron et al., 2018, p. 5).

Our concern for children affected by technoference in childhood must not be expressed as frustration with parents. The villains in this story are the architects of the attention economy (Wu, 2017), the 'attachment economy' as represented by AI (Center for Humane Technology, 2026), and perhaps the legislators whose regulations cannot keep track of the rapid pace of technological change. It does not help if those legislators also continue to take advice from lobbyists whose business models have every interest in distracting us (Popiel, 2018) – whether or not children are in the room.

We must tread with tenderness and compassion in acknowledging the way adult smartphone use has been normalized – even encouraged – despite the negative implications for the children in our care (McCaleb, 2021). Today's parents deserve understanding and empathy in this situation, which is the 'David v. Goliath' of modern parenting. Families are challenged to create the conditions for optimal child development, even as powerful corporate distraction machines work in opposition.

As Atli et al. (2019) write: "it is not enough for parents to just have certain parenting skills. They are supposed to adapt themselves to recent technological developments in the world" (p. 197). To feel truly playful and free, parents need support in this area. In my experience, parents describe a melange of uncomfortable feelings when they learn about the negative implications of technoference for their children's development, and the lack of constraints on those who are distracting. In my work with families, as we stare down the uncomfortable research findings documenting harms associated with the overuse of digital technologies (Cullen et al., 2024), I hear stories of guilt, anger, and despair, none of which are natural bedfellows for a joyfully playful parent. Name and acknowledge the asymmetry in our relationships with technology so we can treat ourselves (and other parents) with kindness as we put down our devices and pick up our books, blocks, and balls.

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3. Focus on structural change.

If this feels like a huge undertaking, it is because it is! This is where we use our play-passion to consider the depth and breadth of advocacy that supports parents in living more playfully.

Structural change might look like: continued **advocacy for tighter legislation** to curb Big Tech's overreach into our lives. For example, technology designers could create affordances that respond to whether there are kids in the room (Radesky & Hiniker, 2022).

It is worth **questioning the use of devices in schools and early childhood services**. The rapid uptick in ed-tech has critics (Ben-Jacob & Glazerman, 2021; Clement & Miles, 2017). Curious questions from engaged families may help teachers assess whether their moment-by-moment use of devices is necessary or an example of technochauvinism (Broussard, 2019)—that is, the belief that a technological solution is superior to a human one. Is this screen really required, or would a pen-and-paper solution be as relevant? While engaging with schools and early childhood services, we must use our voices to **support teachers as they promote playtime**, a.k.a recess (Kahn & Atkinson, 2025).

> Supporting communities in accessing greater opportunities for play in **green spaces and safe public places**, for example, playgrounds (Heerman et al., 2017).

Working with local government to **create safer streets**. 'Child-friendly' cities are those where humans are prioritized over vehicles, and play is not an afterthought (Pia & Bezboruah, 2025).

Meanwhile, we can try to honor personal agency, even amid the cultural soups we all swim in. Technology use is a modifiable factor (Toledo-Vargas et al., 2025), so **keep switching off** where and when you can.

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Conclusion

sTechnoference risks an optimal parent-child connection and distracts from IRL. By supporting parents and demanding safer digital and physical environments, we can - and must - promote the vital role of play, with life-enhancing benefits for the next generation.

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Let's Grow Brain P.O.W.E.R.! What Kids REALLY Need to Thrive and How Screens Interfere

Katie Talarico, MSEd

Introduction

Parenting in the digital age is difficult. Maintaining consistent rules is exhausting, and screen time battles feel inevitable. Devices are hard for families to manage. The truth is that parents today are tasked with an impossible feat: to MANAGE the UNMANAGEABLE. Most screen-based activities for children (and adults) have been purposefully designed to be unmanageable: to capture and hold their attention hostage, and to override their best intentions.

These purposeful design features, in combination with well-financed marketing departments, have steered screens into a role of perceived necessity and inevitability in childhood - without proof of benefit. At the same time, an ever-growing body of independent research shows significant harms to the health and well-being of children who overuse screens. Parents are inundated with conflicting messages.

Many advocates are working tirelessly for change through legislation and policies that protect children online, push companies to create safer products for children, and hold companies accountable for harms they cause. However, this is a slow process, and parents are still on the front line, protecting and guiding their children through the digital world. Families need solutions!

On the bright side, research also shows extraordinary benefits to children's development from simple and time-honored activities like play, outdoor time, chores, engaging with others, and reading. We must push back on the assumption that screen time is necessary and inevitable for learning and growth, and strive to bring healthy development back to the center of childhood.

Let's Grow Brain P.O.W.E.R.! aims to do both. Research shows that parents are more receptive to positively framed messages about screen time than to negatively framed, or fear-based, messages (Fairplay, 2025). The Let's Grow Brain P.O.W.E.R.! framework shifts the focus to healthy development, or in other words, what children

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really need to grow and thrive. P.O.W.E.R. is an acronym that highlights healthy developmental activities that provide children opportunities to build the *human skills* they will need in the future.

P- Play

O- Outdoors

W- Work/Chores

E- Engage (with others)

R- Read

When children spend more time on these healthy, screen-free activities, they not only reap the extraordinary benefits these simple activities offer for growing brains and bodies, but they also have less time each day for screens. MORE BRAIN P.O.W.E.R. TIME = LESS SCREEN TIME!

Let's Grow Brain P.O.W.E.R.! offers a simple, memorable framework of shared language that prioritizes healthy child growth and development, gives families a roadmap to healthy development, and educates families about how screen time interferes.

Problem Statement

Childhood screen time is excessive, and research shows it has serious negative effects on growing brains and bodies. By 18 months to 2 years old, 90% of children exceed screen time guidelines. By age 2, 40% of children have their own tablet, and by age 4, that rises to 58%. Tablets are internet-connected, portable devices that provide instant entertainment and distraction. We increasingly see children staring at tablets in shopping carts, at restaurant tables, in waiting rooms, and at home. In fact, 2-year-olds use screens for approximately 2.2 hours per day. By age 5-8, this rises to almost 3.5 hours per day. Teenagers are staring at screens for almost 9 hours per day (Mann et al., 2025).

An ever-growing body of independently funded, robust research links screen time to harm in almost every major area of human health and development, including

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physical health, mental health, social-emotional well-being, cognitive development, and academic achievement. Research on young children reveals additional concerns about screen time's effects: attachment with caregivers, sleep, language acquisition, emotion regulation, sensory processing, and early brain development are all impaired (Talarico & Carr, 2025).

The sheer volume of studies regarding children's screen use, and the wide range of negative effects, should give everyone who cares for children's well-being a reason to pause. Together, we need to reconsider the culture of screen overuse for children and shift the focus toward healthier developmental activities.

Two studies in particular spurred the creation of the Let's Grow Brain P.O.W.E.R.! framework. In these studies, pediatrician and researcher Dr. John Hutton recruited small cohorts of preschoolers, measured screen use, conducted developmental testing, and examined MRI brain images. Both studies correlated higher screen use with thinning of certain brain structures, especially in areas related to language, literacy, and social skills (Hutton et al., 2020; Hutton et al., 2022). The preschool years are an essential time of learning and growth that can establish patterns for many years. Preschoolers' brains should grow, not thin.

Communicating this information to parents of young children is vital, but difficult. Fear-based messages can create overwhelming feelings of fear or guilt, and reduce parents' confidence in their ability to manage screen time (Fairplay, 2025). However, starting a conversation with a positively framed message helps parents absorb a negative message without harming their confidence (Fairplay, 2025). Let's Grow Brain P.O.W.E.R.! focuses on a positive, empowering message before explaining how screens interfere with healthy development.

Background

Screens are designed and marketed to promote overuse. They have assumed an oversized role in childhood through manipulative design patterns created by an industry focused on profits over children's well-being. Most content has been transformed by addictive algorithms and manipulative design features. Quality programming or apps for children are hard to find, and companies have no incentive to create higher-quality

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content. Most of what we all see has been purposely designed to capture and hold our attention and even override our best intentions.

Persuasive design is the science behind the addictive algorithms, the fascinating games, and the never-ending videos and shows. Dr. Richard Freed writes extensively about persuasive design in his book, *Better Than Real Life* (2025). He notes that persuasive design combines psychology and neuroscience with technology, enabling tech designers to embed psychological tricks and neurological hacks into an app to alter a user's thoughts, feelings, and ultimately, their behavior. These design features are scientific, targeted, purposeful, and they are highly successful. We are on screens more than any of us could have ever imagined, and often for longer than we'd like to admit! Dr. Freed explains that tech companies hire psychologists and neuroscientists to devise ways to hook our attention for just a few seconds or minutes longer than we'd like (Freed, 2025). More time on an app attracts more advertisers, which generates more revenue for the company. The business model is simple, but it is wreaking havoc on our children.

Even the youngest users are not protected from this manipulation. One study found that 80% of apps designed for children ages 0-5 contained manipulative design features (Radesky et al., 2022). Because children's brains are not fully developed, they are even less able to resist being held captive to the screen.

A popular children's show provides one example. The show's creators regularly conduct "audience research days" in which they observe toddlers watching an episode of the show. Researchers note each time toddlers look away from the screen, aiming to make those moments in the show more engaging (Segal, 2022). In other words, the show's creators purposefully work to override a toddler's healthy developmental desire *to look at something else,* even just to observe the world around them.

Tech company marketing also encourages screen overuse. They spend millions of dollars to spread the message that children will be hip, safe, social, and smart when they use these products (McLeod, 2025). Reality largely contradicts this message. First, predators and inappropriate content abound online, which undermines children's safety (Kraut, n.d.). Second, communicating and connecting through a screen breeds more

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shallow relationships without the rich synchronicity of facial and body cues or shared experience, which undermines children's social-emotional health (Stieger et al., 2023). Lastly, academic achievement worldwide has fallen as personal and learning screens have taken over classrooms, undermining children's cognitive ability (Horvath, 2025). Children might seem hip or cool, but the sacrifices of safety, social-emotional health, and cognitive ability are real.

Excessive Screen Use Interferes with Healthy Development

Once screen time sneaks into a family's life, it disrupts healthy development in four ways: displacement of healthier activities, technoference, overstimulation, and inappropriate content.

Displacement

Childhood is an incredible period of physical, mental, and social-emotional growth. Screen time *displaces* important activities that help children grow and thrive. Children need to experience and practice many physical skills to fully understand their bodies and how they function in the physical world. Time for things like climbing, jumping, and balancing is essential. Children need to learn and practice cognitive skills to expand their cognitive capacity. This includes time for building, doing puzzles, pretending, making up games and rules, and asking questions. Children also need to learn and practice social-emotional skills to understand how to successfully function in the world. This includes time to practice conversations with eye contact, play with or help a friend, or navigate difficult emotions. Finally, children need to learn and practice life skills like putting on shoes, setting a table, or helping with laundry in order to learn to care for themselves and others. These skills require patience, time, and practice.

Even high-quality screen time cannot compete with real-world learning. Children are wired to learn from the physical world around them. Hutton (as cited in Wilkinson, 2024) explains that human brains evolved to do two things really well: process information from the five senses, and interact with other humans. Screens shrink experience into two dimensions and place a physical barrier in relationships. Real-world learning should not be displaced by screens.

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Technoference

Technoference happens when technology use interferes with relationships (Children and Screens, 2025). It happens in families and schools, between children, between teens, and even between adults. When we pay attention to a screen while a child is in front of us, we are inadvertently communicating that what's on the screen is more important than the child at that moment. Adults must change this by modeling good screen habits like putting a phone aside during family time and paying full attention to the child in front of us. We all need to remind ourselves (and our kids) to always put people first.

Overstimulation

Our brains were not designed to process the sheer amount of information we encounter daily. For children, it is even more difficult. Lights, sounds, and fast-paced material constantly bombard their brains, and their nervous systems struggle to keep up. This overstimulation can dysregulate biological systems and show up as meltdowns or other behavioral and emotional issues (Dunckley, 2015).

An additional type of overstimulation occurs in the brain's reward pathways. Dopamine is a neurotransmitter related to desire and reward. Interactive screens cause the release of high amounts of "easy" dopamine. Real-life activities generally require more work than screen-based activities and tend to release smaller amounts of dopamine. When children become accustomed to high levels of dopamine in the brain, they crave more of the "easy" dopamine from the screen, and real life can start to feel boring (Freed, 2025). This creates a cycle of screen overuse. Dopamine levels can be "reset," so children can enjoy the "hard-earned" dopamine of real-life activities. Finding joy in little things is one of life's true pleasures!

Content

Poor quality, inappropriate, and extreme content is everywhere online. Over 20 million videos are uploaded onto YouTube each day (YouTube, 2026). It is impossible to vet all this material daily. People with no background in either education or child

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development label videos as “educational,” and people with no regard for children’s well-being post harmful content.

Inappropriate content slips through even the best firewalls and content filters, and children easily share material with their peer groups. Harmful content can fuel unhealthy obsessions or relationships, fears, and misinformation.

Appropriate Approaches/Strategies

Shift the Focus to Healthy Development

As noted, families are more likely to hear and trust a positive, empowering message about screen time than a negative or fear-based one (Fairplay, 2025). So, let’s start the conversation by shifting our focus. We all want healthy, thriving children who can grow into healthy, thriving adults. We can focus on what research and lived experience show us about helping children grow and what adults can do to support that process. More P.O.W.E.R. Time = Less Screen Time!

Provide Parents with a Roadmap Toward Healthy Development: P.O.W.E.R. Activities and Human Skills

Children are children. Technology changes, but children’s developmental needs have not. Children need P.O.W.E.R. activities! These screen-free activities provide extraordinary benefits to health and development (Talarico & Carr, 2025). They can be as simple and low-cost as empty boxes and crayons, a patch of dirt, asking for help finding a book at the library (and then reading it together), or helping with chores at home. The following list represents some of the many benefits:

Play: Play improves physical and mental health, builds resilience, and strengthens many foundational skills, such as problem-solving, critical thinking, creative thinking, and communication.

Outdoors: Outdoor time improves physical and mental health, mitigates the negative effects of screen time, strengthens cognition and academic learning, and builds communication and language skills.

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Work/Chores: Work and chores build useful life skills, a strong work ethic, self-esteem, resilience to frustration and adversity, and a sense of belonging.

Engage: Engaging with others strengthens language, communication, and interpersonal skills, builds empathy, and creates community.

Read: Reading opens new worlds of knowledge, strengthens focus and attention, increases brain connectivity and the ability to think critically, and builds empathy. Shared reading also strengthens attachment.

These activities help children practice the *human skills* they will need in the future. No matter what the future looks like, and no matter what the new and popular technology of the day is, children will need *human skills* like**:**

- Problem solving
- Empathy
- Resilience
- Critical thinking
- Creative thinking and
- Social-emotional skills (like communicating and self-regulation)

These abilities help children observe, examine, and interact with the real world and the people in front of them in a positive, beneficial way. As children practice these skills, they become more proficient.

Encourage Practice and Repetition to Grow Brain P.O.W.E.R.

When children engage in healthy activities, they learn valuable skills. For example, when a child rides a scooter, builds a block tower, does a puzzle, reads a book, stirs a pot, sorts laundry, or navigates boredom or disappointment, they are learning.

Children's experiential pursuits correspond with some activity in the brain. When a child learns a new skill or tries a new activity, the brain creates a new pathway. Each time the child practices that skill or activity, the brain reinforces the pathway and makes it thicker, stronger, and faster. This incredible process of brain growth is called myelination. For brains, "myelination is the process by which a fatty substance called

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myelin wraps around the axons of neurons, forming an insulating layer that dramatically enhances the speed and efficiency of neural communication" (NeuroLaunch, 2024). Nerve fibers coated in myelin make up much of the brain's white matter. So, the practice and repetition of skills not only help a child gain proficiency in an activity, but it also spurs the development of white matter in the brain. This is the same white matter that was thinning in Dr. Hutton's research on preschoolers. Young children learn, and therefore grow white matter, with all activities they practice: from riding a scooter to quietly looking at a book, to engaging in a conversation or moving through disappointment. Repetition grows brain power.

Use it or Lose it

Growing brain matter requires experiences and practice. If a child doesn't practice a skill, the brain pathway stays weak and slow, and the skill stays difficult. Interestingly, brains go through several periods of "pruning" in childhood and adolescence. During these periods, the brain prunes away underutilized pathways. The adage "use it or lose it" rings true for brain development.

Educate About How Screens Interfere with Healthy Development

After empowering families to add more healthy developmental activities into everyday life, we can begin to educate them about how screen overuse causes harm.

Conclusion

Screen-based activities will never provide as much learning as three-dimensional, sensory-rich, synchronous, and in-person activities. The P.O.W.E.R. activities: play, outdoor time, work/chores, engaging with others, and reading, lead children into the three-dimensional, sensory-rich physical world and allow them to practice the human skills that will help them in the future.

Screen overuse is interfering with children's healthy development, including physically, mentally, socially, emotionally, cognitively, and academically. Providing a child with a device might calm and entertain them in the moment, but it also displaces the real-life learning that children need to grow and thrive. Families receive conflicting information about screen time and are often unsure of how to proceed. We must provide

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families with a path forward without blame or shame. When families include more P.O.W.E.R. activities in the day, screen time will naturally be reduced. Small changes can have a big impact on development. As families learn about how screen time affects their growing child, they can make more changes when they are ready.

Let's Grow Brain P.O.W.E.R.! provides a simple, memorable framework that promotes healthy developmental activities, encourages healthy change, and explains how screen overuse interferes. Let's Grow Brain P.O.W.E.R.!

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The Algorithm in the "Toy Box": Navigating AI, Play, and Culture

Jessie Ming Sin Wong, PhD

Introduction

Toys are a universal and essential part of childhood. They are tools of play, props for imagination, and objects through which children make sense of their world. Foundational theories of development demonstrate that object play is not just common but essential for cognitive growth. Toys serve as critical pivots for developing abstract thought and are the primary instruments through which children build symbolic understanding (Piaget, 1962; Vygotsky, 1978). The right toys, introduced at the right time, can promote healthy development and create rich learning opportunities (Dauch et al., 2018).

For millennia, these toys remained relatively constant. They were dolls, blocks, and balls, crafted from wood, clay, and rock (Chrisp, 1996). Today, the " toy box" looks very different. We have entered the era of the "smart toy," an era where playthings can listen, respond, learn, and connect to the internet. Artificial intelligence (AI) has moved from research labs into our children's playrooms as interactive robots, adaptive learning games, and voice-activated companions (Holmes et al., 2019; Lee et al., 2024; Su & Yang, 2022). These new toys offer incredible promise, with the ability to personalize experiences and foster new skills (Snooplay, 2024). They also introduce profound new challenges that touch upon the very culture of childhood. This white paper explores the complex relationship between AI, play, and culture, offering guidance for parents and educators to navigate this evolving landscape thoughtfully and protect every child's right to meaningful play.

Problem Statement

A New Kind of Playmate. The arrival of AI in the "toy box" presents a double-edged sword. On one side, these technologies can create deeply engaging and educational play. An AI tutor can adapt to a child's specific learning pace, and an interactive robot can encourage creative problem-solving (Kewalramani et al., 2021; Lee

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et al., 2024). On the other hand, these same toys raise urgent questions about development, privacy, and culture that we are only beginning to confront.

The core problem is this: AI toys are not just passive objects. They actively shape a child's experiences, values, and worldview. This creates several critical issues:

- ***The problem of culture***: Whose culture do these toys teach? AI systems learn from vast datasets, which often reflect a single, dominant cultural perspective. This happens because the most readily available data on the internet comes predominantly from Western, English-speaking sources. A 2024 UNESCO report found that major AI models produce content with significant gender and racial biases, associating women with domestic roles and producing richer, more positive narratives for men (UNESCO & IRCAI, 2024). For a child, this is not an abstract problem. It means the AI storytelling app might generate only tales with fair-skinned princesses waiting for a prince, or the robot companion may not understand a name outside its pre-programmed norms. When a toy's stories, jokes, and characterizations reflect these biases, it communicates to children that some voices, faces, and traditions are more valuable than others, potentially harming their sense of identity and belonging.
- ***The problem of relationships***: Does the toy replace a friend? Smart toys are designed to be engaging and can create strong emotional bonds. This can be beneficial, but it also risks a child preferring an ever-agreeable AI companion over navigating the complex, messy, and essential work of real human friendship (Serholt et al., 2022). Human interaction teaches invaluable skills, such as reading nonverbal cues, managing conflict, developing empathy, and experiencing the shared joy of a joke understood. An AI companion, which cannot truly feel or disagree in a meaningful way, offers a simplified, frictionless version of connection. Over-reliance on such interactions may hinder the development of social resilience, leaving a child less prepared for the complexities of real-world human relationships. This can lead to what some have called a "solitariness of childhood," where play becomes more private and less social (Sutton-Smith, 1994).

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- ***The problem of privacy***: Who is listening to your child's play? Many smart toys require an internet connection to function and collect data on a child's conversations, habits, and progress. This data is a valuable commodity. Companies can use it to build detailed consumer profiles of children before they are old enough to understand what a consumer is. The U.S. Federal Trade Commission (FTC) has updated its rules to limit how companies can monetize children's data, but the risks of data breaches and misuse remain significant (FTC, 2025; Snavely & DeVaney, 2025). This surveillance-based model of play raises serious ethical questions about the commercialization of childhood and a child's right to a private inner world where they can speak and imagine freely without being recorded and analyzed.

Background

From Sticks to Silicon.

The history of toys is inextricably linked to the history of human culture. The earliest toys were often found in nature, such as rocks and sticks (Chrisp, 1996). For centuries, most toys were homemade. The Industrial Revolution brought the first wave of mass-produced commercial toys, making them more widely available. After World War II, the toy industry grew significantly, thanks to the advent of plastic and metal, which made it possible to produce cheaper, more common toys, such as Lego bricks. Even with this commercialization, folk toys that reflected a child's local culture remained common in many parts of the world (Koong & Wong, 2018).

The last two decades have brought a more radical transformation. The rise of digital technology and global media has fundamentally changed what a toy is (Yelland, 1999). Today, the global smart toy market is a massive industry, valued at over 19 billion U.S. dollars in 2024 and growing rapidly (Singh & Singh, 2024). Unlike the folk toys that often reflected local traditions, these new smart toys are frequently designed by a handful of global corporations, raising new questions about cultural representation. They are not just toys with batteries. They are complex devices with sensors, microphones, and processors that use AI to create interactive experiences. This shift

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from simple, child-powered play to complex, algorithm-driven interaction represents one of the most significant changes to the landscape of play in human history.

Appropriate Approaches/Strategies

Navigating this new reality doesn't require rejecting technology; it requires adapting to it. It requires intentionality. Parents and educators can become critical, informed consumers who harness AI's benefits while protecting children from its risks. Here are some practical strategies:

- ***Become a "culture curator" for the "toy box"***: Your role is to ensure your child's playthings reflect your family's values and the diversity of the world.
- ***Ask about diversity***: Before buying a smart toy, investigate the stories it tells and the characters it features. Ask if it supports multiple languages or if its content can be customized to reflect different cultural traditions. Look for companies that are transparent about their commitment to creating inclusive content.
- ***Seek out diverse creators***: Look beyond the big-box stores. Many smaller companies and startups are founded by individuals from diverse backgrounds who are creating more culturally representative toys and apps. Supporting them can help foster a healthier, more inclusive market.
- ***Co-play and correct***: Play with your child and their AI toys. When the toy introduces a stereotype or a biased idea, use it as a teaching moment. Talk with your child about what you heard and why you see it differently. This builds essential media literacy skills.
- ***Supplement with your culture***: Use technology to share your own heritage. Record yourself telling family stories for your child to listen to, or use tablets to show them pictures and videos of relatives and cultural celebrations (Wong, Accepted).
- ***Champion a "balanced play diet"***: Digital play should be one part of a healthy and varied play experience, not the whole meal.
- ***Prioritize unplugged play***: Ensure your child has plenty of time for unstructured, imaginative play with traditional, open-ended toys like blocks, art

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supplies, and dolls. This kind of play is crucial for developing creativity and problem-solving skills.

- ***Protect social play***: Encourage and facilitate playdates with other children. No AI, no matter how advanced, can replace the developmental benefits of learning to share, negotiate, and empathize with a human peer.
- ***Embrace boredom***: Do not feel the need to fill every moment with stimulation. Boredom is often the engine of creativity. In the quiet moments, when a child has "nothing to do," they are most likely to invent a new game, daydream a fantastic story, or see their old toys in a new light. Highly engaging AI toys are often designed to eliminate boredom, but in doing so, they can rob children of these vital creative opportunities.
- ***Set clear boundaries***: Establish firm rules around screen time and the use of digital toys. Technology should have a clear "off" switch, especially during family meals, before bedtime, and during outdoor play. This helps children learn to self-regulate their technology use.
- ***Ask the hard questions about privacy***: You have a right to know what data a toy collects and how that data is used.
- ***Read the privacy policy***: Before purchasing, look for the toy's privacy policy online. Look for clear, simple language. If you cannot find it or do not understand it, that is a red flag.
- ***Ask who the company shares data with***: Check whether the company shares or sells data to third parties for advertising or other purposes. The Children's Online Privacy Protection Act (COPPA) provides a baseline of protection, but many state laws are now adding further restrictions (Thomson et al., 2025; Waite, 2025).
- ***Demand control***: A good product will give you, the parent, control. You should be able to access and delete any data the company has collected on your child.
- ***Manage the device itself***: Take control of the hardware. A simple piece of tape over a camera lens when not in use is a low-tech but effective precaution. Likewise, learn how to turn off the microphone in your device's settings and only enable it during active play.

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Conclusion/Recommendations

AI is a powerful new force in the world of play. It can offer children personalized, engaging, and educational experiences that were unimaginable a generation ago. However, without careful guidance and critical oversight, these same technologies risk promoting a homogenized global culture, replacing vital human relationships, and compromising a child's fundamental right to privacy. The path forward is not to ban these new tools, but to engage with them wisely. We must shift the conversation from what a toy can do to what it *ought* to do in the service of a child's holistic development.

To ensure that AI serves play, and not the other way around, this white paper offers the following recommendations:

1. ***For parents and caregivers***: Embrace your role as a media mentor and culture curator. Actively choose toys that reflect your family's values, play alongside your child to guide his or her experience, and champion a balanced diet of play that prioritizes social, outdoor, and imaginative activities.
2. ***For educators***: Integrate technology with clear pedagogical goals. Use AI as a tool to support learning, not as a replacement for teacher-led instruction. Model critical thinking by discussing with students how these tools work and the biases they might contain.
3. ***For the toy industry***: Adopt an "ethics by design" approach. Prioritize children's developmental needs and cultural affirmation over engagement metrics. Provide radical transparency in privacy policies and give parents meaningful control over their children's data.
4. ***For play advocates and policymakers***: Champion stronger, clearer regulations that protect children's data and hold companies accountable for algorithmic bias. Support the development of independent rating systems that can help parents evaluate the ethical and cultural quality of smart toys.

The "toy box" has changed forever. It is our collective responsibility to ensure that even as toys become smarter, our approach to play remains wise, humane, and dedicated to the flourishing of every child.

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Playwork

Cultivating a *Playwork* Movement, Part 1: Our National *Play Deficit*

Cultivating a *Playwork* Movement, Part 2: The Task Before Us



ipa CHRISTCHURCH 2026

USA ipa American Association for the Child's Right to Play

Cultivating a *Playwork* Movement, Part 1: Our National *Play Deficit*

Jonathan McCloud, PhD; Susan Chlebowski, UK-trained Playworker and Forest School Leader; & Jill Wood, MLIS

Introduction

The last few decades have seen a substantial change in how children in the United States experience childhood. A combination of factors has restricted and reduced childhood autonomy and agency. These include, but are not limited to, changes in parenting and caregiving practices (Doepke & Zilibotti, 2019), decreases in the availability, accessibility, and usability of public and private spaces, and various legal and social policies (Gray et al., 2023; Lareau, 2011). As children have experienced this reduction of independence, their ability to play freely without adult interference has suffered dramatically. Though ostensibly well-meaning, adult expectations for children and ways of being with children have inadvertently limited children's ability to experience the truest sensation of being and presence: self-directed free play. Consequently, children in the United States are experiencing and being shaped by a socially and emotionally debilitating deficit of free play (Gray et al., 2023).

This paper, the first of two, examines the social, cultural, and institutional conditions that have contributed to our national play deficit. The authors consider how restrictions on children's freedom, time, and space, along with assumptions about play within adult society and unequal access to play shape children's opportunities for self-directed play. The authors also examine emerging efforts to respond to these conditions and consider how those efforts might be identified and connected as the beginning of a broader, more holistic response.

Problem Statement

The Contemporary *Play Deficit*

A growing body of multidisciplinary research highlights a visible, decades-long shift in U.S. childhood, characterized by a significant decline in opportunities for free, self-directed play. Where previous generations enjoyed independent neighborhood

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roaming, children's movements today are heavily restricted and closely managed by adults.

Unsupervised free time has steadily been replaced by rigorously scheduled, adult-supervised activities (Gray et al., 2023; Lareau, 2011). Consequently, children are often hyper-monitored, both figuratively and literally (Doepke & Zilibotti, 2019; Gray et al., 2023; Lareau, 2011). Spaces and activities that allow for play are most often designed by adults with safety and risk prevention at the heart of the design (Gill, 2007; Louv, 2008), meaning that play is allowed primarily within adult-determined parameters (Gill, 2007; Lester & Russell, 2014). The overall decline in free play and the dulling of the childhood experience have happened across a diverse sociocultural spectrum, leading to what is referred to as a *"play deficit"* (Gray, 2013a, 2013b).

In this paper, the term *play deficit* refers to long-term structural conditions that negatively affect children's freedom, time, and space. These include overprotection, busy daily schedules, standardized, high-stakes academic pressures, and the loss of public and shared spaces (Gray et al., 2023; Lester & Russell, 2014). As *play deficits* remain pervasive, the effect is *play deprivation*: a condition experienced as a result of a lack of play, characterized by negative social and psychological development and well-being (Gray, 2011; Gray et al., 2023; Hughes, 2012). Strong cultural tropes suggest that today's youth do not want to play as much as earlier generations did because of phones and social media (Haidt, 2024; Skenazy et al., 2025). However, scholarship demonstrates that children retain a natural, vibrant, and strong motivation to play. Moreover, they retain the drive toward unrestricted outdoor social play, despite technology (Bateson & Martin, 2013; Gray, 2013b; Haidt, 2024; Skenazy et al., 2025). Thus, this paper focuses on deficits in and restrictions on free play.

Background

Freedom, Time, and Space

The systems of oversight and control that now shape children's experiences were largely created with good intentions. Adult society has recognized increased vehicular traffic and less pedestrian-friendly neighborhoods. There is also greater awareness of and a more proactive stance toward crimes against children. Furthermore, the invasive

and predatory nature of today's media landscape has amplified and sensationalized parents' and caregivers' worst-case scenarios. These factors have created a cautious adult society that has withdrawn children's permission to play unsupervised outdoors. Children and adolescents who play freely in the public view now draw suspicion and judgment from contemporary adult society. Unfortunately, a disproportionate measure of condemnation is aimed toward parents of color and those living in poverty (Calarco, 2018).

The United States' hyper-litigious liability culture compels adults to anticipate and resolve as many conceivable disputes as possible before they arise. Consequently, any possible hazard, however improbable, is something to eliminate rather than manage (Marshall & Citylab, 2016). The modern "safetified" childhood has reduced, culture-wide, children's ability to govern their own movement (Gill, 2007; Skenazy et al., 2025).

Adult Assumptions About Play

The turn of the new millennium brought a variety of educational policies designed to reward and punish schools, communities, and children in pursuit of academic achievement and economic competitiveness (Au, 2022). Free time, once part of school life, is now seen as unproductive. School days that once valued recess, freedom to explore the school library, or creative exploration have been reduced or eliminated to maximize instructional time (Council on School Health et al., 2013; McMurrer, 2008; West, 2007). Out of school, a similar trend exists, as extracurricular activities and organized athletic programs have proliferated, in part because of the assumed skills and competencies they confer. Ultimately, children's daily schedules, both within and outside of school, have become increasingly filled with outcome-oriented programming, framed as preparing children for future success and skill-building (Elkind, 2007; Gray et al., 2023).

Compounding these factors, children experience considerable inequities in public space, including accessibility, usability, and quality. Where public green space or parks exist, their designs frequently prioritize the efficient movement of motorized traffic. These spaces are increasingly governed by surveillance to maintain order and mitigate liability (Lipman, 2026). While well-intentioned, these systems restrict childhood

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behaviors and gatherings, and they even vilify adolescent behavior (Hochman Bloom, 2026; Lipman, 2026). Ironically, as public green spaces grow in importance to society at large, their design is narrowing the kinds of open-ended, natural childhood behaviors permitted within them (Gill, 2007, 2021).

Beyond policies and schedules, adult beliefs about play quietly shape how children experience the cognitive and emotional inner world of play, often co-opting it to fit an adult agenda. The child/adult relationship has shifted so that adults feel childhood requires intentional adult design and intercession (Lipman, 2026). Play has increasingly become a tool used by adult society for skill-building, learning, or socialization, as evidenced by modern school language, replete with phrases such as *"playful learning"* and *"play-based pedagogy"* (Mardell et al., 2023). However, depending on its design, gamifying a math problem or literacy task remains schoolwork, not play. Similarly, the United States toy market has become almost singularly driven by the multibillion-dollar educational toy segment, imbued with adult and market agendas (Byrne, 2023; Global Toy News, 2025; Hassinger-Das & Fletcher, 2023). Organized youth sports are leveraged to build character and leadership potential, again adult constructs and desired outcomes (Coakley, 2011). Self-directed play is often viewed as a reward, and the denial of play is used to punish or control behavior. From this vantage point, play can be interpreted as lavish or wasteful rather than as an innate developmental need, a fundamental human right, or a biopsychosocial drive (United Nations, 1989, art. 31).

Collectively, evolving adult beliefs have shifted children's play experiences from self-directed, informal, unsupervised play spaces to adult-designed childhood activities that must be managed, monitored, and optimized for future gains. This paper advocates free play: play that is motivated and guided by the players themselves and largely free of adult involvement (Bateson & Martin, 2013; Mardell et al., 2023). However, even the shift in the character of play does not unfold evenly across communities.

Unequal Access

Broadly speaking, the aforementioned structural and cultural shifts have shaped modern childhood; however, their effects have been felt unevenly across communities.

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Race, wealth, disability, and local policies strongly influence children's ability to access safe, usable spaces for free play (Huang et al., 2023; Jarrett et al., 2023). In some communities, public green space is abundant and informally supervised by community adults. However, in other communities, green space is scarce or subject to restrictive rules and heightened surveillance. Children from historically marginalized communities are more likely to face a narrow field of permission regarding play, and fewer behaviors are interpreted as harmless play (Pinckney et al., 2018). Children with disabilities may face social barriers that limit play, as well as architectural barriers that limit both access and meaningful participation (Smythe et al., 2024). The *play deficit* is therefore not a uniform condition but one that is shaped by a range of social and economic inequities. Such inequities determine how, and whose, play is protected, tolerated, and constrained.

Emerging Responses

Despite these conditions, children's free play is not absent in the United States. A variety of groups, from educators to community organizations, create and hold spaces where free play can flourish. Over the last two decades, nature and forest school programs have expanded, offering children time outdoors with opportunities for exploration and play. A group of early childhood practitioners champions free play in childcare settings, and several community-based pop-up play programs have gained recognition (Leichter-Saxby, 2022; Leichter-Saxby & Law, 2015; Sobel & Bailie, 2016). These efforts illustrate a growing recognition that children need time and space to direct their own play. However, these initiatives have developed independently and are guided by different philosophies, vocabulary, and community needs. The commitment to children's free play is real, yet it remains dispersed rather than unified (Law, 2021).

These emerging responses stand as an important illustration and signpost: the forces contributing to the play deficit are neither fixed nor beyond remedy. The work already underway demonstrates the possibility of change. What is also revealed, however, is an existing landscape of dispersed and disconnected individuals and organizations working to protect and provide for children’s free play. Those doing this work may also be unaware of others pursuing similar aims. Therefore, a twofold

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problem surfaces. These efforts exist in relative isolation, and the free play landscape is not yet visible to itself.

Strategies

A holistic and unifying response should be developed to bring the free play landscape into focus. The authors propose a *Play Deficit Response Task Force* that can begin to recognize and document work being done by individuals and organizations to protect and provide for children's free play. The task force's immediate purpose is to bring these efforts into view across communities and settings and begin the broader work of cultivating a response that addresses the national scope of the play deficit.

The work of the task force can begin with two complementary approaches: an invitation and active outreach. One approach would use a public call through play advocacy groups, professional associations, and various other networks to invite individuals and organizations to recognize their work as support for free play in the United States. The other approach would ask task force members to actively seek out related work unfolding in schools, parks and civic organizations, early childhood settings, and other locations that shape children's daily lives.

Both approaches, however, require a functional description of what comprises work intended to protect and provide for free play. Individuals and organizations engaged in this work are likely to be unique and hyper-local. Therefore, specialized language drawn from play scholarship or academia would not adequately capture the breadth of this work. The task force could instead use a descriptive profile drawn directly from the conditions previously outlined in this paper. Those recognized through this profile would demonstrate work that addresses all three dimensions:

1) expands children's freedom, time, and space for unrestricted, self-directed play;
2) resists the imposition of adult-desired educational and developmental outcomes on children's play; and
3) addresses the sociocultural inequities that shape children's access to play.

Such a profile could guide both the public invitation and the task force's active outreach.

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The purpose of the task force's work extends beyond mere identification and documentation. It is to bring the existing free play landscape into view and establish relationships among those whose current work exists in relative isolation. These relationships provide a starting framework for a holistic and unifying response to the national scope of the play deficit.

Conclusion

Our national play deficit is not the result of a single policy, institution, or sociocultural moment. Our deficit has grown through the subtle accumulation of forces that narrow children's freedom, time, and space for unrestricted, self-directed free play. These forces are shaped by implicit assumptions adults hold about the nature of childhood and the purpose and value of play itself. Pervasive social inequities further shape how communities experience the play deficit. Our play deficit is therefore best understood as a broad feature of contemporary childhood, one that is produced and sustained through the systems and relationships that organize children's daily lives. The emerging responses named in this paper illustrate that these systems and relationships may also become sites of change. The forces and conditions sustaining the play deficit are, once again, neither fixed nor beyond remedy.

Recommendation

As an initial response to the work described in this paper, the authors recommend assembling a *Play Deficit Response Task Force*. The authors can initiate the first conversations toward its development, while acknowledging that the task force is intended to grow and include representatives from across the free play landscape. The task force's work could produce a record of individuals, organizations, and communities that reflect the descriptive profile above. An institution or organization with existing technology infrastructure could house the record, which could continue to grow as the work commences. The record would function as more than a simple directory. It would support relationship-building and collaboration among those engaged in protecting and providing free play, while also supporting continued outreach.

The task force's work would provide an initial pool of individuals, organizations, and communities for future national collaboration. Part 2 of this paper series

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recommends a national summit and working group that could draw participants from this pool. The work proposed here becomes a starting point for the professional and practice-based response developed in the second paper, Cultivating a Playwork Movement, Part 2: The Task Before Us.

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Cultivating a Playwork Movement, Part 2: The Task Before Us

Jonathan McCloud, PhD; Susan Chlebowski, UK-trained Playworker and Forest School Leader; & Jill Wood, MLIS

Introduction

This paper, the second of two, builds on the examination of our national play deficit as presented in *Cultivating a Playwork Movement, Part 1: Our National Play Deficit*. In the first paper, the authors considered how the subtle accumulation of sociocultural forces has narrowed children's freedom, time, and space for unrestricted, self-directed free play, and how the play deficit is experienced unevenly across communities. The paper concludes by explaining that our national play deficit is best understood as a collective, structural problem, and calls for a more robust and connected response among those already working to protect and provide for children's autonomy, agency, and free play.

Playwork, a professional practice and ethical framework for being and working with children (Playwork Principles Scrutiny Group [PPSG], 2005), provides a needed and curative response to our national play deficit. *Playwork* provides adults with a moral and ethical framework in building their relationships with children, as well as intellectual and practical tools to create opportunities and hold spaces for children's free play (Brown, 2015; Brown et al., 2019; Hughes, 2012). This second paper, *Cultivating a Playwork Movement, Part 2: The Task Before Us*, examines the history and practice of *Playwork*, considers strategies for developing a sustainable *Playwork* presence in the United States, and explains how *Playwork* can help adult society begin to repay its debt to children.

Problem Statement

Regrettably, in the United States, the history, philosophy, and professional standards of *Playwork* are neither commonly known nor practiced among those who work with children (Law, 2021; Wilson, 2009). A handful of practitioners and organizations identify as Playworkers and *Playwork*-informed, and a few provide training and professional learning opportunities. A variety of other *Playwork*-adjacent

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settings and organizations create environments and adopt *Playwork* practices without acknowledging or even recognizing them as *Playwork*. The result is not a total absence of *Playwork* in the United States, but a fragmented free play landscape that lacks a shared language, professional identity, or support system.

The fragmented landscape is reinforced and perpetuated by the near-complete absence of *Playwork* education and effectively zero pathways for professional preparation and mentorship. Those interested in *Playwork* or currently working with children may encounter *Playwork* through community or professional experiences, yet then see no coherent or visible avenue toward sustained professional practice. Without a connected educational and professional infrastructure, *Playwork* remains difficult to recognize, access, and develop across settings in which adults work with children. A coordinated approach capable of supporting *Playwork* as a practice, profession, and field of study is needed.

Background

Playwork as a Response

What changes must occur within adult society to allow children to experience more opportunities for free, self-directed play? Playwork emerges as a comprehensive response to this question. *Playwork* is an ethical framework that:

1) rearranges the role of the adult relative to the child,
2) provides a set of techniques and approaches capable of protecting and fostering environments for children's free play, and
3) offers a scholarly unifying language around children's play (Hughes, 2012; Law, 2021; PPSG, 2005).

The Origins of *Playwork*

The origins of *Playwork* lie in the aftermath of the Second World War and the efforts to create spaces for children despite arduous social conditions in an increasingly invasive adult society (Cranwell, 2003; Hughes, 2012). *Playwork* emerged and developed most notably in the United Kingdom within specially curated playgrounds known as Adventure Playgrounds and other community-based play initiatives.

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Individuals who worked with children in these contexts sought to understand and articulate what children need from adults during free play (Cranwell, 2003; Hughes, 2012). Broad and emergent practices of observation, reflection, and training led to the eventual creation of shared professional ethics (Brown & Taylor, 2008; PPSG, 2005). While *Playwork* has both its roots and the ground of its development in the United Kingdom, Playwork's crowning tenets are transferable to any context where children's free play is limited (Cartmel & Worch, 2022; Wood et al., 2024).

Of primary concern to *Playwork* is how adults can protect and provide for children's play without compromising its integrity (Hughes, 2012; PPSG, 2005). *Playwork* positions play as valuable in and of itself. Play does not need justification through external perspectives and frameworks, such as education, development, or therapy. *Playworkers* maintain that the act and expression of play spring from a deeply human drive. The drive to play persists despite the restrictions and limitations on play. The integrity of play resides in its capacity to emanate from within the individual (Hughes, 2012; PPSG, 2005). Therefore, *Playworkers* create, manage, and advocate for environments that allow for children's interests to emerge in play.

Professional *Playwork* practice is articulated in various formats, including academic scholarship, specialized credentialing programs, and, most notably, a set of internationally recognized *Playwork Principles* (PPSG, 2005). *Playwork* practice aims to remove limitations, restrictions, and barriers to "freely chosen, personally directed, and intrinsically motivated" play (PPSG, 2005, Principle 2).

These barriers may be physical, social, or cultural and include inaccessible and uninspiring spaces, excessive adult supervision and behavioral expectations, and the adult imperative to instrumentalize play for educational or developmental purposes. Such barriers suppress the drive to play and deny children meaningful play experiences (Hughes, 2012; Wood et al., 2024). In contrast, *Playworkers* create rich and generative play environments that support free play.

Playwork primarily reframes the adult's role (Brown, 2008; PPSG, 2005; Wood & Kilvington, 2018). *Playwork* practice compels the adult to consider *how* and *when* their actions influence children's play. The *Playworker* seeks to understand the

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meaning of play from the child's perspective. *Playwork* requires an individual capable of disciplined, sustained reflection, patience, and restraint in interfering with children's play (Brown et al., 2019). *Playwork* is therefore not a practice of leading or guiding children's physical and intellectual actions, but rather a *way* of *sharing space* with children while being ethically attuned to their play.

Strategies

How *Playwork* Confronts Barriers to Play

Ultimately, *Playwork* offers a virtuous and practical response to many of the conditions contributing to the contemporary *play deficit*. *Playwork* provides assessments and benchmarks for how communities, organizations, and decision-makers address children's play. The following list considers how *Playwork* responds to the barriers to children's free play identified in Part 1 of this paper series:

Freedom, Time, and Space

- Children's Autonomy & Agency. *Playworkers* serve as *non-directive facilitators* and do not impose adult ideas or agendas, empowering children to make decisions about their own play and about their relationship with the play environment.
- Safety Culture and Overprotection. In *Playwork* environments, adults remove or mitigate real danger while trusting children to take self-chosen risks: perceivable, manageable challenges the child can choose to engage in or not engage in, such as climbing a tree. Risk-benefit assessments guide this process and help adults remove barriers to adventurous play.

Adult Assumptions About Play

- Adult-Centric Play Culture. Grounded in scholarship that treats play as an intrinsic biological imperative essential to holistic human and societal health, the *Playworker's* role is to establish and protect open-ended, child-centric environments where play is entirely the children's domain (Hughes, 2012).

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- Public Space and Environmental Design. *Playwork* provides guidelines for establishing and developing permissive play environments that respond to and change with the child's desires, rather than adult-designed spaces.
- Schooling and Achievement Culture. *Playwork* asserts that play is a fundamental aspect of human life and well-being and is valuable in its own right, rather than a tool for developing future skills.

Unequal Access

- Inequities in Play. *Playworkers* recognize that sociocultural and economic contexts shape play, and that fields of permission vary by race, gender, ability, and so forth.
- Accessibility & Usability. *Playwork* rehumanizes play spaces. Meaningful access and usability of play spaces often emerge through relationships rather than being designed into playscapes and fixtures/equipment.

Fragmented Responses

- Fragmented Efforts. *Playwork* has the potential to unify play practitioners and advocates around evidence-based methods and terminology that foreground play as a biological necessity in childhood (Hughes, 2012).

The barriers and obstacles to children's free play described in Part 1 are deeply embedded in adult society, institutional and organizational landscapes, public policy, and community life. Individuals and organizations are already engaged in work that aligns with or is adjacent to *Playwork's* ethical approach to children's play (e.g., Acera School, n.d.; Adventure Play at The Parish School, n.d.; “The Yard”, n.d.; Timbernook Academy, n.d.). However, these initiatives exist in relative isolation, without a shared language, professional identity, or support system.

Law's (2021) doctoral research on *Playwork* and play advocacy empirically establishes these conditions and barriers to developing a *Playwork* movement in the United States. *Playwork* practitioners, scholars, and advocates must extend their attention beyond individual practice to the conditions necessary for *Playwork* to flourish. *Playwork* must develop as a practice and field of study. The following section is

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forward-looking rather than descriptive. Three interconnected strategies are presented here as pathways to:

1) educate practitioners on *Playwork* ethics and philosophy,
2) create a professional and credentialing consortium, and
3) kindle a national conversation about what a distinctly American *Playwork* movement might become.

Children Are Everywhere: Where do *Playworkers* and *Playwork*-informed adults practice?

Ordinary institutions and everyday people shape children's lives. No single Goliath has created the deficit, nor is there a single setting where it can be addressed. Just as children do not exist within a single space or moment, children's play does not reside in a single location. Equally so, adult society permeates every layer of a child's life. Adults are present, irreducible, and impossible to design out. Therefore, *Playwork* must be understood as portable and transferable to multiple environments. Children are everywhere.

At its core, *Playwork* is an ethical framework (Brown, 2015; Brown et al., 2019). *Playwork* is not location- or context-dependent (Cartmel & Worch, 2022; Wood et al., 2024). The *Playwork* mindset moves with the *Playworker* into all spaces. To reduce *Playwork* to a set of actions and behaviors would be insufficient and would fail to capture its full scope. Playworkers' decisions and responses emanate from this ethical foundation. *Playwork* fosters conceptual change in the adult. The *Playworker* does not simply modify a space so that children's play will emerge naturally. *Playwork* changes the adult's relational orientation toward the child. Therefore, this first strategy is not to transform everyday settings into playgrounds, but to transform the quality of the adult presence within those settings. In so doing, settings that children trust and use become playable.

Adults who work with children are also shaped by their everyday encounters with organizations and other people. Cultural frameworks and discourses position adults as providers, managers, and controllers. An invisible and pervasive child/adult binary shapes adults' actions toward children. For example, children are framed as dependent

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and in need of guidance, whereas adults are framed as capable and in control. As a result, adult actions and interventions in the child's experience become normalized. *Playwork* does not accept this binary as given; instead, it asks the adult to regard the child as a full person with unique spatial, relational, and temporal experiences. A U.S. orientation to *Playwork* must frame play as a product of the relational environment rather than a phenomenon that emerges solely from the child.

Playwork is a *human practice* and a way of *being* with children. It is not performed for an audience, and *Playwork*-informed spaces are not sites of exhibition. One may ask, then, how *Playwork* becomes knowable and identifiable in everyday spaces? *Playwork* cannot be identified simply by the presence of loose parts, risky elements, or partially completed building projects. *Playworkers* may not be dressed in uniforms or otherwise recognized as *Playworkers*. Instead, what might a visitor see in a *Playwork*-informed setting?

A visitor might sense, and perhaps observe, that children move more freely. A wider field of permission exists, with less suppression of children's behavior and movement. Free from reflexive adult interference, children are empowered to make choices, and their self-directed activities reveal competence, negotiation, and a wider spectrum of emotions, most notably joy. A *Playwork*-informed environment may appear less ordered than traditional settings, but what is visible is children exercising authentic autonomy and agency rather than compliance.

Playwork-informed settings intentionally limit adult behaviors that interrupt play. In many established adventure playgrounds, *Playworkers* are the only adults permitted in the play space. In mixed-use play settings where other adults are present, signage may explicitly ask adults to consult a *Playworker* if tempted to intervene in children's play. These boundaries signal that the space operates under a different set of values regarding children and adults. To those unfamiliar with *Playwork*, this palpable narrowing of the power gap between children and adults may cause discomfort. This tension, however, promotes constructive dialogue that addresses the adult imperative to intervene, while the boundaries themselves stand as a structural expression of respect for children's autonomy and agency.

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A *Playwork*-informed setting and a credentialing pathway are mutually dependent. *Playwork*-informed settings become environments for practical learning, mentorship, and supervised Playwork practice. In turn, a credentialing continuum can support and develop *Playwork*-informed professionals where they are, just as *Playwork* itself meets children where they are.

A Credentialing Continuum

The *play deficit* is overlaid with a moral urgency which begs a swift and wide-ranging response. Roughly speaking, every five years, a new cohort or wave of children enters adolescence and their teenage years, having experienced the cumulative impact of the *play deficit*. Children cannot wait for a fully realized *Playwork* movement to mature. A credentialing structure should be developed as a continuum with multiple entry points into *Playwork* practice, offering a strategic response to that urgency.

Practitioners in the Field

The fastest route to changing children's daily play experiences is through adults currently working with children in anchor institutions. *Playwork* credentialing at this level can be delivered within existing professional development structures. A variety of professions require continuing professional development, such as workshops, in-service training, and conference attendance. *Playwork* content can enter into the channels that already serve parks and recreation staff, librarians, museum educators, and so forth. This form of instructional delivery meets practitioners where they are and can be incorporated into existing institutional structures with relatively little additional infrastructure.

Practitioners in Formation

Playwork becomes sustainable when *Playwork* content is incorporated into undergraduate and graduate curricula. Degree programs in Outdoor Parks and Recreation Management, Library Sciences, Environmental Studies, Education, and other related fields are natural homes for *Playwork* content. This is a longer-term vision for *Playwork* education and credentialing, yet it is also essential. Future generations of

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practitioners can enter children's lives already oriented toward *Playwork's* ethical framework.

From Urgency to Sustainability

The full continuum spans immediate reach and long-term transformation. Every location along the continuum addresses the same goal: increasing the number of adults in children's daily lives who understand how to protect freely chosen play and regard the child as a whole person. No single location along the continuum is sufficient on its own, as the continuum is an integrated whole. A continuum approach grows *Playwork* without delay and sustains it without relying on isolated champions or singular institutions.

The Consortium Model: Who Prepares *Playworkers*?

Providing a credentialing continuum requires more than isolated programs or individual champions. To the authors' knowledge, few opportunities for *Playwork* education currently exist in the United States. Commonwealth University of Pennsylvania at Bloomsburg (2026) offers a minor for degree-seeking students, and smaller alternative, non-collegiate organizations, such as Pop-Up Adventure Play, offer *Playwork* training and skill-sharing (*Pop-Up Adventure Play*, 2025). Current US-based practitioners may learn about *Playwork* through adjacent fields such as education, outdoor recreation, and early childhood care. However, for interested individuals, no coherent or visible pathway remains from initial introduction to *Playwork* through sustained professional practice.

A sustainable *Playwork* movement will require a collective, scalable approach to *Playwork* education, mentorship, and supervised practice. Higher education in the United States is uniquely positioned to provide these through established colleges and universities, community colleges, and community partnerships and extension programs. Higher education goes beyond instructional delivery and includes financial aid systems, employer recognition, assessment and quality assurance systems, and a recognized credentialing authority. Play-focused organizations such as the International Play Association (IPA World, 1961), The American Association for the Child's Right to Play, IPA USA (IPA USA, 1973), the National Institute for Play (Brown, 1994; National

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Institute for Play, 1994), and the Alliance for Childhood (Alliance for Childhood, 2005) provide expertise, networks, and advocacy capacity required of any social movement. Isolated programs and individual champions cannot adequately address the current *play deficit*, nor can any single college, institution, or organization (Law, 2021, pp. 196, 225, 243). A consortium model signals that *Playwork* is larger than a single program or organization.

Given the modern realities facing U.S. higher education, individual institutions are unlikely to shoulder the investments needed to develop *Playwork*. A consortium model enables sustainable cost-sharing and administration across institutions and allows institutions to contribute within their established areas of impact. For example, community colleges could provide continuing education and workforce development, land-grant universities could contribute through extension agencies aimed at community enrichment, and other institutions could provide academic coursework and research. Community colleges serve a unique function in the higher education ecosystem. They specialize in adult learners, community partnerships, and affordability, and appeal to individuals and established professionals not pursuing a traditional four-year degree (American Association of Community Colleges [AACC], 2024). A *Playwork* consortium established across a range of institution types would support multiple entry points into *Playwork*, from introductory workshops to professional and academic coursework and credentialing.

Moreover, a consortium model allows *Playwork* to mirror the geographic and cultural diversity of the United States. The *play deficit* is not experienced equally across the country. The play needs of immigrant communities, rural Appalachia, urban and densely populated areas, and tribal nations differ significantly. A consortium would establish a nationally connected, unified presence for *Playwork* while remaining responsive to the unique social, cultural, and historical conditions of regions and communities (Jarrett et al., 2023).

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Daylighting *Playwork*: How Does the Public Come to Recognize and Understand *Playwork*?

Playwork is largely invisible in the United States. As one learns about and develops a deeper understanding of *Playwork*, its limited and shadowed presence becomes increasingly apparent. The curious facial expressions in others, the failed searches for information from trusted sources, and the absence of play events on community calendars collectively highlight the need to cut back the canopy of unknowing and bring *Playwork into the light*.

Creating a public vocabulary around children's free play and the adult's role is essential to building a *Playwork* movement in the United States. Growing concern about the unwellness of America's youth (Jiao & Segrin, 2023; Let Grow, 2025, 2026; University of Michigan, 2025). Parents' and communities' concerns consistently point to the factors that contribute to the national *play defici*t. Regrettably, the techniques, approaches, and language of *Playwork* that address these factors are often misunderstood (Law, 2021; Wilson, 2009). Policymakers, educational institutions, and others are unlikely to support *Playwork* when they are unfamiliar with the practice or its underlying ethics and motivations (Law, 2021; Voce, 2015). Public awareness campaigns, like those addressing childhood and adolescent well-being, often effect little change when they lack a shared language. However, public awareness and a shared language are prerequisites for the growth and uptake of a new approach to being with children (Law, 2021; Voce & Sturrock, 2018). Therefore, daylighting *Playwork* requires public-facing resources, intentional partnership development, and visible demonstrations of *Playwork*.

Playwork becomes visible when trusted organizations, institutions, and communities both practice and name it. Community anchors must articulate the values and practices that distinguish *Playwork* from other approaches serving children. Schools, public libraries, pediatric healthcare, and parks and recreation departments all regularly encounter families and children (Hagan et al., 2017; National Recreation and Park Association, 2025; Public Library Association, 2023). These anchor institutions already possess channels for communication and outreach (Public Library Association,

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2023, pp. 45). They can illustrate *Playwork's* relevance across multiple settings and provide robust introductions to *Playwork* concepts.

Communities can also demonstrate their commitment to children's free play. A designation similar to Tree City USA, Bicycle Friendly Communities, or Main Street USA (League of American Bicyclists, n.d.; National Main Street Center, n.d.; Tree City USA, n.d.) could encourage local investment in children's free play and serve as a symbol that *Playwork's* values are present within the life of the community. Such national, civic designations have shown that public recognition and shared standards foster local action (Arbor Day Foundation, 2026).

The *play deficit* is not a mystery. Multiple voices have identified and discussed it across multiple arenas of public thought. Part 1 of this paper series considered those causes and conditions and described how adult society and organizations have contributed to the deficit. The strategies offered here are not intended to resolve the deficit or erase its impact, but rather to name an approach that renders the deficit manageable rather than overwhelming. *Playwork's* most significant contribution is not a policy or program, but a lens. *Playwork* is an intellectual and ethical tool that indelibly reorients how one sees children, the adult's role, and play itself.

Conclusion

The national *play deficit* is multi-layered and complex. *Playwork* is a comprehensive response to that complexity. *Playwork* addresses the layers of adult society, institutions, and communities that contribute to the deficit. This paper has provided a practical, integrated framework through the credentialing continuum, the consortium model, and daylighting *Playwork*. The framework is not reliant on a single institution or organization, nor does it depend on an individual champion. The framework is designed to grow with communities.

This paper holds another ambition: to draw the reader towards *Playwork*. Perhaps the reader's next encounter with *Playwork*, be it a conversation, conference, or community event, will feel more recognizable and more urgent because of this paper. *Playwork* is not a distant or exclusively international practice, nor is it limited to niche

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playgrounds that promote risky adventures. *Playwork* is portable. It is transferable and ready to meet children wherever they are.

Children are living the *play deficit* today, and adult society's debt to children and their play is real. The strategies outlined in this paper are a starting point for developing a *Playwork* movement that works simultaneously through top-down and bottom-up approaches. A *Playwork* movement starts with people who are already present and committed in children's lives, in tandem with those who prepare and support future generations of practitioners. This paper and its authors are offering an opening gesture, a challenge, and an invitation to a conversation that does not yet have a home in the United States.

Recommendation

The strategies proposed here operate together as a framework that requires a collection of individuals from multiple locations within the play studies, play-advocacy, and play-adjacent communities. The record developed by the *Play Deficit Response Task Force*, as proposed in Part 1 of this paper series, offers an initial pool from which to draw this collection. The next step is to convene a National *Playwork* Summit and Working Group to address what Law's (2021) research identifies as an unmet and essential condition for a *Playwork* movement to develop in the United States. The summit should include those already working at the intersection of play, children, and professional practices across the United States. Those whose attendance is most essential are *Playworkers* currently practicing in the United States. Play scholars and advocates, academic faculty and administrators, and various organizational leaders must also attend and reflect the geographic, cultural, and community diversity of the United States.

The National *Playwork* Summit is not a ceremonial gathering, but a working assembly with ambition. The summit should produce an organized body aligned by a mission, vision, and a national *Playwork* agenda. Dedicated individuals and groups should leave the summit charged with deliverables aligned with each strategy outlined in this paper, including a set of translated *Playwork Principles* for the U.S. context. This is not a replacement for the existing Principles, but a contextually adapted

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interpretation that honors their origins while reflecting U.S. social, cultural, and historical conditions. Ideally, the summit would generate benchmarks for professional *Playwork* training and education to guide various actors along the credentialing continuum.

Who Should Be Present

The summit should include a broad and diverse representation of the play ecosystem, including:

- *Playworkers* currently working in the United States.
- Scholars from fields such as play studies, childhood studies, education, recreation, public health, and social work.
- Leaders of organizations that provide play opportunities for children and youth.
- Representatives from anchor institutions such as parks and recreation departments, schools, museums, libraries, and community-based organizations.
- Advocates for children's rights, disability inclusion, and equitable access to play.
- Professionals working in adjacent fields whose work intersects with play, including landscape architects, city and rural planners, youth workers, educators, and public health practitioners.
- Community leaders, students, and early-career practitioners who represent the future of the field.
- Teachers/educators, early childhood educators, and care providers currently working with children.

As a closing gesture, the reader who has engaged with this paper is precisely the individual the National *Playwork* Summit needs. The *Playwork* conversation has yet to find a home in the United States. This recommendation is an invitation to help build one.

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Reading for Resilience: Using Children's Literature to Support Early Childhood Mental Health

Marjorie Cole, MEd, President, IPA - Canada

Introduction

The early years of life are a time of rapid emotional, social, and brain development. During this period, children learn how to understand feelings, form relationships, and feel safe in the world. These early emotional experiences lay the foundation for mental health across the lifespan (Masten & Barnes, 2018). When young children feel supported and emotionally secure, they can learn, play, and connect with others more effectively. When they feel overwhelmed, frightened, or alone, their development can be disrupted in ways that last for years (Shulman, 2016).

Recent years have highlighted that young children are experiencing more stress than ever before. Family changes, economic pressure, illness, community stress, and the lingering effects of the COVID-19 pandemic have all increased emotional strain on children and caregivers (Mental Health Commission of Canada, 2023). Many young children are now showing signs of anxiety, grief, emotional dysregulation, and difficulty with relationships (Government of Canada, 2022).

However, many early childhood environments are not equipped to respond to these needs in developmentally appropriate ways. Mental health support is often limited, and young children cannot benefit from traditional therapy that relies on talking and insight (Masten & Barnes, 2018). Young children need something that fits their world of play, imagination, and stories.

Children's literature offers exactly that. Stories give children a way to explore emotions, challenges, and relationships through characters and imagination. When educators use books intentionally, they can help children feel seen, understood, and less alone. In play-based early learning settings, story time is already a daily routine. Shared reading should be recognized as a powerful mental health support for young children (Kumschick et al., 2014; Reach Out and Read, 2023).

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Problem Statement

There is a growing gap between the mental health needs of young children and the supports available to them, leaving many children without the guidance, resources, or safe spaces they need to develop healthy coping skills and emotional resilience. This gap places additional responsibility on early childhood educators, who often must support children's emotional wellbeing within everyday classroom routines, despite limited training and access to professional mental health services.

Many children today are dealing with anxiety, fear, sadness, grief, and being emotionally overwhelmed. Some have lost loved ones. Some have experienced family stress, illness, or instability. Others feel the effects of social isolation and disrupted routines (Mental Health Commission of Canada, 2023). Even when adults try to protect children, they absorb stress from their environments.

Young children often lack the words to explain how they feel. Instead, their distress shows up in behaviour. They may become aggressive, clingy, withdrawn, or overly emotional. These behaviours are often misunderstood as discipline problems rather than signs of emotional struggle (Shulman, 2016).

At the same time, mental health systems are not designed for young children. There are not enough child therapists, and long waitlists mean that many children never receive services. When they do, traditional talk-based approaches are poorly suited to children who are still developing language and self-awareness (Masten & Barnes, 2018).

Early childhood educators are on the front lines of this crisis. They care deeply about the children they serve, but many feel unprepared to address mental health needs. Most training programs focus on physical care, safety, and learning, with limited attention to emotional wellbeing (Mental Health Commission of Canada, 2023).

Early education also faces pressure to focus on academic skills, such as early literacy and numeracy. While these are important, children cannot learn effectively if they are emotionally overwhelmed or feel unsafe (Shulman, 2016).

These challenges create a system in which many young children struggle without enough support. There is a clear need for approaches that are developmentally

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appropriate, emotionally supportive, and easy to use in everyday early childhood settings.

Background

Research in Canada highlights the importance of early emotional development and mental health. The Mental Health Commission of Canada underscores that the first six years of life are critical for forming close relationships, managing emotions, and laying the foundation for later wellbeing (Mental Health Commission of Canada, 2023). At the same time, the Government of Canada has recognized gaps in supports for young children and has invested in research and programs to improve early childhood mental health outcomes (Government of Canada, 2022).

Globally, decades of research show that early emotional experiences shape brain development, stress response, and future mental health. When children feel supported, understood, and emotionally safe, they develop stronger coping skills and healthier relationships (Masten & Barnes, 2018).

Play is one of the primary ways young children process the world. Through play, children make sense of their experiences, act out worries, and practice problem-solving. Play allows children to explore difficult emotions in a way that feels safe and manageable (Shulman, 2016).

Stories are a form of guided play. When children listen to a story, they enter an imaginative world. They identify with characters, feel their emotions, and imagine how to solve problems. This makes stories a powerful tool for emotional learning (Kumschick et al., 2014).

Children's literature offers several mental health benefits:

- It helps children name and recognize emotions (Kumschick et al., 2014).
- It shows that other people have similar feelings and struggles (Masten & Barnes, 2018).
- It models coping skills, kindness, and resilience (Reach Out and Read, 2023).

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- It provides emotional distance that makes difficult topics feel safer (Bibliotherapy Systematic Review, 2025).

When an adult reads a story with warmth and attention, it also strengthens the child's sense of connection and safety. This relationship is one of the most important protective factors for mental health (Shulman, 2016).

Appropriate Approaches and Strategies

Children's books can support mental health in many simple, powerful ways when used thoughtfully. One important strategy is emotion-focused reading. Adults can pause during a story to notice how characters feel, using comments like "She looks sad" or "He seems worried" to help children connect feelings with words (Kumschick et al., 2014).

Story-Based Play**:** After reading, children can act out the story using puppets, dolls, or dramatic play. This lets children express emotions through movement and imagination, which is often easier than using words alone (Shulman, 2016).

Story Examples:

- *The Color Monster* (Llenas, 2012) helps children identify and name feelings.
- *When Sophie Gets Angry—Really, Really Angry* (Bang, 1999) demonstrates healthy coping strategies for anger.
- *The Invisible String* (Karst, 2000) supports children experiencing separation or loss.
- *I Am Peace: A Book of Mindfulness* (Verde, 2017) introduces mindfulness and calming strategies.
- *My Hero Is You* (IASC, 2020) addresses global stress, including the pandemic, and models coping and problem-solving.

Books can also help children facing specific challenges such as loss, fear, or separation. Seeing characters with similar experiences reduces isolation and supports emotional processing (Bibliotherapy Systematic Review, 2025).

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Re-reading is another powerful tool. Children often request the same story repeatedly when it resonates emotionally. Repetition helps build safety and mastery (Reach Out and Read, 2023). Creating calm reading spaces in classrooms or childcare centers supports emotional regulation. A cozy book corner can become a place where children go to feel calm and grounded (Reading Rockets, 2023).

Most importantly, adults should follow the child's lead. If a child wants to talk about a story, listen. If they want to play it out, support that. The goal is not to teach a lesson, but to create space for emotional expression (Shulman, 2016).

Conclusion and Recommendations

Children's mental health begins in the earliest years of life. When young children feel safe, understood, and emotionally supported, they can better learn, form relationships, and handle challenges (Masten & Barnes, 2018). Children's literature offers a simple, powerful way to support this emotional development (Kumschick et al., 2014).

Books help children make sense of their feelings, see that others struggle too, and imagine ways to cope. When reading is combined with play and caring relationships, it becomes a form of emotional care (Reach Out and Read, 2023).

Recommendations:

1. Early childhood programs should recognize shared reading as a mental health support, not just a literacy activity.
2. Educators should receive training on using books to support emotional development and regulation.
3. Childcare centres and other early learning environments should build diverse collections of books that include stories about feelings, loss, change, and resilience.
4. Encourage story-based play as part of daily routines.
5. Policies and funding should support mental-health-informed literacy programs in early childhood settings.

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By placing stories at the heart of emotional support, we can help young children grow into more resilient, confident, and connected individuals.

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Play is a Powerful Therapeutic Tool

Mina Dilip, MA, Play Therapist

Introduction

People tend to dismiss play as mere leisure. Some cultures view play as a waste of time. However, emerging trends in psychology and neuroscience demonstrate its profound role in healing and recovery. This white paper explores the healing power of play as a therapeutic tool, highlighting its impact on trauma recovery, nervous system regulation, emotional healing, resilience-building, and the development of social skills. Drawing on a case-study-based foundation of field evidence and cross-cultural perspectives, this white paper aims to provide practical recommendations for practitioners, institutions, and policymakers. By framing play as an essential component of health care, this paper calls for systemic recognition and investment in play therapy as a critical intervention for children, adolescents, and adults.

Problem Statement

In spite of growing evidence, play therapy remains underutilized and undervalued in mainstream healthcare services. The chief barriers are:

- **Perception issues:** Play is often perceived as “frivolous” rather than therapeutic.
- **Resource constraints:** Limited availability of trained play therapists, especially in low-resource settings, owing to the high cost of training and inadequate accessibility in developing countries.
- **Policy Gaps:** Lack of formal recognition as an effective therapeutic tool in most national health and education systems.
- **Overall scepticism:** Families and institutions tend to favour cognitive, solution-oriented methods over non-directive, play-based approaches.

These gaps hinder people—particularly trauma survivors—from accessing an effective intervention that has the potential to support recovery and well-being.

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Background

When Words Are Not Enough

Some moments in life are too heavy for words. A child who has witnessed violence, an adult carrying decades of unspoken grief, or a parent overwhelmed by the chaos of family life may all find themselves without the language needed to communicate their pain. Play steps in at this moment—not as an escape, but as a bridge. Neuroscience explains this through polyvagal theory, which suggests that when we enter a **dorsal vagal** state of complete shutdown, the vagus nerve becomes compressed, making it hard to process language. According to the polyvagal theory propounded by Stephen Porges (2024), the human nervous system switches between three distinct states: the **ventral vagal** state of safety and social engagement; the sympathetic activation state, which triggers the fight-or-flight response; and the **dorsal vagal** state of complete shutdown and withdrawal.

Approaches / Strategies

This white paper synthesizes:

- **Available Literature:** Peer-reviewed studies in psychology, neuroscience, and education.
- **Case Vignettes:** Real-world examples from therapeutic practice demonstrating the healing power of play.
- **Why Play Heals**: Science-backed reasons to support the power of play as a therapeutic tool.
- **Cross-Cultural Insights:** Exploration of how play is already being used in different cultures for healing and resilience.
- **Comparative Frameworks:** Examining play therapy alongside traditional talk therapies to illustrate its unique benefits.

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Key Findings based on Available Literature

1. Neurological and Psychological Benefits of Play

- **Play activates brain pathways that reduce stress and promote healing**. Siviy (2016) in "A Brain Motivated to Play: Insights into the Neurobiology of Play", describes the coordination of brain parts such as the frontal cortex (the thinking part of the brain), the striatum (the central hub of the brain that processes motor function and rewards), and the amygdala (the brain's emotion centre) during play, and the neurochemical systems (such as dopamine and opioids) that bestow rewarding or anti-stress properties upon the human body.
- **Symbolic play allows children to process trauma non-verbally, fostering emotional regulation**. In "The Power of Symbolic Play in Emotional Development", Wieder (2017) offers a conceptual review of how symbolic play helps externalize internal states and enables emotional regulation without language.
- **Adults rediscover creativity and self-expression, reducing symptoms of burnout and depression**. A targeted study by Shen et al. (2020) titled "The playful mediator, moderator, or outcome? How playfulness contributes to adult mental health" offers empirical evidence that playfulness in adults improves well-being, reduces stress, and prevents burnout.

2. Social and Developmental Benefits

- **Group play interventions build empathy, cooperation, and resilience**. This was definitively proven by an extensive study conducted in Iran by Chinekesh et al (2014) titled "Effect of play therapy on social-emotional skills in pre-school children."
- **In families, play strengthens bonds and improves communication**. Studies conducted by various researchers, including Chu, McLean, and Edwards (2023) and Røe-Indregård et al. (2022), found that parental involvement and co-play increased shared engagement, reduced maternal stress, enriched parent-child relationships, and enhanced communication among family members.

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- **In hospitals, play reduces anxiety and boosts adjustment to stressful events**. In Karnataka, India, a nurse-led quasi-experimental play intervention (Benazeera & Reshma, 2025) using board games and picture books among children aged 7 to 12 years revealed significant reductions in state anxiety, trait anxiety, and medical fear over several days in the intervention group compared to the control group.

Case Vignettes

Here are some case studies that demonstrate how the nervous system regulates itself back to the ventral vagal state within the safe context of play (Porges, 2024).

Case 1: The Traumatised child

A seven-year-old boy sat silently in therapy sessions, unable to talk about the nights he spent hiding under his bed while his parents fought violently. The moment he picked up a toy soldier, placed it in front of the dollhouse, and whispered, “You’re safe now,” his inner world began to emerge. What he couldn't say aloud, he could show through play. This is the essence of healing through play therapy: when used therapeutically, play allows the unspoken to be expressed, the unseen to be witnessed, and the unbearable to be transformed.

Case 2: The Betrayed Wife

A traumatised woman entered expressive play therapy, weighed down by silence. Her husband had betrayed her by having multiple extramarital affairs. She had gone completely mute, unable to utter a single word. She was invited to make a mask—choosing colours, shapes, and symbols of her choice. The mask she created was dark and sharp, reflecting the grief and anger she had hidden away. Behind the mask, she finally allowed herself to cry and rage. By externalizing her trauma through creative play, she began to accept and integrate her emotions. In time, she was able to face the big decision she needed to make about leaving the marriage. The mask became a turning point in her healing journey.

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Case 3: Group Play Therapy for High School Teachers

In a high school teachers' workshop, a group of exhausted teachers were asked to play simple team-building games. At first, the teachers resisted, embarrassed by the childishness of the games. However, within minutes, laughter filled the room. They discovered each other beyond roles and titles—simply as people.

One teacher shared, "I realized I hadn't laughed like that in years. It reminded me why I chose to work with children in the first place." The session didn't just boost morale; it reignited connection, collaboration, and resilience.

Case 4: Circle of Safety

In a group of teenagers who had lost close family members to cancer, a simple game of tossing and catching a ball in a circle created powerful moments of safety and connection. Boys who once avoided eye contact began to giggle as they waited for their turn. Each catch and throw was a small act of trust.

Through play, the group slowly built a sense of belonging. What began as a game became a rehearsal for the real world—a reminder that joy and safety can exist even after hardship.

Why Play Heals: Insights from Science and Practice

While the above stories are compelling, they are also grounded in science. Here is how:

- **Emotional Safety**: Play lowers defences. It allows people to engage without the pressure of direct confrontation (Axline, 1947; Landreth, 2012).
- **Neurobiology of Play**: Neuroscientist Jaak Panksepp identified play as a primary emotional system in the brain. Play reduces stress hormones and increases endorphins, such as oxytocin and dopamine, in the body (Panksepp,2007; Russell, 2008).
- **Symbolic Processing**: Play lets people externalize difficult experiences symbolically. Children can make a toy figure fight on their behalf, or adults can use art to express grief they cannot give voice to (Weider, 2017).

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- **Resilience Building**: Through playful problem-solving, individuals rehearse coping strategies that strengthen them in real life, especially when play is used in group settings (Eberle, 2014).
- **Play in the Nervous System**: Drawing upon the polyvagal theory mentioned above, play is the easiest and quickest way to convey safety to the nervous system, thereby moving away from sympathetic activation or dorsal shutdown into the secure, tranquil ventral vagal state (Porges, 2024).
- **Cross-cultural Applications of Play:** Many cultures already use play in varied settings as a medium of community building, healing, and recovery. Below are some examples:
    - **Generic Contexts**

      Many African tribes use rhythmic musical and body play through drumming and dancing rituals to bring communities together (Victor & Muller, 2018; Bunt & Stige, 2014).

      In India, folk games and storytelling serve as natural mediums of therapeutic play, especially in rural settings (Ramanujam, 2021; International Traditional Sports and Games Council (ICTSG), 2025).

      Western models, such as the Montessori method of schooling, use structured playrooms with varied toys as learning materials (Montessori, 1912; Lillard, 2017).

    - **Crisis and Trauma Contexts**

      Across cultures, refugee children engaged in play interventions show fewer Post-Traumatic Stress Disorder (PTSD) symptoms and stronger resilience (Ty & Green, 2020; Pfeiffer & Sachser, 2022).

      Hospital play therapy reduces pre-operative anxiety and accelerates recovery (Benazeera & Aranha, 2025; Li et al., 2016).

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Play Vs. Traditional Talk Therapies: A Comparison

Traditional talk therapy relies on verbal articulation of thoughts and emotions. In contrast, play therapy uses symbolic, sensory, and creative expression, offering ways to channelise and release experiences beyond words—especially valuable for children or trauma survivors (Axline, 1947; Landreth, 2012).

Research has shown that trauma sits in the body, and not in some abstract place called 'the mind'. When an individual is required to talk about traumatic experiences using words, the pain, which was hitherto missing from the cerebral cortex of the brain, enters that part of the body, too, potentially re-traumatising the person.

On the other hand, play therapy uses neck-down processing, because it is mostly non-verbal, body-based, non-directive and non-threatening. Play helps access deeply embedded trauma and project it outward through externalization onto toys, puppets, dolls, or drawings. Once externalized, the multi-sensory nature of play helps make sense of these difficult experiences, integrate them effectively, and move toward recovery, thereby minimizing the chances of re-traumatization (van der Kolk, 2014; Levine, 2014).

Challenges Identified

Returning to the original premise of this white paper about the under-utilisation of play therapy as an intervention for mental wellbeing, here are the top challenges identified as the reasons for the same:

- Misconceptions that play is "non-serious" (Lynch & Moore, 2016).
- Difficulty scaling play therapy interventions across institutional contexts (Ebrahim, Steen, & Paradise, 2012).
- Lack of standardized training and certification pathways in many regions (Ray et al., 2005).
- Limited resources for marginalized or crisis-affected populations (Kazdin, 1997).

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Recommendations

This section sets out recommendations for mental health practitioners, institutions such as schools, hospitals, and NGOs, and policymakers.

For Practitioners

- Pursue specialized training in play therapy and expressive arts (Association for Play Therapy, 2023).
- Use culturally sensitive play materials and methods.
- Integrate play into existing therapeutic practices to increase engagement (Gil & Drewes, Eds, 2006; Ray, 2011; United Nations Committee on the Rights of the Child, 2013).

For Institutions (Schools, Hospitals, NGOs)

- Establish dedicated playrooms and provide access to therapeutic materials.
- Train staff in basic play-based interventions.
- Partner with certified play therapists to support children and families (Ray, 2011; Gaynard et al., 1990)

For Policymakers

- Recognize play therapy as a valid and reimbursable clinical intervention.
- Include play therapy training in university counseling and psychology programs.
- Start funding research to evaluate the long-term outcomes of play-based interventions.
- Ensure that child-protection and trauma-care centres offer integrated play-therapy services (World Health Organization, 2019; United Nations Committee on the Rights of the Child, 2013). *General Comment No. 17 2013).*

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The Forgotten Language of Play

Play is the first language we learn as children. Long before we master words, we explore the world through touch, movement, and imagination. Babies giggle in peekaboo, toddlers create entire worlds using building blocks, and children spin make-believe stories using dolls. As we grow, society teaches us to take ourselves seriously. Productivity, achievement, and responsibility are prioritised, and play is dismissed as "child's stuff." In doing so, we lose access to a powerful tool for healing. For children, play is a direct expression of their inner world. For adults, returning to play is like rediscovering a forgotten dialect of the soul—one that reconnects us to spontaneity, creativity, and emotional freedom.

Conclusion

Healing does not always come through heavy conversations or analytical insight. Sometimes, it comes through laughter, imagination, and the simple act of play. Play is a quiet revolution. It does not demand; it invites. It does not pressure; it opens. It does not lecture; it allows. For children, adults, families, and communities, play is not a luxury—it is a lifeline.

Reclaiming play is not about escaping reality; it is about transforming it. It is about finding safety in chaos, joy in despair, and connection in isolation. In a world that demands seriousness, choosing to play may be the most radical act of healing we can do.

The call to action is urgent: invest in play therapy, train practitioners, adapt culturally, and advocate for systemic recognition. By honouring the healing power of play, we honour the most natural pathway to recovery and well-being.

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Unlocking Potential: The Transformative Power of Loose Parts Play in Early Childhood Education

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Introduction

This white paper explores the benefits of loose parts play in early childhood education. It addresses the problem of limited opportunities for children to develop crucial cognitive, social-emotional, and physical skills through open-ended play-based experiences. Drawing on research and practical applications, it proposes implementing loose parts play to foster creativity, problem-solving, and overall development in young learners, supporting their right to play (Gibson et al., 2017). Despite decades of research supporting the benefits of open-ended play, opportunities for loose parts experiences remain limited in many early childhood settings. Yet in practice, these opportunities are implemented unevenly, with many programs still relying heavily on structured, adult-led activities.

Problem Statement

Many early childhood education programs lack opportunities for children to engage in open-ended, exploratory play that supports holistic development (Cutuli et al., 2023; Donison & Halsall, 2023; Levickis et al., 2022). Traditional structured activities may limit a child's creativity, problem-solving abilities, and independent thinking. Sadly, this is not a new problem, as previous researchers have noted increased structure during playtime, even among very young children (Houser et al., 2016). Over the past several decades, early childhood pedagogy in many programs has shifted toward more academic, teacher-directed activities, often reducing opportunities for unstructured play that once formed the cornerstone of early learning (Barblett et al., 2016; Hesterman & Targowska, 2019; Kilderry, 2015).

Unlike teacher-directed, structured play, loose parts play offers children opportunities to:

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1. learn in research-based provocations that support early brain development,
2. engage in open-ended play experiences that help them establish independence, build autonomy, make choices, and assert their feelings and opinions, and
3. demonstrate knowledge and skills in developmentally appropriate ways, using all five senses, as they interact with the world in safe play spaces.

The proposed solution is to implement open-ended loose parts play in early childhood settings to enhance children's development across all domains and support all children's right to play.

Background: Designing Loose Parts Play Environments

Nicholson's Theory of Loose Parts (2023) emphasizes that those who design environments for children should do so intentionally, creating spaces that foster learning how to learn and think creatively. The theory highlights the environment's role as a "third teacher" and is grounded in the belief that children are capable, inquisitive, and creative. Loose parts—materials that can be moved, carried, redesigned, lined up, taken apart, and reassembled in countless ways—can be used alone or combined with other materials to support open-ended exploration (Penn State Extension, n.d.). The possibilities for child-led loose parts play are limitless. As Nicholson (1971) explained, "In any environment, both the degree of inventiveness and creativity, and the possibility of discovery, are directly proportional to the number and kind of variables in it" (p. 30). Similarly, Gowrie New South Wales notes, "You create the learning environment, and then they take over. Children love to be independent. They are natural learners and playing with loose parts taps into this to help them learn in an open-ended way" (n.d., 13). Building on these theoretical foundations, educators can apply loose parts principles to create rich, child-centered play environments.

Educators should create play spaces with a variety of loose parts and little to no instruction so children can engage with objects independently and cooperatively in ways they choose (Spencer et al., 2019). According to Daly and Beloglovsky, "engagement is how children integrate and apply their social, emotional, physical, and cognitive capacities as they interact with the environment in both developmentally and contextually appropriate ways" (2020, p. 113). In addition to variety and accessibility,

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cultural relevance is essential. When possible, choose materials that reflect the children's cultural backgrounds and identities. Reflecting children's culture and identities through loose parts helps them build curiosity, construct knowledge, and feel validated as themselves and as peers. Culturally relevant loose parts can be used to promote a sense of community, celebrate diversity, and help children develop self-esteem (Branje et al., 2021; Caldwell et al., 2023; Rodrigues et al., 2023; Spencer et al., 2021).

Benefits of Loose Parts Play and Implications for Child Development

When children engage in developmentally appropriate, open-ended loose parts play, they discover more about themselves and the world around them. They explore textures, use their senses to collect and analyze information, solve problems, and design creative solutions. These sensory-rich experiences strengthen attention span, persistence, and intrinsic motivation—qualities that drive further exploration and help children integrate new knowledge. The following sections describe how child-centered loose parts play supports growth in four key domains: approaches to learning, cognitive, physical, and social-emotional development.

Approaches to Learning

Approaches to learning encompass both how children learn and their attitudes toward learning. According to the Illinois Early Learning Project (n.d., para.1), "Children are born ready to learn, and the first three years are the time when children develop the habits in how they approach and explore their world." These habits include initiative, curiosity, sustained attention, persistence, reasoning, creative thinking, confidence, risk-taking, and imagination.

Through loose parts play, young children naturally practice these skills. They take risks, test new ideas, ask questions, and persevere through challenges—sometimes encountering failure and learning from it. They experiment with different approaches, seek help when needed, and build the confidence to try again. Each of these experiences contributes to a mindset that values problem-solving, creativity, and resilience.

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Implications for Promoting Approaches to Learning with Loose Parts.

Educators can nurture these dispositions by resisting the urge to step in too soon when children encounter difficulties. Instead, they can observe closely and offer guidance only when frustration is likely to end the play. This balance between independence and support helps children develop resilience and a growth mindset. Educators can also:

- Encourage cognitive flexibility by prompting children to see new possibilities in familiar materials.
- Spark curiosity by asking open-ended questions during play.
- Invite children to describe their play processes and explain their decisions, reinforcing language and reasoning skills.
- Support healthy risk-taking by framing failed attempts as learning opportunities.
- Notice which materials spark sustained engagement and incorporate them into future play opportunities.
- Provide a "work-in-progress" space so children can pause and return to their projects, fostering persistence and continuity in learning.

Cognitive Development

Both scholars and educators espouse loose parts play as a vehicle for promoting cognitive development, and, more specifically, creative and divergent thinking and problem-solving. Loose parts play "is unique among play types because children can combine different play types and natural or manufactured materials in one occurrence" (Cankaya et al., 2023, p. 1). The open-ended nature of loose parts play invites children to take initiative and experiment without apprehension. Loose parts play allows children to explore, investigate, and make sense of their world. They develop higher-order creative-thinking skills by actively constructing their knowledge through playful experiences. As children manipulate and repurpose materials, they strengthen both cognitive flexibility and self-regulation (Cankaya et al., 2023). This type of play lays a

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strong foundation for lifelong learning and intellectual growth (Naish et al., 2023). Educators can intentionally support these benefits through thoughtful practices.

Implications for Promoting Cognitive Development with Loose Parts.

According to Cankaya, Martin, & Haugen (2025), a loose parts plan can support many areas of young children's thinking and learning. See below for steps educators can take to facilitate cognitive development through loose parts play:

- Promote problem-solving by encouraging children to plan, make choices, and solve problems through trial and error.
- Support critical thinking by encouraging children to find new uses for familiar materials.
- Support children's imaginative thinking and language development through loose parts pretend play.
- Encourage children to explore and describe materials using multiple senses.
- Promote language and reasoning by encouraging children to share their ideas and explain their thinking as they work.

Physical Development

As children explore, investigate, and make sense of the world through loose parts play, they have many opportunities to enhance fine and gross motor skills (Gibson et al., 2017). In fact, previous research on loose parts play has shown significant benefits for children's physical development (Houser et al., 2016; Gibson et al., 2017). Quantitative studies have shown that loose parts play interventions lead to significant increases in step counts and minutes spent in moderate-to-vigorous physical activity (MVPA), as well as decreases in sedentary behavior (Houser et al., 2016; Gibson et al., 2017; Spencer et al., 2021). Whether indoors or outdoors, and especially during riskier forms of play, experiences with loose parts encourage movement, exploration, and energy expenditure—leading to higher physical activity levels and less sedentary time (Houser et al., 2016; Spencer et al., 2021). This type of play also supports movement development, which is an important aspect of physical literacy (Houser et al., 2016).

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Educators have observed that engaging with loose parts allows children to challenge themselves physically and develop fundamental movement skills such as coordination, balance, muscular strength, and endurance (Spencer et al., 2021). Loose parts diversify the play experience, providing ample opportunities for activities like climbing, swinging, and balancing, thereby enabling risk-taking (Houser et al., 2016; Spencer et al., 2021). The concept of "object affordance" highlights how loose parts, whether natural or synthetic, offer diverse opportunities for physical action, tailored to each child's interpretation and interaction with them (Houser et al., 2016). Object affordance, a concept first introduced by Gibson (1979) in his ecological theory of perception, describes how an object's properties suggest possible actions, allowing each child to interpret and interact with loose parts in unique and developmentally meaningful ways.

Implications for Promoting Physical Development with Loose Parts.

Loose parts play naturally supports fine and gross motor skill development as children move, manipulate materials, and navigate space. Listed below are some specific strategies educators can employ:

- Design opportunities for children to develop fine motor skills (e.g., muscular strength, dexterity, and eye-hand coordination) through grasping, sorting, pouring, stacking, tying, twisting, threading, and arranging materials such as buttons, sticks, stones, blocks, thread, and fabric pieces.
- Offer large loose parts (e.g., tires, planks) in outdoor spaces to encourage children to climb, balance, jump, and build.
- Give children opportunities to carry and stack large and small materials.
- Help children develop gross motor skills and spatial awareness with loose-parts obstacle courses.

Social-Emotional Development

Loose parts play offers rich opportunities for developing young children’s social and emotional skills. Studies link loose parts play to greater happiness at school, more complex dramatic play, and enhanced creativity (Gibson et al., 2017). When children

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guide their own play, they make choices, assert opinions, and explore feelings—building autonomy, independence, and self-confidence.

Loose parts can also act as companions in imaginative play, helping children process emotions and work through challenges (Wilson, 2020). Through unstructured play, children navigate social worlds, make decisions, and experience the natural consequences of their actions—developing self-regulation in the process (Gibson et al., 2017).

Collaborative play with loose parts strengthens cooperation, problem-solving, peer negotiation, and self-expression (Cankaya et al., 2023; Drew et al., 2008; Maxwell et al., 2017). As children work together to design and build, they practice listening, sharing, and resolving conflicts (Daly & Beloglovsky, 2015), fostering a sense of community (Curtis & Carter, 2014).

Empathy also grows during loose parts play. Storytelling and dramatic play encourage children to see situations from another's perspective, anticipate others' emotions, and respond with understanding (Ginsburg, 2007).

Just as empathy deepens children's interpersonal skills, cultural competence broadens their understanding of diverse perspectives. When educators provide loose parts that reflect children's cultural backgrounds, they create an inclusive environment where all children feel seen, valued, and connected (Vecchi, 2010).

Implications for Promoting Social-Emotional Development with Loose Parts.

A key component of early childhood education is facilitating children's social-emotional development, which shapes their capacity to build relationships, regulate their emotions, and interact positively with others (Collaborative for Academic, Social, and Emotional Learning, 2020). Encouraging play with loose parts—open-ended materials such as stones, twigs, cloth, and discarded objects that children can use in many inventive ways—is an often-cited way to build these skills (Nicholson, 1971). The principles of loose parts play highlight the value of play settings rich in variation that encourage experimentation, creativity, and teamwork. When children play

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collaboratively with loose parts, they practice important social-emotional skills such as cooperation, decision-making, problem-solving, self-expression, and peer negotiation (Cankaya et al., 2023; Drew et al., 2008; Maxwell et al., 2017). While collaborating to build, exchange, and co-create with loose parts, children also practice listening, sharing, and conflict-resolution skills (Daly & Beloglovsky, 2015). Open-ended loose parts play exploration also allows children to begin, guide, and modify their play using loose parts components, which promotes a sense of control and independence. This liberty fosters social skills such as self-assurance, autonomy, and a sense of proficiency as they make decisions and consider the consequences in an unstructured setting (Curtis & Carter, 2014). As children's social skills strengthen, their playful interactions foster a sense of community.

Children who create their play narratives in open-ended play spaces are more likely to develop empathy, communication skills, and emotional resilience (Cankaya et al., 2023; Koralek et al., 2013). The unrestricted nature of loose parts encourages emotional expression by allowing children to represent emotions through building and creative scenarios. Children may act out painful emotions or personal experiences to understand and control them (Nicholson, 1971). These play experiences allow them to work through difficult emotions in a creative, safe environment.

Children can also engage in role-playing and dramatic play with loose parts, which helps them understand other people's viewpoints. These experiences foster empathy, an important social-emotional ability (Ginsburg, 2007). For example, incorporating symbolic objects and figurines into a storyline through loose parts play may encourage children to consider a character's emotions or responses to challenges. Finally, loose parts play gives teachers opportunities to help young children build cultural competence, the ability to learn and work effectively with people from other cultures. When teachers provide loose parts that represent the cultural backgrounds of the children in the classroom, children feel a sense of belonging and importance. When they see themselves represented, they feel like they matter. This inclusive environment validates children's experiences and enhances their self-esteem (Vecchi, 2010). Listed below are some implications for promoting social-emotional development with loose parts.

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- Encourage children to use social skills such as listening, sharing, negotiating, and resolving conflicts as they co-construct with peers.
- Guide children toward shared goals through cooperative building projects.
- Give children opportunities to process emotions by incorporating them into loose parts play scenarios.
- Invite children to act out familiar stories with loose parts, explore characters' perspectives, and create alternate endings.
- Allow children to direct their own loose parts play, making decisions and adapting plans based on interest and motivation.
- Offer loose parts that represent the cultural diversity of the classroom community.

When intentionally facilitated, loose parts play is more than open-ended exploration—it becomes a vehicle for building emotional resilience, social competence, and inclusive, respectful communities.

Conclusion/Recommendations

Loose parts play is a powerful approach to early childhood education, offering measurable benefits in approaches to learning, cognitive growth, social-emotional well-being, and physical development. Young children are naturally curious, driven to explore, and eager to test ideas. When given open-ended materials, they investigate cause and effect, experiment with spatial relationships, and innovate through hands-on experiences. These opportunities allow children to build independence, develop resilience, and demonstrate their knowledge in ways that are developmentally appropriate and personally meaningful.

In an educational climate that increasingly prioritizes standardized outcomes, loose parts play is a vital reminder of the value of process over product. It affirms the importance of unstructured, child-led exploration as a core component of learning, not an optional extra. By providing children with environments rich in diverse, open-ended materials, educators can support agency, creativity, and lifelong learning skills while honoring children's right to play.

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Recommendations for Implementation

- Offer developmentally appropriate materials and open-ended activities that allow time for sustained discovery throughout the daily schedule.
- Provide a wide range of discovered, recycled, and natural materials with varied textures, sizes, and shapes to stimulate creativity and sensory exploration.
- Design indoor and outdoor loose parts play spaces with accessible storage to foster independence and autonomy.
- Invest in professional development focused on engaging, intentional ways to integrate loose parts play into curriculum and routines.
- Partner with families by requesting safe, appropriate materials and sharing strategies for using loose parts at home.
- Document learning through observations, photographs, and examples of children's work to communicate the value of loose parts play to families, administrators, and policymakers.

When implemented thoughtfully, loose parts play benefits every child and strengthens the quality of early learning programs. It is both an educational strategy and a statement of belief that children deserve the freedom, time, and materials to explore, create, and grow. By embracing loose parts play, educators, families, and policymakers commit to fostering environments where every child can explore, create, and grow — and to shaping an educational culture that values curiosity, agency, and the right to play.

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This is Your Brain on Stories: Make-Believe Play, Fairy Tales and Resilience

Stephanie Goloway, EdD

Introduction

Make-believe play. Pretend play. Dramatic play. Fantasy play. Sociodramatic play. Symbolic play. Narrative play. No matter how we label the ephemeral creation of stories in children's imaginations, two things remain constant: its omnipresence in childhood and its critical importance to healthy development across all domains. Yet, like play in general, and make-believe's cheeky cousin, risky play, in particular, this powerful weaving of symbols, social interaction and whimsy is in decline, at least in adult-monitored settings.

The same can be said for another bastion of make-believe: fairy tales, once the foundation of every child's literary exploration. Modern parents and teachers often eschew folk and fairy tales from around the world. They are seen as too dark, too scary, too violent, too sexist: inappropriate for the tender sensibilities of children.

In this paper, I will be examining some of the neuroscience behind the developmental significance of fairy tales and storytelling, and how this relates to make-believe play. Implications for resilience will be suggested. I offer strategies for encouraging rich, imaginative play in all settings. Finally, there is a plea for committed advocacy to protect the joyful, messy quicksilver of make-believe as we nurture children so they can successfully ride the inevitable waves of change in their worlds.

Problem Statement

Research shows that all play is in decline, and many of the reasons overlap with declines in both the quantity and quality of mature make-believe play (e.g., Leong & Bodrova, 2012; Nicolopoulu & Ilgaz, 2010). The increased focus on early academics leaves less time for child-led play. Screens not only consume time and attention but also affect a child's ability to construct mental imagery and develop social skills. Safety concerns, too, play a role. While "safety" may seem more of an issue with risky play, adult focus on children's *emotional* safety may limit the emergence of more complex play scenarios, as well as children's fascination with the darker themes of fairy tales.

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However, the more concerned adults are about protecting children from life's obstacles, the less we support the development of their adaptive capacity for resilience. Resilience is defined as our ability to overcome challenges and adversity and is a core component of mental health (National Scientific Council on the Developing Child, 2015). Coincidentally (or not!), the experiences that support the development of resilience (relationships, agency, executive functions, self-regulation, and cultural affirmation) (Masten, 2015) are embedded in both make-believe play and fairy tales (Bodrova & Leong, 2024; Goloway, 2017; 2022).

A century of theory and research that highlights the importance of make-believe play has not stopped this decline. Would evidence from neuroscience help adults to reassess their priorities and return their focus to the critical importance of representational development in the form of pretend play?

Children actively engaged in pretend play are not easy subjects for neuroscience research. Brain research on storytelling can offer insights into how the brain responds to narrative fantasy play. These findings may help shift the perspective of those who do not value make-believe, fairy tales, and related play.

Background

"Pretend you're a frog, and you jump into a bad guy, but you don't know it."

"Grab 'em!"

"He's stealing kitty!"

"Get him, over there, get him!"

"Blast him, grind him up, he got the gold!"

"Meow, meow, meow."

"Here's your kitty, Snow White."

"Are you the dwarfs? The frog dwarfs?"

"We're the ninja dwarfs. The frog is a ninja. Watch out! We might have to blow this place up again." (Paley, 2004, p. 30).

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As this play episode, recorded by early educator and play scholar Vivian Gussin Paley, illustrates, children's make-believe is about many things, from mommies and babies, to kitty cats and frogs, to ninjas, dwarfs, and princesses. However, it is also almost always about **trouble**. Whether in the child-initiated scenarios they play out, or the stories they tell, or the fantasy tales they gravitate towards, children are fascinated by risk, danger, and thorny challenges (Kuschner, 2019).

It would be convenient to blame this on the media, video games, and 21st-century issues. However, the same themes of good guys vs. bad guys, facing monsters both imagined and real, and triumphing over adversity were documented by Brian Sutton-Smith and colleagues in their seminal study of children's storytelling in the 1970s (Sutton-Smith, 1981). So what is it that makes trouble so attractive to the child's imagination?

Play has been described as preparation for life (e.g., Gray, 2013; Sutton-Smith, 2017). Because the only thing constant in life is change, play's purpose, from an evolutionary perspective, is to provide practice in adapting to change and uncertainty as we develop our skills. All kinds of play support the development of this resilience to change (Goloway, 2024). Much has been written, especially, about the decline in risky play and the resulting impact on children's mental health and ability to handle stress and adversity. (e.g., Gray et al., 2023).

Researchers have studied (and debated) the role of make-believe play in many domains of child development and learning for generations (e.g., Fein, 1981; Lillard et al., 2013; Doebel & Lillard, 2023). Researchers have studied many areas, including social and emotional skills; representational (symbolic) development, including language, literacy, and storytelling; executive functions; and self-regulation. Researchers have also analyzed specific aspects of play directly connected to stories, ranging from play schemes and episodes (Welsch, 2008) to story-structure cohesion and emotional immersion during fairy-tale role plays (El'koninova, 2001).

But WHY do children participating in this universal and developmentally predictable form of play embrace so much angst and trouble? Why do the stories they co-create delve into conflict, fear, and danger? The answer may lie in children's ability to

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make (themselves and others) **believe** that the (sometimes scary) world is a place they can control by creating stories where this is true. If play prepares one to overcome the unknown in life, it makes sense that children's make-believe play would embrace the unknown - trouble in symbolic form - to master it. (Huber, 2024)

One challenge in empirically studying this aspect of children's make-believe is the quicksilver speed with which their stories can emerge, transform, and dissipate, as in the example above. Child logic is not the same as adult logic! More importantly, even the most attuned observer with the most sophisticated recording techniques cannot truly know what is going on beneath the sparkly crowns and firefighters' helmets. Do such play scenarios involving monsters, quicksand, and babies lost in the woods actually activate the developing brain's capacity for resilience?

It is hard to imagine young children playing with electrodes taped to their heads. However, neuroscientists have studied children and adults as they read, hear, or view fantasy stories, such as fairy tales, which contain similar elements of danger. The results give us insight into how the brain responds to imagined challenges.

In a nutshell: our "brains on stories" respond to such challenges AS IF they were real (Smith, 2016). The same stress hormones are released (i.e., cortisol) when the dragon in the story bursts onto the scene, as would be released, for example, if you saw a car rapidly heading your way. The heightened attention to the plot facilitates connection with the characters, leading to the release of oxytocin, sometimes called the "caring hormone." When the story arc reveals the successful resolution of the danger (e.g., the dragon is defeated), the limbic brain responds to the happily-ever-after ending in the same way it would in real life: with the release of dopamine (Smith, 2016; Zak, 2014)

Researchers such as Paul Zak call this process "transportation" and have linked it to feelings of empathy elicited by stories with this kind of narrative arc (Zak, 2015). It appears to be a neuroscience component to what Vygotsky called "doubleness" (Vygotsky, 1978). "Doubleness" is a child's ability to simultaneously feel happy because she is playing, but scared, in the context of that play, of the dragon about to breathe fire into her castle. This gives the child the opportunity to regulate both emotions, since both must be held in check for the story to move forward. Fleer and Hammer (2013) note that

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fairytales provide an ideal source of such *doubleness* because children feel comfortable with the stories' familiar structure and relationships, while still experiencing the tingle of fear or suspense that the villain or daunting quest provides.

Compelling evidence suggests that hearing stories about overcoming obstacles positively affects our brain's ability to navigate stress and show empathy and compassion. Like other neural pathways, these are strengthened through repetition. Regular exposure to such stories, whether read or created in play, could develop and strengthen the "resilience muscle" of the brain.

However, the kind of stories studied, i.e., folk and fairy tales and their modern relatives, fantasy, are discouraged in many settings. Popular media (e.g., McFadden, 2025; Guardian, 2024) is rife with anti-fairy-tale sentiment, and parents who want only the best for their children may avoid reading these ancient tales.

Of greater concern, a widely-used classroom assessment tool, ECERS-3 (Early Childhood Environment Rate Scale-Third Edition) specifically identifies as "inappropriate" stories that may frighten children: "This would be true in many fairy tales, for example, where the good character kills the "bad" character, instead of working out problems without harming one another" (Harms, Clifford & Cryer, 2015, p. 40). While fairy tales are not specifically forbidden, classrooms subject to quality rating evaluations often remove classic folktales such as *The Three Billy Goats Gruff*, *The Three Little Pigs*, *Little Red Riding Hood*, and *Jack and the Beanstalk* to meet the ECERS criterion.

This may have a cyclical effect. Children weave themes and images from the stories they hear, read, or view into their make-believe (e.g., Welsch, 2008). When their literary diet consists solely of stories that check off adult boxes for civility, safety, and realism, they may be less likely to create and act out the gritty tales of trouble and challenge their brains need to thrive. As play advocates, we have a responsibility to ensure that children's developing brains flourish in the magical forest where neuroscience, make-believe, story, and resilience dance.

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Approaches and Strategies

The specific approaches and strategies below encourage the development of mature make-believe play. They are divided into three categories: Time, Space, and Stories. Each has a strong theoretical and research base.

Time

One major obstacle to developing make-believe play is the lack of time many programs devote to it. Bodrova and Leong (2024) suggest that in the later preschool years, at least 40-60 minutes of uninterrupted time is necessary for mature play scenarios to develop; these rich make-believe stories can extend over several days. *The Play Environment Rating Scale: ECERS Extension, Play Environment Rating Scale* (PERS) (Shiyan et al., 2025) requires at least an hour for a "Good" rating, and more for "Excellent." Without enough time to identify characters, imagine props and plots, and co-create interesting scenarios, children's play remains stunted. The rich symbolic thinking and self-regulation that emerge in make-believe cannot fit into a fifteen-minute rotation of classroom centers.

Honoring make-believe also means recognizing that for most young children, it is a state of being, rather than a block of time. They imagine and act out stories on the playground, at the lunch table, and even during bathroom breaks. Building some flexibility into the structure of a day to allow for and thoughtfully observe these critical "dalliances" into the imagination supports children's development across all domains.

Space

In addition to extended, flexible time to facilitate pretend play, an environment that supports make-believe includes flexible spaces and a variety of open-ended materials. PERS (2025) recommends that both indoor and outdoor spaces include many opportunities to transform the physical environment to accommodate children's play ideas. For example, children should have access to fabric, tape, and clothespins if they want to turn a table into a cave, or a slide into a giant's castle. Movable furniture and multi-tiered structures offer children opportunities to create spaces for group, partner, and individual play, as well as a wide variety of settings for their evolving stories.

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Open-ended materials and loose parts are integral components of an environment that supports make-believe. Children will use these to create their own props and augment their plots and characters. Beyond enhancing the play experience itself, open-ended materials encourage the development of representational thinking, which is at the heart of make-believe and literacy.

Stories

Perhaps the most significant way we can nurture the power of make-believe is by providing children with rich, meaningful stories. Children's literature is a vast smorgasbord, and they should have the opportunity to explore it all. Once they are familiar with them, children often weave the defined story structure and archetypal characters of folk and fairy tales into their play. Fairy tales model how the weak and powerless overcome adversity. They offer both this message of hope and the risk and challenge that children's brains need to wire themselves for resilience so they can overcome real-life adversity.

The supply of folk and fairy tales from around the world is seemingly endless. Variants of the same story (e.g., Cinderella) from different cultures offer the opportunity to provide ALL children with stories in which they see themselves reflected. In addition, children can explore the continuity among tales from very diverse cultural traditions, strengthening their connections to the plot and characters, which they can bring into their play. Children's interests (e.g., alligators, cows, or mirrors) can also be matched with folk and fairy tales that feature them, deepening their understanding of objects and symbols.

While many popular children's videos feature fairy tales, reading or telling stories more actively engages a child's developing representational skills, which are essential to make-believe play. Neuroscience research by Yabe et al. (2018) suggests that children's prefrontal brain activity is more active when they engage with a told story than when they read one from a picture book. While preliminary, their study nudges us to consider telling familiar folk and fairy tales in the oral tradition, in addition to reading the many beautiful picture book versions available.

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It is also important to listen to and validate children's many ways of telling their own stories. For example, Vivian Paley's work focused on what she called storytelling/storyacting as a bridge between children's fantasy play and their emerging literacy (Paley, 2004; Nicolopoulou et al., 2015). Children often have opportunities to dictate a story to a scribe, then act it out with the class. As in their play, children braid real-life experiences with stories they have heard as they tell their own tales. These told stories both draw from and inspire the play scenarios they create with their peers. And so, the spiral of the imagination swirls and grows.

Conclusion

Make-believe play is a pervasive and universal part of child development. It is an important way for children to develop symbolic thinking, interact with other children, self-regulate, and demonstrate agency and initiative. All of these contribute to the brain's capacity for resilience. In many settings, however, children are not given the time and space to engage in rich, meaningful pretend play.

Similarly, folk and fairy tales are often pushed from the early childhood environment. These ancient stories of using skill, wit, and courage to overcome adversity are sometimes seen as too fraught with danger and fear to share with children. Neuroscience, however, offers an alternative view: that stories of imagined risk and challenge are exactly what our brains need to prepare us to combat the very real stressors we experience.

Children seem to intuitively know what their brains need, in both make-believe play and in the stories that fuel it. They are drawn to themes of "trouble," even as well-meaning adults try to protect them from it. As play scholar David Kuschner describes it,

"Children's fascination with trouble includes such themes as power, the grappling with good and evil, overcoming adversity and confronting the monsters, real and imaginary, in your world." (Kuschner, 2019, p. 132).

In both their play and in the stories we share with them, we owe it to children to honor this fascination with trouble and risk. Even in settings where opportunities for physically risky play are few, every child can vicariously race down the beanstalk with

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Jack as he escapes from the angry giant. Beyond inspiring wild, joyful play, folk and fairy tales can set the stage for the neurodevelopmental blossoming of each child's adaptive capacity for resilience. However, this resilience gives every child the best chance of defeating the inevitable dragons they will encounter in life and living happily-ever-after in our challenging, ever-changing world.

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Reframing Early Art Experiences: How Process Art Supports Real Learning

Daniele Hunter, EdD

Introduction

The Product Art vs Process Art Debate

Two distinct types of art are most commonly used in early childhood settings. They are product and process art. Product art refers to closed-ended activities with step-by-step instructions and an end result that looks nearly identical across children (Bongiorno, 2014; McLennan, 2010). Process art, by contrast, has no predetermined end goal (McLennan, 2010), no step-by-step instructions to follow, and an end product unique to each child (Bongiorno, 2014; Capriotti, 2025). Given the differences between product and process art, it is no wonder there has been a longstanding debate in early childhood about which art is right for young children to engage in.

Problem Statement: Issues

Advocates of product art argue that these activities serve an important purpose for young children, teaching skills such as following directions and developing motor skills (Gift of Curiosity, n.d.). Additional advocates state that product art offers equal opportunities for all children to create and is well-loved by parents who receive these crafts (McLennan, 2010). While these claims hold some truth, some push back against product art, arguing that these same skills can be taught through process art experiences (McLennan, 2010). Process art advocates also claim that product art focuses on lower-level thinking skills and leaves little room for children's creativity (McLennan, 2010). Many also claim that this adult-centered approach lacks meaning for the children (Aussie Childcare Network Team, 2024). Furthermore, product art experiences often limit learning and do not match a child's developmental readiness. This disconnection can leave learners disinterested and frustrated (We Skoolhouse, n.d.) and should prompt educators to question whether these adult-centered experiences are worth the risk.

In contrast, process art advocates attest that these child-led experiences teach children valuable higher-level thinking skills, including creative thinking and problem-

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solving (Aussie Childcare Network Team, 2024; McLennan, 2010; We Skoolhouse, n.d.). Such skills are vital to children's lifelong success in the 21st century (Lindsay, 2015; McLennan, 2010). Process art also builds strong social-emotional skills, such as emotional regulation, confidence, and a strong sense of self (Early Bounce, 2025; We Skoolhouse, n.d.). Furthermore, process art celebrates each child's uniqueness, encouraging them to use their imagination and be proud of their work without pressure to be perfect (Early Bounce, 2025).

Rather than positioning process and product art against each other in this ongoing debate over which is better, the more important question is which of these two art forms effectively supports what we know about how young children learn during these early years. Through this focused lens, educators cannot only better support the children in their care but also advocate for more effective and appropriate teaching practices across early childhood settings.

Background

Knowledge is Constructed in Time, Not Forced

Several foundational theorists, including Jean Piaget, Lev Vygotsky, Jerome Bruner, and John Dewey, have identified that young children learn best with hands-on experiences that are meaningful to them in the moment and social in nature. Together, their shared views of learning laid the foundation for what is now called constructivist theory. Constructivist theory holds that learners build new knowledge through experience and interaction with a concept (McLeod, 2025). This theory has several key features, each drawing on the work of the aforementioned theorists.

The first facet of constructivist theory is that knowledge is constructed over time, not forced upon learners (Kretchmar, 2021; McLeod, 2025). Specifically, this theory maintains that learners are not empty vessels waiting to be filled with knowledge. Instead, learners build knowledge over time, based on their prior skills and understanding (McLeod, 2025; Purdy, 2021). This view aligns with both Piaget's theory of cognitive development and Bruner's spiral curriculum. Both emphasize that each new layer of development depends on the previous one (Madsen, n.d.; Purdy, 2021). Purdy

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(2021) compares this to building a structure: you start with a solid foundation and add layers until the structure is complete.

The constructivist theory also recognizes that children learn through interactions with peers, teachers, and their broader community (McLeod, 2025). This layer of the constructivist theory is greatly influenced by Vygotsky's sociocultural theory and Dewey's views on social learning. More specifically, Vygotsky highlighted how social relationships and cultural experiences shape learning, while Dewey emphasized that collaboration and shared problem-solving create pathways to deeper understanding (Kurt, 2021; Williams, 2017). Dewey's work also emphasized that true understanding is built when learners can connect meaningful context to the experience. In fact, Williams (2017) argues that teaching learners new concepts without meaningful context borders on unethical.

Drawing again on the work of Bruner and Dewey, constructivist theory emphasizes that learning is an active process rather than simply transferring information from adult to learner (McLeod, 2025). Active learning involves both physical and mental engagement, in which learners not only move their bodies but also use their minds to think, reflect, analyze, and solve problems (Kretchmar, 2021). Specifically, Bruner emphasized that children are not passive participants in learning but must be actively involved for new information to stick (Purdy, 2021). Dewey called this a "learn by doing" approach, in which children practiced new skills and concepts through hands-on activities (Williams, 2017). In short, while information may be passively conveyed to learners, actual understanding does not occur unless they have a chance to engage actively (McLeod, 2025).

While each theorist approached learning from different perspectives, they all share a fundamental belief that knowledge is constructed rather than imposed on learners. This belief has shaped not only the constructivist theory, as shown here, but also our understanding of how children learn. Within the context of the product-versus-process art debate, this belief calls for a shift away from adult-driven, closed-ended experiences and toward art opportunities that value exploration, choice, and the learning process itself.

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Strategies

Putting Knowledge into Practice

Shifting from a product art philosophy to a process art philosophy can feel like navigating uncharted territory and may meet resistance. However, shifting perspectives and practices in the classroom is less about changing the materials and more about rethinking how children are invited to use them as they explore and create. Educators can make several small changes that will slowly but meaningfully transform art experiences from an adult-driven craft space into a child-led environment where creativity and learning flourish.

Stock the Art Shelves

First, supporting process art requires a well-stocked art area. Shelving should be easily accessible to the children and contain a wide variety of art tools and materials. Children need clear guidance on safety rules and expectations, but when applied consistently, they will soon understand how to engage, play, and create independently in this environment. According to the Infant-Toddler Environment Rating Scales (ITERS) and the Early Childhood Environment Rating Scales (ECERS), well-stocked art areas should include a variety of materials, including drawing materials, paint, three-dimensional materials, collage materials, and appropriate tools (Harms et al., 2006; Harms et al., 2005).

Ask More Open-Ended Questions

When children engage in process art experiences, a teacher's role shifts slightly but remains incredibly important. Instead of guiding the process step by step, the teacher serves as an observer, a questioner, and a supporter. Asking open-ended questions will prompt children to think deeply about their work. These questions encourage children to think independently, solve problems, and value their voices. As teachers, sitting back and observing children at work will showcase their true knowledge and understanding, leading to more meaningful teaching decisions in the future.

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Loosen the Reins on Expectations

It can be hard to let go of expectations as an educator, especially when it feels like everyone is watching to make sure children are, in fact, learning. To embrace process art, however, educators must be willing to forgo these unreasonable expectations and outside pressure. Instead, educators must recognize and support the natural unfolding of every child's learning journey and give them the space, time, and tools to keep growing. In doing so, educators begin to advocate for experiences that value learning as a process, not a performance.

Let the Process Guide Your Practice

A simple shift in art practices that can guide educators toward embracing and practicing process art is to keep the experience's goals in mind and provide children with the right materials to achieve them. Maintaining this mindset helps educators stay child-centered, remembering that the learning process matters most, not the end product. In fact, keeping goals in mind will result in an accurate and fair representation of every child's learning.

Celebrate the Journey

In early years learning, each milestone matters. It represents their growth and serves as a building block for more complex understanding over time. From the first marks on a piece of paper to the more intricate drawings in a child's self-portrait, shifting towards process art requires educators to see and celebrate every milestone. These moments of celebration help shift onlookers' focus to the learning, growth, and discovery that naturally unfold when children are given the time, space, and tools to create in developmentally appropriate ways.

Conclusion

Product art and process art are fundamentally different art forms most commonly found in early childhood settings. This has led to a longstanding debate over which is better for young children. While product art may support things such as following directions and motor skill development, it is often misaligned with children's readiness, limiting their creativity, and is primarily driven by adults. Process art, on the

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other hand, supports children's naturally unfolding development, promotes higher-level thinking skills, and strengthens children's social-emotional development. Ultimately, the question is not about which type of art is better, but rather which approach aligns with how young children learn.

While children may grasp a concept taught by an adult, their true understanding does not develop unless they have a chance to learn in the way their bodies and brains are designed. This knowledge is built through active, meaningful, and social experiences that let children build on their prior knowledge. You can't pour it into children. As educators, the experiences we offer to young children must align with this belief. When it comes to art, process art supports every part of what young children need for long term learning to happen. It is both physically and mentally active, engaging children's bodies and minds as they manipulate tools, think creatively, question, and problem-solve. Process art allows children to work within their current developmental level, building seamlessly off of their prior knowledge with no expectation of meeting a goal they are not yet ready for. Finally, process art lets children think freely, drawing on their social backgrounds and community upbringing to create, imagine, and learn.

While putting this into practice might seem daunting for some, it is essential for early childhood programs. As central members of children's learning, growth, and development, educators must commit to shifting perspectives toward more valuable art practices. These changes don't need to be major; even small shifts can have a significant impact. Beginning with well-stocked art areas, educators can create a space that welcomes process art and the creativity, imagination, and learning it brings. By shifting engagement toward open-ended questions, teachers encourage children to think more deeply about their work. Letting go of unrealistic expectations placed on educators fosters teaching practices that honor each child's natural development. By keeping the goals of the experience in mind above the end result, educators can maintain art experiences that value the learning process and the construction of knowledge. Finally, by celebrating the journey of process art, educators can begin shifting onlookers' understanding, helping them see each milestone in a child's learning journey as a pivotal moment that lays the foundation for ongoing growth and development.

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Part 1: Where Did All The Play Go?
The Play Confusion: When Everything Is "Play," Nothing Is

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"The opposite of play is not work — the opposite of play is depression"
(Sutton -Smith 1997, p. 198)

Part 1 focuses on the issues that have led to a deficit in child-led play in early childhood settings and offers ideas for fixing a broken system. It asks: What is replacing child-initiated play?

Part 2 discusses how play continuums have contributed to the issues facing early childhood educators and provides strategies for getting back on track, what to use in assessment, and the tools needed to make learning visible.

Introduction

Children's childhoods have disappeared, and the shift away from child-led play diminishes their engagement and focus, making it hard for them to develop curiosity and explore the world around them. Instead of having the freedom and autonomy to learn through play, childhood has turned into 'getting ready' for a future filled with standardized tests and developmentally misaligned activities.

Children's play is being replaced by SMARTboards, iPads, Chromebooks, YouTube videos, flashcards, worksheets, homework, dance, gymnastics, softball, tutoring, teacher-directed classrooms, and daily schedules organized into small blocks of time that require too many transitions.

The early childhood profession needs to return to what we know works with children. To focus on the science of how children learn. To provide the time, space, relationships, and environment where children thrive. As Bev Bos reminds us, "The Child is the Curriculum" (Saia, 2016). This reminder may encourage educators and administrators to feel hopeful and proactive about restoring meaningful play in early childhood settings.

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To begin this exploration, educators must regain their agency; instead of asking, 'Why is it this way?' they must use their power to say, 'There is a better way to provide early childhood education.' Early childhood professionals must push back against 'readiness' pressures and unrealistic academic expectations that do not align with children's development, and share with families and administrators why child-led free play is how children learn. Advocating for this shift is essential for meaningful change in early childhood practices and for the profession to become *developmentally focused* rather than *planning activities that meet state standards*.

Problems/ Issues

"The education of even a small child, therefore, does not aim at preparing them for school but for life"

(*Montessori Series, 2007, p.322).*

What Happens ...

When policy decisions affect families' and children's access to health care, nutrition benefits, and public housing assistance programs, children's development is impacted. When natural disasters or violence take place where children and families live, children's progress in developmental milestones is affected.

Families who experience the disappearance of these programs are negatively impacted, and children who have these experiences cannot even begin to learn unless their basic needs, including food, restful sleep, shelter, clean air, and water, are met (Maslow, 1943).

When children experience child neglect, trauma, child abuse, anxiety, stress, depression, prenatal exposure to toxins, and a variety of other factors, their development is affected. These adverse experiences are cumulative and affect typical development (Perry, 2001; Kostelnik & Grady, 2009; Casey & Dewhirst, 2025).

Policymakers need to recognize the consequences of funding cuts. They should be held accountable for funding the basic needs of struggling families and creating communities where children feel safe and secure. This allows children to be curious, explore, and discover, critical steps for development.

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Development is Not a Race

In early childhood settings that set unrealistic expectations that do not match where children are developmentally, children experience increased stress and anxiety, which leads to behavior issues and a breakdown in building positive relationships (Miller & Almon, 2009). Ignoring the sequence of how development unfolds, pretending that each domain (cognitive, fine and gross motor, social, language, and emotional) develops in isolation, and failing to recognize that each child's progression through developmental milestones is unique has created a climate for learning that disrupts rather than promotes children's growth. (Elkind, 2007; Miller & Almon, 2009; Bassock & Rorem, 2016).

Children's development is shaped by their unique experiences, biological makeup, habits (such as curiosity or withdrawal), approaches to learning (such as choosing what to do), and how they explore new materials. Screen use also affects their development (Tatter, 2025).

Use of Technology and Screens

The emphasis on using technology in homes, early care and education settings, and public and private schools has created a situation where technology is replacing child-led play. In early care and education settings, SmartBoards, iPads, teachers' desks, or computers take up classroom space, often replacing active materials that children need to learn. Using YouTube videos to sing songs or read stories to children is not how children learn to read. Technology can limit opportunities for active engagement and tactile learning experiences that are crucial for development.

When parents are exhausted and just need to start dinner, or have time to help children with homework, children may get more screen time. Parents may feel uncomfortable with children playing outside, riding their bike, or playing with friends; this increases children's screen time. When families go out to dinner, instead of having conversations, you see busy parents needing to relax and de-stress from their day while children use screens. As you drive, you see car seats with young children playing on iPads or phones; in the grocery store, instead of looking at different vegetables and fruits and having a conversation, you see children on some type of screen. The lack of

conversation and back-and-forth communication reduces opportunities to build the language and vocabulary children need to become proficient readers (Romeo et al., 2018).

Overuse of screen time has many adverse effects on social, emotional, physical, and cognitive development. Replacing outdoor physical activity with screen use can lead to obesity and sleep loss, which can affect school performance and lifetime health. Exposure to violence through video games, television, or the internet can contribute to behavior problems due to children being scared or trying to imitate the actions of on-screen characters (American Academy of Pediatrics, 2023).

In a recent study, Vanderloo et al. 2022 concluded that screen use in early childhood is associated with increased vulnerability in developmental readiness for school. The research showed that children who use screens are at increased risk of poorer language and cognitive development in Kindergarten. Although Bronfenbrenner was referring to television, it remains relevant today, with increased access to and availability of different types of screens.

The primary danger of the television screen lies not so much in the behavior it produces as the behavior it prevents - the talks, the games, the family activities, and the arguments through which much of the child's learning takes place, and his character is formed. (Bronfenbrenner, 1979).

The American Academy of Pediatrics (2023) recommends no screens for children 18 months or younger unless it is video chatting. For children 18-24 months, they recommend limiting screen time to short, high-quality programming, with parents viewing it with their children. For children ages three to five, regardless of the setting, they recommend no more than one hour of screen time per 24 hours. Parents should monitor screen time for older children and teens to ensure it does not replace family time, reduce sleep, or reduce physical activity.

Another insidious factor contributing to a play deficit is confusion over what play is and what it is not.

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Strategies

Recognizing the Play Aliases that Interfere with Children's Development

Children's spontaneous play has disappeared as the focus shifted to more structured, adult-directed activities, with teachers replacing exploration, discovery play, and access to recess with more time for academics. Sometimes the loss of child-led play or recess is restricted and used as a disciplinary consequence (Murray, 2026). Another factor is how the readiness movement has reduced time for play through longer school days and longer school years, all driven by an overemphasis on academic achievement. Parents' concerns about their child's safety have resulted in less neighborhood play and more structured, adult-led after-school activities (Patte, 2015; Murray et al., 2026). Ginsburg (2007) reminds us that highly scheduled children have less time for free, child-driven, and creative play. In early childhood settings, teachers struggle to recognize what play is and is not.

What Play Is Not!

- It is not a place where ancillary activities like dance, gymnastics, softball, or any other type of adult-led activity replace play.
- It is not a place where the curriculum comes in a box, binder, or mail, nor does it repeat the same weekly themes year after year.
- It is not a place where teachers group children by ability in academic subjects.
- It is not a place where children's voices are too loud, and all you hear is teachers' voices correcting, directing, or disciplining children.
- It is not a place where the teacher sees each child's development based on their chronological age. Chronological and developmental ages are very different. One child might be ahead of their age in some areas and behind in others.
- It is not a place where teachers use extrinsic motivation (stickers, a collective classroom reward such as a party, tickets, tokens, prize chests, small toys, certificates, doing jobs in the classroom and earning something, to name a few). Extrinsic motivators encourage children to do something for a reward, rather than teaching them to do something because it is the right thing to do.

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- It is not a place where children go hungry. Food must be provided. No child can learn when they are hungry.
- It is not a place where children are lined up to go to the bathroom. Children need to recognize when they are hungry and need to eat, and to listen to their bodies when it signals it is time to go to the bathroom; this is the beginning of self-regulation.
- It is not a rigid daily schedule that includes small chunks of time for teacher-directed or organized activities. The clock does not schedule the day. The schedule is not siloed by subject: math, literacy, music, circle, science, calendar, weather, worksheets. To build the foundations of learning needed, children need large blocks of time to play without teacher direction. The drive to play comes from development. They will play what they are ready to develop.
- It is not a place with primary-colored walls and carpets/rugs. Plastic toys in plastic baskets that offer no interest because children get bored with them, or there are not enough materials for them to play with a friend for at least an hour.
- It is not a place where the teacher selects which centers are open or closed, or which materials children use for an art product, or which centers they rotate through.
- It is not a place where children are fearful or hesitate to do something without permission.
- It is not a place where children are prevented from taking a material from one part of the room and moving it to a new location to play with.
- It is not a place that never explores what is outside the building and playground to ensure children have regular contact with nature.

Foundational learning experiences require active learning materials. Instead of purchasing passive learning materials such as Chromebooks, iPads, and associated apps, recognize that these devices do not promote development (Hirsh-Pasek et al., 2015; Madigan et al., 2019). You can include technology like an overhead projector that projects light onto the wall, with colorful materials so children can manipulate them to change the image and watch the changes happen in real time. Provide light tables with colorful manipulatives where children can build, sort, or manipulate materials, and light

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shines up through those materials; CD players, Old typewriters, and digital cameras for children to take images of interesting things are ways to use technology.

Conclusion

What You See, Feel, and Hear in the Setting.

Whatever the setting, what children see, how they feel, and what they hear all affect their development. What a teacher sees, feels, and hears also impacts the teacher. Children and teachers come from different cultural backgrounds, which can make children feel less safe or feel that their culture is not valued. Teachers need to be aware of how their cultural experiences may affect their ability to form loving, positive relationships. Here are a few things to consider. When you walk into your setting, does it feel welcoming to families and children? What does it smell like? Are there areas to get away? Is it comfortable?

What do children see? Is it visually overstimulating? Is it cluttered? Do you have enough materials for groups of children to play together? Is your daily schedule based on the clock or on the children?

What do you hear? Loud music or just music all the time? What type of music, yours or the children's? Do you hear crying and fighting, loud teacher voices, toys being dumped, chaos? If you hear this, the children are frustrated because you are too structured and they do not have enough time to play.

In Part 2, the paper discusses solutions and strategies for Part 1's problems, describes terms that have confused teachers, and explains how play continuums have been used to trick us into thinking they are play. Part 2 also compares the definition of child-led play with other definitions used to address the readiness movement. Part 2 guides you to reimagine an environment where children thrive.

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Part 2: Where Did All The Play Go?
The Play Confusion: When Everything Is "Play," Nothing Is

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Part 1 focuses on the issues that have led to a deficit in child-led play and offers ideas for fixing a broken system. It asks: What is replacing child-initiated play?

Part 2 offers strategies for getting back on track, the true definition of child-led play, what to use to assess children's development, scenarios, and the tools needed to make learning visible.

Introduction

Play has become confusing. To cater to the "readiness movement," early childhood teachers are bombarded with different terms used to describe play, or what others have called play-hijacked terms (Pyle & Danniels, 2017; Hughes, 2012; Sands, 2016). Have you heard of any of these? We play with a purpose; we play to learn; we use play-based strategies.

Recognizing that these terms dilute and erase play from early childhood will begin to rectify years of readiness preparation and return home and early childhood settings to places where children's laughter, joy, excitement, and curiosity can be felt, seen, and heard. Teachers and parents need the confidence and knowledge to push back on those who believe play is frivolous and only a break from learning (Yogman et al., 2018). When early childhood professionals see the value of child-initiated play, they can regain the joy and excitement of watching children's learning unfold during play.

Issues

The Play Continuum Confusion

When educators are asked to use one of several types of play continuums, they may think they are providing what healthy development requires. They may be encouraged to believe that descriptors such as guided play, teacher-directed play, purposeful play, play to learn, play-based learning, structured play, play with a purpose, and developmentally appropriate practices are all the types of play children need to

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develop. These play labels have shifted focus away from the importance of child-initiated play and led educators to believe they must plan more didactic, focused activities, increase large-group instruction, or increase small-group, teacher-led activities instead of allowing children to pursue their interests.

Recognizing the Play Hijackers (Pyle & Danniels, 2017; Hughes, 2012; Sands, 2016) embedded in the readiness movement will help restore the characteristics of child-led free play.

The Play Hijackers

- **Teacher Interrupted Play** - Play that originates from a child's interest or curiosity. However, the teacher interrupts it to extend it by asking open-ended questions or introducing tools or additional resources without child input.
- **Teacher Guided** - Merges children's interests with the teacher's intentional learning goals; it is not based on children's development, but may be a technique used to meet a state standard with the teacher leading. Children are required to participate; it does not meet a specific developmental need. Though it may be based on children's interest, it is not child-led.
- **Teacher Planned** – Not initiated by children's interests; instead, structured by the teacher to target specific academic concepts or skills, and carried out with materials like cut-out shapes that are designed to make a product and have nothing to do with the process of creativity, cooking experiences, where the teacher does all the measuring and mixing, science experiences, and literacy experiences. Examples also include the teacher choosing the book, songs, and fingerplays without children's input or in ways not related to children’s interests.

Teacher-directed - Not based on children's interests. Highly structured, explicit teaching, led by the adult.

- The teacher chooses which centers are open and how many children can be in a center at the same time.
- The teacher chooses which manipulatives to open and when circle or Group Time begins.

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- Telling children when it is time to go to the bathroom, lining children up to go to the bathroom, playground, etc.; clean-up time; any transition throughout the day; a schedule that segments subjects, music, language, literacy, art, science, math, breakfast or lunch, time, snack time, nap time, large group instruction with everyone doing the same thing at the same time.

The Issues You Face

Making Meaningful Change

What should teachers do?

White (2012) describes the adult's role as preparing an environment filled with exciting materials, experiences, and objects that promote exploration with open-ended items that can be used in a variety of ways. The adult prepares an environment that fosters curiosity and discovery. The adult listens to children's conversations to identify and use these interests by enriching the environment with new materials to explore.

The Environment and Positive Child Relationships

The teacher's role is to curate an environment that offers enough materials for several children to play at the same time without it appearing cluttered or disorganized. Centers, such as blocks, creative art, housekeeping, manipulatives, book area, science, sensory, and makers areas, can be easily expanded or reduced based on children's interests.

- Store materials in woven baskets or other natural containers.
- Where materials live should be obvious. For example, put a picture of what goes in the container on the inside bottom of the container, so it is easy for children to see where it goes when it is empty.
- The teacher lets children move materials between areas to support their play.
- The environment is comfortable, welcoming, and home-like, with lamps that replace overhead lighting.
- Natural light comes through windows so children can watch bird feeders and squirrels, see trees, flowers, and plants change with the seasons, watch the wind blow, and hear and see the rain and snow.

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- The setting offers living things, things that grow and can be observed both inside and outside. Children help care for them.
- The room is comfortable and has soothing wall colors, lots of natural open-ended loose part materials like tree cookies of various sizes, and natural elements like cotton, other wooden pieces, colorful objects you might find at a discount or thrift store, real items that children can use that represent the cultures of the children in your setting. Consider active equipment, like a hand-crank apple peeler that removes the skin, real pots and pans, a rolling pin, wooden spoons, and cultural cooking utensils in the housekeeping area.
- The room should smell good, represent the cultures of the children in the classroom, have lots of photos of children and their families, and include a comfortable chair or bench where parents can sit while dropping off or picking up.
- A place where every child is welcome, the teacher knows their interests, and listens to children as they ask a question. The teacher uses "I wonder where we could find that?"; I wonder what we have in the room that you could use to make that? All without answering the question, but engaging children in creativity and problem-solving as they consider what they could use or do.
- A place where children run into the room, grab a hug, are excited to be there, and cannot wait to play; where children know the room is theirs to discover and play; an environment that builds positive relationships, and a place where children thrive.
- A place where children learn to listen to their bodies, know when they need to go to the bathroom or when they are hungry, and can meet these needs independently.
- A place where children are viewed as capable and competent, and snacks are available for at least two hours during the morning or afternoon so children eat when they are hungry. Children wash their hands before snack. They can eat a snack with a friend. Snacks are self-serve. Children are provided with rebus photos of snacks and what equals one serving. Measuring cups, tongs for picking up items, and a small pitcher and cups for pouring juice, milk, or water are available. More snacks are available if children are still hungry.

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- For most of the day, children have child-initiated play inside or outside on the playground, or at the park. Children need to be outside in nature for at least two hours per day, regardless of the weather. Exceptions include weather conditions such as thunder and lightning, hail, tornadoes, flooding, or strong wind, etc.
- Throughout the day, the teacher observes children's play without interfering.
- The teacher listens to what children are saying and doing, stays available if an issue arises, and teaches children how to resolve conflicts. When the teacher uses the strategies below consistently, children begin to resolve their own conflicts.

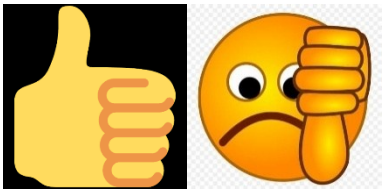
Conflict resolution steps

What happened? For a single child or for more than one, each gets to tell what happened

How did it make you feel? Have an emotion chart so children can point.

What could you do to resolve the problem? If they have one, then move on.

Is that a good choice or a bad choice? I had Thumbs Up and Thumbs Down Images in my pocket on laminated cardstock.



- What else could you do?
- Why don't you try it and see if it works? The teacher stays close but lets the child implement it.
- If the other child does not listen, the teacher says, "I will go with you while you try again," but says nothing; she/he stands behind the child, observing.

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Strategies and Solutions

Reframing What Play Looks Like in Early Childhood

What Children Need to Develop and Learn

The Teacher's Role in Communicating and Implementing Child-Initiated Play

Teachers need tools in their tool belt to observe and determine each child's individual development in the foundations of learning. Teachers must know how to use tools and descriptive scenarios to support children without turning activities into teacher-planned or teacher-directed activities. These tools help you collect information to share with families, reflect on your teaching practices, and determine what you might need to adjust or change to foster the brain connections that form the foundation of future learning.

These strategies may differ from what you might currently use. State standards are not included in what you should be observing. Instead, you will see ways to collect evidence of each child. Part II offers suggestions for how often to observe and collect data, ways to share that information with families, and questions to help you reflect on your practice. You might be asking, when do I have time to do this? Reframing your definition of child-led play and its elements will create a setting that provides the time you need. So, let's get started.

Peter Gray's definition of play makes clear that when others introduce play as a continuum, they do not understand what play is. Peter Gray (Gray, 2013, p.140) offers the simplest and most explicit definition of child-initiated play. Child-initiated play is…

- **Self-chosen and self-directed:** Players freely choose to participate and decide how the activity unfolds, without adult control.
- **Intrinsically motivated:** The activity is done for its own sake. The process and the experience matter more than any final goal or external reward.
- **Guided by mental rules:** Players follow internal concepts or agreed-upon rules that require conscious self-restraint.

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- **Creative and imaginative:** The experience involves an active, alert mind working within a simulated or fictional context that breaks away from ordinary reality.
- **Relatively non-stressed:** It is conducted in an alert and active frame of mind, but one that remains free from intense pressure or anxiety.

Scenarios for Supporting Play

Scenarios of Teacher-Scaffolded Play and Provocations: Notice that all elements of child-initiated play are present.

Teacher-Scaffolded:

Scenario 1: Without being obvious or getting too close, the teacher carefully observes the children engaged in child-initiated free play. The teacher listens and takes running records or time samples of what the children are doing. The teacher listens carefully for raised voices that do not sound exciting and may be a disagreement. The teacher may also listen to children discussing something they need. Whatever the scenario, the teacher waits to see whether the children can resolve the issue or find a creative way to get or make what they need. If the children resolve both scenarios on their own, the teacher quietly walks away. If the children ask for help or the disagreement escalates, the teacher asks open-ended questions to help the children reach a solution.

- *Example: Children need something to continue their play and ask for help. The teacher asks questions like, "Hmmm, do we have something like what you are looking for in another area of the room?" Alternatively, "I wonder if there are materials in the room you could use to make what you need?" The teacher never solves the problem.*
- *Conflict: If children are in conflict, have not been able to solve the problem, and look for help, the teacher asks, "What happened to one child?" How did that make you feel? What should you do? Or what have you tried? (ensuring the statement is a good choice) The teacher suggests, " Go ahead and try again. If it is not a good choice, the teacher asks, " What else could you do? The teacher*

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repeats the same questions with the other child until they can resolve the conflict.

Provocations: *The teacher carefully observes children at play, using authentic observation strategies to assess each child's level of development in all domains. The teacher intentionally listens to children's conversations, perhaps conducting a language sample by writing down children's questions or interests. From these conversations, the teacher may plan a provocation that will be available the next day. No child is required to participate; the teacher does not guide or direct, and it happens only because of children's interests.*

Building the Foundations of all Future Learning

Instead of reading skills, math skills, writing their name, or a myriad of other ineffective learning activities. This section provides content for what teachers can observe. This includes how children approach play, the habits they use in play, where they are in the learning cycle, how they use schemas in play, how those schemas are evolving, and where they are in the developmental milestone domains. These tools are not meant to correspond with the child's chronological age. Instead, they provide information on their developmental age. See the link to the free CDC Developmental Milestone Charts in the Reference section.

Approaches to Learning

Approaches are how children approach or engage in learning. During the day, the teacher authentically observes a child or children using the approaches-to-learning indicators. Identify where the child is by highlighting the indicators, then provide a running record describing the child's progress. Date the form. *Do this at least once per quarter,* and use it to explain to families how children learn the foundations of all future learning.

Reflect: *If children's approaches are limited, the teacher should ask what could be changed or added to scaffold the child's approaches. These observations go into their portfolio to share with families.*

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Curiosity and Initiative	Persistence and Engagement
Selecting Activities Independently	**Staying focused and finishing what they started**
Asking Open-Ended Questions	Working Through Challenges or Frustrations
Exploring new materials	Returning to an unfinished activity or long-term project
Initiating Play or Showing a Preference	-
Planning, Cognitive Flexibility, Problem Solving, Seeking Help	**Self-Regulation and Task Management**
Planning is setting a goal for what they want to do.	Moving from one activity to another with minimal stress or guidance
Cognitive Flexibility is taking a material and using it in a non-traditional way	Following a 2- or 3-step direction
Asking for help or assistance when they recognize they are stuck and cannot accomplish what they set out to do.	Demonstrating impulse control by waiting for a turn or sharing toys.

Source: (U.S. Department of Health and Human Services, 2015)

Positive Learning Habits

Another foundation for future learning is developing positive learning habits. Teachers should provide large blocks of time, at least 1-2 hours of uninterrupted play several times throughout the day, both inside and outside. Children engage in child-led play, and the teacher/s conduct authentic observations to identify which positive habits they have developed and which negative habits are present.

Reflect: *If negative habits are present, ask what you could provide that is aligned with the child's interests. One strategy is to ask the child, What would you like to see added to the environment?*

Observe the habits in both columns for each child using running records or by printing this sheet; *do this at least once per month*, and track the children's positive habits as evidence to make learning visible.

Reflect: *Ask yourself: Are you giving children opportunities to develop Positive Habits, and are you reflecting on what more you can do?*

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Positive Habits of Learning	Habits that Interfere with Learning
Being Curious	Lacks Curiosity
Showing interest in exploring the environment	Looks around, not able to choose where to play
Engaged in an activity they selected	Only able to stay with one activity for a short time
Exploring new materials	Cautious of approaching something new
Taking initiative	Waits for someone to direct them
Demonstrating Independence	Not able to play
Asking open-ended questions	Not asking questions
Expressing their interests	Crying, throwing a temper tantrum
Sustaining focus on their selected activity	Easily distracted
Persistence	Unable to keep trying
Returning to a long-term project after an interruption.	Abandoning their play
Setting a goal	Unsure what to do or where to start
Trying new ways to accomplish the goal	Giving up
Using materials creatively or in a non-traditional way	Only using materials in the way they are designed to be used
Seeking help	Being helpless

Source: (Yogman et al., 2018)

Fostering the Development of Autonomy and Agency

Autonomy is an internal developmental milestone reflecting the child's ability to think independently, make decisions, and regulate their body (OECD, 2021). Look for attempts to solve issues or situations, such as a conflict with a peer, without adult interference. Look for awareness of their body. When children decide they are hungry and take steps to eat a snack, can they dress themselves? If so, what clothing have they mastered? Hanging up their backpacks and coats, keeping track of their items. Showing that they are doing things because it is the right thing to do (intrinsic motivation) without seeking adult approval or a reward. Emotional self-regulation, managing impulses, and recognizing when they feel overwhelmed or need a break. Developing autonomy helps them wire their brains and build the foundation for future learning.

Observe each child's development of autonomy each quarter, and provide progress notes in the child's portfolio.

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Agency represents the child's right to express views and initiate action. This includes choosing where they will play, whom they will play with, and what they will play (OECD, 2021). Indicators of child agency include child-led play, access to materials, and the ability to decide how and when to use them. Children also have input into classroom rules, what they want to learn, and the daily routine. Children can express preferences, ideas, or disagreements, and teachers incorporate them in the setting. Agency helps wire their brains and build the foundation for future learning.

Observe each child's agency at least once a quarter. Write down brief descriptions of their progress in thinking independently, making decisions, regulating their body, solving problems or issues, and building self-help skills.

Reflect: *Ask yourself how you are providing opportunities for children to develop Agency and Autonomy and adjust as needed.*

Learning Cycle

The learning cycle is another tool that teachers can use to see where children are in their ability to complete the entire cycle with one activity the child selects. Do this each quarter and place it in the child's portfolio. How children move through the Learning Cycle is one way they wire their brains and build the foundation for future learning. You may date each observation and highlight the steps they accomplished with one activity they selected to track development.

Reflect: *Do children have enough opportunity, materials, and time to complete the learning cycle?*

Curiosity	**leads to**	**Exploration**
Exploration	**leads to**	**Discovery**
Discovery	**leads to**	**Pleasure**
Pleasure	**leads to**	**Repetition**
Repetition	**leads to**	**Mastery**
Mastery	**leads to**	**Confidence**
Confidence	**leads to**	**Self Esteem**
Self Esteem	**increases a**	**Sense of Security**
Sense of Security	**results in**	**Curiosity**

Perry (2001)

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The Importance of Schema Play

In Piaget's Theory, he describes how children construct knowledge by using schemas (Piaget, 1954). Heather Bernt-Santy (2025) discusses Chris Athey's research exploring Piaget's discussion of schemas.

Schemas are patterns of behavior and thinking that children exhibit during child-initiated free play (Bernt-Santy, 2025). Children do not recognize what they are doing or why. Schemas are innate brain-wiring patterns of repeated behaviors children use to make sense of the world around them.

They are not a once-and-done activity. They happen as children develop, starting in infancy. Children will continue to practice each schema with different materials, in different locations (indoors, outdoors). Each time a child repeats a schema, they are strengthening the connections in their brain. Schemas show how play forms the foundation for future learning.

Observe schema play often, use the form below to describe what children were doing, and take a photo of what they did, placing it in the child's portfolio.

Reflect: *As you observe schema play, ask yourself how you can provide engaging materials that children could use as they develop and strengthen their schemas. Caution: The teacher does not model or teach schemas.*

Schema Observations

Positioning **Lining things up, creating patterns**	

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The Transforming **Mixing things to make something new**	
Orientation **Looking at themselves, or objects from different angles, upside down, etc.**	
Transporting **Moving items from one area to another area** **Different containers or objects**	

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Rotation **Move, spin, rotate, and twist objects or move their bodies in this way**	
Trajectory **Throwing things, swinging, watching things bounce, building blocks, knocking down**	
Connecting **Putting things together, taking them apart, linking**	

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The Enveloping **Completely hiding objects or themselves. Building forts, hiding in clothing racks, burying themselves in blankets and pillows**	
Enclosing Schema **Children exploring the enclosing schema like to contain things using borders and enclosures.**	

Adapted from Bernt-Santy 2025

Schemas are a lifelong skill. Here are just a few examples.

- Transporting items while grocery shopping, moving furniture
- Lining things up in the pantry or organizing tools for a project.
- Rotating things as you cook or design.
- You transform items as you cook.
- You use orientation and connecting schemas as you build something with instructions.

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- You use the enveloping schema when you pull the covers over your head; alternatively, when you hide yourself in a tent while camping.
- You use the enclosing schema when you plant flowers or rearrange your furniture.
- You use the trajectory schema when you play a sport or throw a ball.

Developmental Milestones

Use developmental milestones from the Centers for Disease Control and Prevention: U.S. Department of Health & Human Services. These are free and range from 2 months- 60 months. Observe developmental milestones at least twice per year and share them with families.

Reflect: *Keep a set with ages to monitor the child's development and know when a referral for screening might be advised. When sharing with families, remove the chronological age and show which milestones the child has reached. You can cut and paste from different age groups to accurately show and share where the child falls across each domain for each family.*

Developmental Milestone Charts

Conclusion

Pushing Back and Reviving Child-led Play/Free Play

Redefining the role from teacher to play facilitator is how to institute child-led free play. Here are some tips to get you started.

- A facilitator who acknowledges that children are capable rather than needing teacher guidance and control, and who recognizes and values child-led play as a biological necessity rather than a break from learning.
- Is aware that children's chronological age does not align with their developmental age and uses the Centers for Disease Control and Prevention (2025) to determine each child's development.
- Makes learning visible to parents and administrators by using authentic assessment strategies, work samples, photographs, documentation boards, running records, and other artifacts.

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- Uses knowledge gained through observations to enhance the environment based on children's emerging interests or inquiries
- Uses these interests as the source for a project or study, moving away from purchased or teacher-determined curriculum or repetitive monthly themes.

In Part 1, you have been given some reasons for the play deficit.

In Part 2, you have been given some strategies for pushing back. These papers do not cover all the reasons early childhood educators struggle to provide child-led free play. If this topic interests you, there are many more authors in the 2026 IPA USA White Paper and in the 2024 IPA USA White Paper. These are excellent resources for you and can be found at IPAUSA.ORG/WHITEPAPER

The Case for Play

An important next step is to gather the language you feel comfortable using to "push back" on what harms children's development and "push in" on child-initiated free play. Frame them, and put them up on walls or in the hallway so visitors and families can see why child-initiated FREE play is how children learn.

The following resources are just the beginning of your journey to protect childhood. Included are quotes from theorists that describe how child-led play is a biological necessity for building the foundations of future learning. Myths about play and school readiness, a link to the U.N. Article 31 on the rights of the child to play. Information from the American Academy of Pediatrics about child-led play. Some of these suggestions are also on the Reference page.

- In 2025, the American Academy of Pediatrics reaffirmed a 2018 clinical report, The power of play: A pediatric role in enhancing development in young children. *Pediatrics*, 142(3), Article e20182058, by stating, "Child-led play is a singular opportunity to promote the social-emotional, cognitive, language, and self-regulation skills that build executive function and a prosocial brain. Furthermore, play supports the formation of the safe, stable, and nurturing relationships with all caregivers that children need to thrive." That play builds executive functioning. "Play is not frivolous: it enhances brain structure and function and

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promotes executive function (ie, the process of learning, rather than the content), which allows us to pursue goals and ignore distractions," and warns that when play and safe, stable, and nurturing relationships are missing, "toxic stress can disrupt the development of executive function and the learning of prosocial behavior, (para 1-3).

- The American Academy of Pediatrics describes child-led play as essential to cognitive, language, physical, social, and emotional development, along with positive, loving, and consistent relationships as children play (Ginsburg, 2007).
- To see how the brain creates connections, examine how neural pathways develop. Free play creates these neural connections, promoting development across physical, social, emotional, and cognitive abilities. Free play wires the brain for the skills we will use throughout life. These skills include "physical agility, social confidence, emotional regulation, creativity, and resilience (Brown & Vaughn, 2009).
- In the book Play Across All Spaces, edited by Erin Casey and Courtney Dewhirst (2026), we gain more insight into why child-led play is a biological necessity for young children's healthy development.
- Ginsburg (2007) explains the benefits of child-initiated play, describing opportunities to use creativity, imagination, and physical, cognitive, social, and emotional strength, which are development's building blocks.
- Myths about Play and School Readiness- Please note my description of where I got these and verify before using.
- Children's development: NAEYC (2020) explicitly establishes in Principle 1 that all domains of child development—cognitive, physical, social, and emotional—are interrelated and interdependent, meaning development in one domain influences and is influenced by development in other domains.
- Panksepp states that "play is not just something that keeps kids busy, but instead 'activates fundamental biological systems that support learning and development,' p. 5.
- Panksepp (2007) reminds us that brains are wired for play, which allows us to adapt to new experiences. Panksepp (2007 continues by stating that play allows the brain to adapt to new experiences.

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- Pellis and Pellis (2009) describe how child-led play stimulates development in the areas responsible for executive function and social and emotional development.
- Bruce Perry (2001) discussed how play contributes to children's understanding of the world around them. With the school readiness movement focused on academics, Perry reminds us that a child's curiosity and active exploration of the environment fuel development. As this cycle repeats, children's curiosity and motivation grow strongerPointer (2026, para. 1): "Play is crucial for supporting healthy development; promoting stable, nurturing relationships; and mitigating toxic stress. A child's play experience can impact their physical, mental, and social-emotional health outcomes."
- Porges (2009 describes how play supports our ability to handle stress and connect with others when children's play promotes enjoyable interactions.
- PowerPoint of my slides from theorists. I have permitted you to edit -PowerPoint Slides of Theorist Quotes
- Schamuhn, T. (2024, November 6). The Power of Play with Peter Gray [Episode 105]. The Child Psych Podcast. Spotify/Publisher.
- Stuart Brown (2014), a leading psychiatrist, author, and founder of the National Institute of Play, discusses how play deprivation disrupts normal development of social, emotional, and creative problem-solving and can carry serious consequences for the individual and the public.
- The United Nations Convention on the Rights of the Child (UNCRC) recognized childhood as "a special, protected time, in which children must be allowed to grow, learn, play, develop and flourish with dignity." Article 31 states, "Every child has the right to rest, relax, play and to take part in cultural and creative activities.... Children also need leisure, defined as time and space without obligations, entertainment, or stimulus, which they can choose to fill as actively or inactively as they wish" (United Nations, 1989, Article 31).

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Explorers and Detectives: The Multimodality of Children's Literacy Development Through Play and the Role of the Educator

Emma Melo, BA

Introduction

The decision to research the topic of children's literacy development through play came about as a request for a faculty professional development on supporting emergent literacy, and my own fascination with how educators in Reggio Emilia refer to the "mysterious signs and symbols" of emerging literacy and numeracy as "the codes" (Chieli, 2025). In 2025, I attended the Students and Professors Study Group, L'approccio educativo di Reggio Emilia, at the Loris Malaguzzi International Center in Reggio Emilia, Italy, to deepen my understanding of Reggio Emilia's innovative approach to early childhood education.

I came to the conference seeking answers to many questions, including how literacy is learned and taught within the Reggio Emilia context, and whether there was any formal preparation for primary school. After three days of attending presentations, studying documentation and artifacts of children's work, visiting schools and ateliers, and conversing with teachers and pedagogistas, it became clear that children in Reggio schools were developing complex literacy skills and habits through play and project work, without formal academic or prescribed curricular instruction. Instead, the teacher's role was to help children "fall in love with the codes," or in other words, to support the journey and natural desire through which children explore, use, play with, and make meaning from the "fascinating and mysterious" marks, signs, and symbols of their culture (Chieli, 2025).

As an ECE practitioner who appreciates the complexity of both children's learning and the role of the teacher behind this simple statement, "falling in love with the codes," I was led to ask the following questions: how do children develop literacy skills and habits through play; how can early childhood educators support emergent literacies and protect play; and, how are children's use of "the hundred languages" as termed by the Reggio approach (Edwards et al., 2012) evidence of developing literacy skills?

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I am the Pedagogical Coordinator at the Highland Presbyterian Church Nursery and Weekday School in Louisville, KY, USA, where I facilitate emergent and contextual curriculum, project work, and professional development. I am also a faculty member in the children's program at the Louisville Ballet School and a lifelong dancer. I am an early childhood education professional, an advocate for children's rights, and a promoter of the arts. I firmly believe that the early childhood years are the most important time for the development of the human brain and body, and that the early childhood educator plays a crucial role in supporting and facilitating this growth. As an artist and educator who embraces the pedagogical philosophy of "The Hundred Languages of Children" (Edwards et al., 2012), I know firsthand the value and legitimacy of human expression through multiple modes and media. I also believe the professions of ECE and arts education are undervalued and under-supported, and I aspire to amplify the voices and work of children and educators who have historically been unheard and unseen.

In researching this topic, I selected publications mostly from the last five years within a constructivism paradigm that aligns with my teaching and learning philosophy. I also chose postmodern research paradigms that challenge dominant, narrow, or static thinking. The methods and tools used to collect and interpret data (Mueller et al., 2024) are familiar to my pedagogical practices of observation and documentation.

Background

Current frameworks conceptualize literacy as being social, cultural, contextual, and multimodal (Torres-Begines et al., 2025). Multimodal literacy refers to a flexible and expansive repertoire of expressive communication and meaning-making, including sound, movement, gesture, gaze, marks, symbols, digital expressions, signs, silence, language, and artistic expression. It expands a traditional definition of literacy beyond dominant and privileged text and verbal modalities and systems by attending to "acts of meaning" and "literacy events," interactions, and "unseen" or "minor" encounters that children have with literacy (Boardman, 2022; Edwards et al., 2000; Lancaster, 2014; Smith, 2021; Theodotou, 2024). According to Hennison (2013), who researched the interdisciplinary ways children explore literacy and numeracy to "decode" their

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environments and make sense of their experiences, children seek and use multimodal literacies with a variety of media to express ideas, reason, problem-solve, collect and organize data, communicate, and create meaning. This blurs the traditional boundary between thinking and approaches that separate the fields of "math" and "literacy." Children and infants are naturally holistic and integrative in their communication methods and use what Reggio Emilia schools call "the hundred languages" to convey and support different stages of expression and meaning-making (Edwards et al., 2000). Theodotou (2024) calls this "the pedagogy of modalities," which she believes is critical in early childhood settings to understand how young children communicate and express thoughts through diverse modes beyond traditional spoken and print methods. This integrated and interdisciplinary multimodal approach to literacy aligns with Howard Gardner's theory of multiple intelligences (Gardner, 2024), which theorizes multiple ways of knowing and learning, and offers broader perspectives and amplified meaning (Edwards et al., 2000), especially if we consider how children socially construct knowledge through play about the world around them.

As we consider this expansive view of literacy, education policies in many countries are narrowing their approach to early literacy development, focusing on systematic curricula, mandates, and demands for quantifiable learning outcomes (Boardman, 2022). In contrast, children demonstrate an innate desire to communicate, share ideas, understand, use, and make meaning with the codes, signs, sounds, letters, numbers, and symbols of their culture through play. They also demonstrate comprehension and skills in their multimodal and collaborative explorations of literacy by using and creating marks, drawings, gestures, movements, sounds, and symbols, including those of their own invention (Lancaster, 2014; Smith, 2021; Theodotou, 2024). This provides evidence that child-led methods of exploring literacy (Theodotou, 2024) and the Reggio Emilia approach of the "hundred languages" (Inan, 2021) effectively support literacy development. Therefore, we can deduce that if these methods are considered play-based learning, then intrinsically motivated, playful exploration of cultural signs and symbols is indeed a way to "fall in love with the codes" (Chieli, 2025). So, as practitioners, we must ask ourselves: what should we pay attention to to see this evidence for ourselves?

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If children learn *through* play, it makes sense to closely observe and listen *to* their play to examine and hypothesize what they are trying to learn. Multiple studies document playful literacy events where children were observed using literacy with meaning and purpose, demonstrating skills and writing habits prior to formal teaching of skills, thereby challenging the binary thinking of play/rest and work/leisure (Henningson, 2013; Smith, 2021; Theodotou, 2024; Torres-Begines et al., 2025; Yopp & Yopp, 2009).

Smith (2021) describes an overlap between children's literacy events and play as a symbiotic relationship, showing evidence that children use literacy as part of their play and that exploring literacy can be considered play. Smith's (2021) research points to a widely accepted definition of play as intrinsically motivated and pleasurable, and draws a parallel to how children also show a natural interest in sharing and using familiar cultural symbols. Smith (2021, p. 149) calls this sociocultural relationship between play and literacy "playful writing," in which literacy and play benefit each other in ways that are intrinsically motivating, collaborative, enjoyable, and social. Smith (2021, p. 152) suggests "playful writing provided children with feelings of excitement as well as togetherness, for example, when they wrote cards for each other, or created treasure maps together." Theodotou's (2024) research similarly shows that children, without any prior formal instruction, demonstrate literacy skills and engage in writing activities during play that reflect their own experiences, such as creating messages, invitations, and signs.

Holm and Ahrenkiel (2024) focus on the multiple functions of language play, in which children primarily use sounds, body movements, and the manipulation of objects or materials to create structures such as rhymes, rhythms, repetition, and patterns. Holm and Ahrenkiel (2024) referred to what Kusters et al. (2017) call the "semiotic repertoire" of multimodal communication, or the "totality of resources" children engage in socially and playfully. Interestingly, in my own documentation, I had begun calling the collective, intentional, and often jubilant, if not defiant, noisemaking of infants and toddlers, "glee parties," only to discover that Holm and Ahrenkiel use the term "glee concert" to describe the same phenomenon. By observing and appreciating the meaning behind children's "glee concerts," including the sounds, dynamics, repetition,

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movements, word play, nonsense rhymes, etc., we can learn that children are socially and "formally" practicing complex language skills and developing paths to literacy (Holm & Ahrenkiel, 2024). These sound, language, vocalization, and word-play exercises build phonological awareness, which lays the foundation for primary-grade phonics and reading instruction. Holm and Ahrenkiel (2024) found that children also used language play in combination with body movements and object manipulation, such as toys, puzzles, or materials, as possible means to communicate beliefs and identities, to compete for or attract attention, create soundscapes, explore power, reflect on emotion, disagree, co-construct, and improvise. This supports evidence that children are integrative and multimodal in their language play, expression, and comprehension, layering meanings, sharing knowledge, and exercising social/emotional dynamics and skills in their language play.

Further demonstrating the complexity of children's emergent literacies, Lancaster (2014) studied the mark-making and graphic artifacts of children's mappings and inventories, observing how children could create frameworks and structures of symbols and marks. This "symbolic architecture" may be considered pre-syntax, given its similarity to the syntactic arrangements of formal writing systems (Lancaster, 2014). We can then draw a parallel to what Holm and Ahrenkiel (2024) observed: children may also create frameworks of sounds and movements within patterns, rhymes, rhythms, and dynamics.

How then can learning environments support this intrinsic desire to play and learn? Children search for meaning through an innate drive to interact with people, things, and places. Therefore, literacy- and language-rich environments that are motivating, contextually and culturally meaningful, and aesthetically appealing can provoke and support children's explorations of literacy. (Edwards et al., 2000; Inan, 2021; Theodotou, 2024). Smith (2021) defines writing as a byproduct of the creative relationship between the human and the non-human (i.e., tools, materials, time, space, and movement), suggesting the non-human as a protagonist with creative properties or affordances. This idea of a richness of available media for children that offers infinite possibilities for creative action is widely supported. Edwards et al. (2000) affirm that choice, affordance, variety, time, and access to materials and media can enable or

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restrict opportunities for creating messages and communications. The unique interactions of the human and non-human protagonists also vary depending on time, place, mood, weather, light, and many other factors. Therefore, learning environments must be spaces that motivate children toward creative action. If creativity and relationship-seeking are not happening, despite adults' perception of a rich environment, we might ask ourselves as practitioners: what do we need to change or add to motivate children's intrinsic desire to make meaning?

In their challenging post-qualitative article, which aims to "trouble" mainstream adult thinking, definitions, and approaches to literacy, Torres-Begines et al. (2025) suggest the ability of humans and "more than human" (in particular, but not exclusive to spaces and things) to have individual agencies and creative abilities in their unique "intra-actions." They suggest, "these unruly edges shelter the emergence of wild literacies, that is, those which are in the messy and provisional area between 'literacy' and 'not literacy'..." (Torres-Begines et al., 2025, p.213). While this deconstructive and critical thinking is on the outer edge of mainstream theories and may give us pause, it supports the well-documented creative and constructive potentiality between children and a variety of tools and media, and asks us to disrupt traditional and dominant definitions of what is literacy, who is literate, how we learn literacies, and who gets to decide. This stance also challenges a deficit lens often held by adults and those in positions of power by supporting a broader definition of literacy through the holistic view of multimodal literacies. Therefore, if we are to create literacy rich, motivating environments that support multimodal expression and meaning-making, then we might consider this challenging stance of Torres-Begines et al. (2025) who suggest in their critical study that "children's spaces" should be places for educational opportunities, co-construction, literacy events, and relationships, not "spaces for children" created by adults, where children are deemed "safe" and the adults are off-duty.

Appropriate Strategies

As stated in the Convention on the Rights of the Child (1989), children have the right to play, leisure, arts, and culture, to have a voice, to express themselves, and to freedom of thought. This means children have the right to a playful childhood where

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their voices and ideas are heard. They have the right to participate in decisions that affect them; therefore, children deserve to be seen by adults as competent to direct and participate in their own learning and interests. In their multimodal use of literacies in play and observed literacy events, children demonstrate empowerment, pride, leadership, focus, decision-making, collaboration, confidence, joy, empathy, and agency (Henningsen, 2013; Smith, 2021; Theodotou, 2024). However, a contradiction exists in education policy: it acknowledges that play, open-ended by nature, is the primary mode of children's learning, yet it focuses on measurable learning outcomes and implementing play-focused curricula. (Smith, 2021; Theodotou, 2024; Torres-Begines et al., 2025). Smith (2021) argues that play-based curricula cannot be considered "curriculum" at all, as play, by its very nature, is open-ended, and the use of terms such as "quality" and "performance" to describe play, as applied by policy directives in an attempt to measure its effectiveness, is contrary to the autonomous, free-flowing nature of play. This is likely to cause confusion and anxiety for educators, administrators, families, and children as they feel pressure to focus on "school readiness." Furthermore, most empirical research on literacy development overlooks early childhood and focuses on primary grades (Smith, 2021). Facing policy directives that contradict and confuse theories and pedagogical practices of learning and human development, and that disconnect play from literacy learning (Smith, 2021), early childhood educators must position themselves as strong advocates for children's rights.

The studies reviewed for this paper highlighted the teacher's crucial role in extracting meaning and evidence from children's developing literacy skills, and pointed to the need for educators to become active researchers in their work with children. The early childhood educator's role as an up-close, playful, compassionate, researcher of children's work and play, who collaborates, listens, observes, interprets, theorizes, plans, designs curriculum, documents, scaffolds explorations and skill development, makes learning visible, upholds the rights of the child, and communicates with and involves families and community partners was the key to finding means to support children's developing literacy and numeracy skills (Boardman, 2022; Edwards et al., 2022; Henningsen, 2013; Inan, 2021; Smith, 2021). Teachers can support children’s developing literacy in play, as well as their voices and rights, by “amplifying the gestures

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and words of the child" and "sharing this with other children" (Chieli, 2025). Smith (2021) encourages educators to lean into children's integrative modalities with "close observation of the multimodal movement of play" by "focusing on the fine details" to "explore these moving and often unexplored aspects of literacy" and to synthesize and seek deeper meaning (p.154-155). The studies all point to the importance of keen observation, documentation, and interpretive skills in order to make meaning and learning visible.

Smith (2021) suggests that ECE teachers are also in a unique position, given the age of the children and the contexts in which they work, to self-create a values-based approach to literacy development, share it professionally, and leverage policy change through their own practitioner research. Henningsen (2013) describes the teacher's role as an active, up-close participant in knowledge-making and as a designer of curriculum based on children's emerging work, rather than a traditional or prescribed curriculum. Based on Henningson's (2013) and Smith's (2021) observations, the early childhood educator is better described as a teacher/researcher/activist. Indeed, a fundamental aspect of the educational philosophy of Reggio Emilia schools is their interpretivist approach to co-creating knowledge and meaning (Inan, 2021). Hence, we can see the importance of access to conferences where educators can share their work and learn from other practitioners/researchers, potentially advancing the ECE profession and filling gaps in research. A more robust ECE profession does not require a more academic curriculum for young children. Instead, it means that adults have the responsibility to recognize the uniqueness and importance of early childhood learning and to actively support, engage in, and protect those early years.

Conclusions

The idea of "teacher as researcher" has become a major focus of my workplace professional development. We have collectively continued this study of early literacy by co-constructing knowledge through examining our practices and documentation, consulting external resources, and participating in hands-on learning opportunities. I continue to research how play in early childhood builds reading and writing skills, and specifically, how the latest findings can be appropriately applied to early childhood

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literacy development in ways that protect play and early childhood from academic pushdown. We aim to fill the research gap with our own findings. We must continually align our values and practices with theory to support young children's learning and rights. However, we must be wary of complacency and not be afraid to challenge dominant powers, or to become overly reliant on research while ignoring the evidence before our own eyes.

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Children's Right to Play: Nurturing Social-Emotional Learning (SEL) Through Play in Early Childhood

Lin Moore, PhD, Texas Woman's University & Elaine Zweig, PhD, Educational Consulting

Introduction

The recent focus on the critical value of social-emotional learning for young children requires a re-examination of the role of play in supporting whole-child development (OECD, 2021; The Lego Foundation, 2018). Social competencies are a set of social, emotional, and cognitive skills that allow children to interact successfully with peers and adults (Ecological Approaches to Social Emotional Learning Laboratory, 2024; Schmidt, 2019). The prefrontal cortex manages these skills and takes time to learn and apply appropriately across various settings (Bergen, 2007; Springer, 2020). Early childhood educators, parents, and caregivers, as caring adults, are uniquely positioned to provide opportunities for children to acquire and practice social competences through playful learning.

The Issues: Social and Emotional Learning (SEL)

Social skills and how to manage one's emotions do not develop automatically. Young children listen to and watch the adults and family members around them. They learn how to handle various situations by imitating others. However, the behaviors and emotional responses they acquire through modeling may be inappropriate or socially unacceptable. Children exposed to name-calling, yelling, and hitting will likely use these same strategies to get their needs met.

Direct teaching of social skills may also be ineffective. Telling a child, "Be nice to your friends," does not specify how to maintain authentic, reciprocal relationships with peers. Similarly, telling a young child, "Don't cry; you're fine," does not acknowledge the physical pain or emotional hurt that the child may be feeling. These types of statements lead us to ask how best to support young children's social competencies and emotional well-being. Is play an essential pathway for SEL?

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The Collaborative for Academic, Social, and Emotional Learning (CASEL, 2024) defined social and emotional learning as "the process by which all young people and adults acquire and apply the knowledge, skills, and attitudes to develop healthy identities, mange emotions and achieve personal and collective goals, feel and show empathy for others, establish and maintain supportive relationships, and make responsible and caring decisions." Furthermore, five primary competencies are central to social and emotional learning: **Self-awareness, self-management, social awareness, relationship skills, and responsible decision-making.**

Background

Children's Play and Social Competencies

Examining how children's play promotes the development and maintenance of social competencies can lead to positive change. While there are multiple definitions of play, researchers and experts generally agree that play is active engagement in activities that are "fun," which impart feelings of pleasure and joy (Brown & Vaughan, 2009). Play is voluntary, self-chosen, and self-directed, intrinsically motivated, creative, and imaginative (Gray, 2023). Curiosity is the force that drives play and meaningful learning (Schmidt, 2019). Playful learning encompasses free play, guided play, and games with rules (Zosh et al., 2018). Early childhood educators, parents, and caregivers determine the environments, materials, and timeframes in which children are allowed to initiate, explore, and lose themselves in play. Different types of play afford specific opportunities for children to develop the five competencies identified by CASEL.

Sensory play involves bins filled with kinetic sand, rice, beans, or pasta; water play; finger painting and painting with feet; light tables and shadow boxes; scent or taste explorations; and making slime or playdough. Through sensory play, children become **self-aware**, notice likes and dislikes, and build self-confidence in their ability to discover and take control of their immediate environment.

Physical play includes dancing, jumping, and hopping to music; yoga and other exercises; chasing and circle games, obstacle courses, and relay races; balls, balloons, and Frisbees; and parachute activities. Successful play requires **self-management** of one's own body and one's emotions. Children define and work toward goals, handle

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stress, persevere to overcome challenges, participate in cooperative and competitive activities, and learn to express feelings appropriately.

Social awareness focuses on recognizing and valuing individual and group similarities and differences, as well as empathizing with others. **Imaginative play** offers children opportunities to experience multiple perspectives and develop empathy through make-believe and storytelling with puppets, dolls, stuffed animals, and action figures. Enactments of dramatic play with props and costumes allow children to role-play both real and imagined situations that require social interactions and negotiations. Board games, card games, call-and-response games, and guessing games are **games with rules** that necessitate social interactions and turn-taking with play partners. Children learn persistence when games are challenging, and recognize the value of fairness when playing with others.

Construction play involves building with blocks and accessories, designing roads and ramps for cars, trains, marbles, or balls, and creating structures with loose parts, Legos, Duplos, Tinker Toys, and Magna-Tiles. Although construction play may be solitary, it more often requires **relationship skills** to plan, implement, and deconstruct or destroy the desired products. Establishing and maintaining friendships, while managing interpersonal conflicts, are critical components of healthy relationships. Children learn to invite others to play, ask for help when needed, and share ideas and resources cooperatively.

Responsible decision-making involves considering relevant factors, anticipating potential outcomes, and acting with respect for others. **Exploratory, nature, and creative arts** provide avenues for responsible decision-making. Examples of **exploratory play** include investigating how things work, conducting simple science experiments, exploring cause-and-effect with objects, solving puzzles, and engaging in scavenger hunts. **Nature play** focuses on observing birds, insects, and other wildlife; collecting and classifying samples of leaves, rocks, and other natural objects; digging in dirt and mud; and caring for plants. **Creative arts play** involves drawing, painting, sculpting, and printmaking with various media to produce designs, collages, murals, mosaics, 2-dimensional, and 3-dimensional artworks. In addition,

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creative arts play includes creating and using musical instruments and sound makers, singing songs and fingerplays, writing and illustrating stories and poems, and making self-authored books.

Special Considerations

Although play is universal, the materials and context of play should take into account children's cultural, linguistic, and socioeconomic contexts (Bressan & King, 2022). For example, selecting multicultural and bilingual books, stories, and songs helps children feel a sense of belonging within a supportive community of learners. Dramatic play props and costumes that reflect the children's cultural and family backgrounds allow meaningful role-playing with familiar objects and settings. Games derived from community and cultural traditions support the languages and ethnic identities of the children involved.

As early childhood educators, parents, and caregivers create inviting environments, select materials, and allow for extended periods of children's play, they should also consider the level of adult intervention or direction. Free play is child-chosen and child-directed, within safe parameters. Adults provide space, time, and materials while leaving the decision-making to children. Sensory play and creative arts play are often settings for free play. Guided play focuses on specific learning goals that require some adult guidance or supervision. Exploratory play, such as science experiments and nature play, such as caring for plants, and digital play, such as coding and programming, are examples of guided play. Games are excellent settings for children to practice social awareness and relationship skills, as well as self-management and responsible decision-making. Adults may introduce the basic rules of gameplay, but allow children to negotiate turn-taking, rule adjustments, and conflict resolution. It is important to acknowledge that social and emotional learning and the various types of play occur within relationships (National Scientific Council on the Developing Child, 2004). Nurturing adults provide a climate that is emotionally warm and physically safe for each child, while encouraging risk-taking that is appropriate for the child's individual abilities, developmental age, and background. Friendships with peers will

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blossom in a learning community where every child is valued and feels a sense of belonging.

Recommendations

Is play an essential pathway to SEL? We can answer, "Yes!" when adequately supported by policies, procedures, and the stakeholders in Early Childhood Education. The following are some recommended components for success.

1. Agreement among stakeholders (educators, parents, caregivers, and policymakers) that play is a fundamental right of children and a foundation for development in the social, emotional, physical, and cognitive domains.
2. Preparation for preservice teachers and childcare workers that incorporates the acquisition and practice of skills to observe, assess, and support children's play.
3. Ongoing professional development for early childhood educators and caregivers to plan and implement environments (indoor and outdoor) and select materials that invite playful explorations.
4. Policies that provide large blocks of time for children to engage in meaningful child-initiated play activities in early childhood education and community programs.
5. Funding for equipment, materials, and supplies that adequately support various types of playful learning in programs for young children.

Conclusion

Children need joyful, playful learning to develop social competencies and emotional well-being. It is time for adults to stand up and advocate for children's right to play at home, in their communities, and in their school and educational settings.

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Is Risk the Reward? Toward an Emphasis on Risk-taking and Decision-Making in Play and Learning Spaces

Alissa Rupp, FAIA

Introduction

To thrive in an ever-changing world, children develop and improve their ability to adapt. Adapting successfully requires trying new things, preferably in a context where "failure" is survivable. The instinct to protect children from failure is strong, so adults often shield children from contexts perceived as risky. Yet this can limit children's opportunities to adapt or learn from bad decisions when the stakes are low (Vedantam, 2025), leaving them unprepared when the stakes are higher. Children's museums provide a unique environment where parents trust that children are safe, children encounter new challenges in a playful space, and adults and children alike learn how to respond to mistakes or failures (Rupp et al., 2023). With this in mind, museum professionals and others who are focused on learning through play must encourage children to assess—and take—risks.

This paper discusses how children's risk-taking and risk assessment relate to developing core competencies and resilience. The overarching mission of children's museums—encouraging learning through all types of play—may also set the stage for children to become better decision-makers and face challenges with confidence.

Problem Statement

Why Take Risks? In the simplest terms, we want our children to be happy, safe, and good at something. What we don't always discuss is that being happy, safe, and good at things takes practice. In every aspect of life, we have to try things out, learn, get better, mess up, and then try again. And all of that involves taking some amount of risk (Von Bank, 2022).

Risk is generally seen as something to mitigate or even avoid. But as adults, we know that taking risks is sometimes necessary. Since we were all teenagers once, we also know that "risky behavior" can often look more like "reckless behavior" to adults and can even lead to physical or emotional pain for the child or for others. While it is clearly

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our job as a society to get children to adulthood in one piece, that process can be hard to watch when we see children taking physical, social, or emotional risks and our protective instincts kick in. This paper will posit, however, that children are more likely to succeed on that path to adulthood if they learn to take risks and can then translate that learning into another skill: good decision-making. For children to develop decision-making skills, they need to navigate 1) risk competence- the ability to see a risky situation and make decisions about it- and 2) *risk competence*—the ability to see a risky situation and make decisions about it—and 2) *risk perception*—predicting the negative outcomes of that risky situation (Lavrysen et al., 2015).

If we dive deeper into what we want for our children, we will likely say we want them to *grow*—emotionally, physically, and intellectually—and to become *competent* in areas that align with their developmental milestones. And we might note that growth and developing competencies also carry some risk—think of learning to walk, learning to read aloud, or learning to drive. So, if we want children and youth to grow, then they (and we) may need to take some risks. They will need to try things, knowing full well that sometimes they will fail. "Children can only understand risk if they are allowed to experience it. . ." (Lange, 2018, p. 204).

Background

Growing into Risks. In ideal circumstances, children develop skills by taking calculated risks, preferably when the stakes are quite low, so they can reap the benefits when they succeed. This brings to mind a "steep learning curve", where the likelihood of failure goes down as competency rises, but the implications of failure may worsen as the task becomes more complex.

Competency will grow as people move their way up the learning curve, if they are also learning to:

- judge the risk of their actions, including the severity, the possible advantages of success, and the possible consequences of failure;
- assess their own skills and likelihood of success; make (informed) decisions;

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- and, importantly, be ok, or know where to turn, if they misjudge and the risk does not pay off or if it results in some hurt.

To activate the learning curve, we do not need to encourage children—or anyone—to take risks for risk's sake. We should encourage them, and each other, to take risks for growth's sake. This shows that risk-taking is essential because, as people develop skills or conquer fears, growth can require some extension—pushing themselves a bit outside their comfort zone and doing things badly until competency builds. Finally, they can feel the exhilaration of succeeding at something hard.

Appropriate Approaches/Strategies

With this pattern in mind, children's museum professionals increasingly welcome the opportunity to incorporate risk-taking into exhibit and program design. They see that, on the path to adulthood, children must:

Become (and feel) competent in many arenas. Consider activities like using tools, climbing things, having hard conversations, helping someone in distress, doing math, being alone, cooking dinner, taking the bus, or any number of other life skills. Using a whittling knife or a power tool is low-risk if you are taught well and build the skill appropriately. It is very risky if you are cavalier or distracted, or if you do not heed the safety procedures associated with that tool (Telly & Spiegler, 2011).

Become good decision makers. Decision-making is a skill. That means you have to learn to do it, and you will make some bad decisions along the way. Professor Grant Schofield of Auckland University of Technology worked with a school in New Zealand where the principal, frustrated by an over-regulated recess period, successfully eliminated all rules from the school playground except "don't kill each other." Professor Schofield quipped, "Let's start children recognizing and mitigating good and bad decisions when they are eight and in a tree, not when they are 21 and in a bar" (Dateline New Zealand, 2014).

Develop their sense of agency. This word, "agency," is used intentionally instead of "empowerment" because power is "generally over "over' someone or something else, whereas agency is self-contained and fosters confidence. If we are

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agents in our own lives—that is, if we know we can govern our time, space, and bodies—then we have a sense of our value and capabilities, and that sense builds over time (Rupp et al., 2023).

Develop resilience. Things do not always go as planned, sometimes because we make mistakes and sometimes because s*** happens. Children are at lower risk (of danger, harm, or breakdown) if they are supported in developing their own resilience (Von Bank, 2022). And communities can be resilient as well. In a resilient community, when an individual can't handle something, they know people around them are committed to helping them through it. If the community itself is challenged, a group of engaged, resilient individuals can see it through.

Children's museums and other places where children learn through play work hard to allow children to take risks without creating hazards (Graef, 2015). Children can decide to go to the top of a climber, perform in a play, balance on a log, or ask another child to share without risking serious bodily or emotional harm. Children and parents can work together over several visits or years toward readiness for a particular challenge. What is a quick hop for a 10-year-old may be a scramble for a 6-year-old and a no-go for a toddler, but as children grow, their ability to make that leap—and their confidence about doing so—will grow. The challenge in a children's museum is often encouraging parents to let the children assess the risk for themselves. Adults may want to discourage children from doing something hard or assist them to the point that the child no longer assesses risk as part of the play. Letting the child make the decision, even if it leads to failure or an acceptable amount of hurt or surprise, prepares that child for agency in the future. Like adults, children learn as much from what does NOT work as they do from what does (Holman & Denworth, 2025).

And let us be clear: this is *not* meant to imply that children need to "go it alone" or "toughen up" (even though plenty of GenX "latchkey children" will wax nostalgic about all the wacky, dangerous things they did in those unsupervised after-school hours). Taking risks does not mean letting someone hurt you. And no child should be pushed to perform in ways that are harmful to them, physically or emotionally. Instead, the goal is that when children face danger—and they will—they have tools in their

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decision-making tool belts because they have experience managing challenges. We hope that the danger they face will be developmentally appropriate—that is, that children will not face adult-sized hazards, emotionally, physically, or intellectually. We hope they will not be in high-stakes situations that are not right for them. But how will they be ready for the inevitable challenges of adulthood if they have not met challenges as children? We do not suddenly become good decision-makers in adulthood, just like we do not suddenly become good drivers. When a 16-year-old finally gets behind the wheel, they have a lot of decisions to make, and a lot of risks to mitigate. Our roads will be safer if they practice decision-making and risk mitigation when they are young, so they are as good at it at sixteen as their partially developed frontal cortex will allow.

Conclusion/Recommendation

Risk is the Buzz Word; Growth is the Point. So, while there is a lot of buzz about risk, the idea posited here is that taking risks is not the point of the play, or of the learning. *Growth* is the point. Developing diverse competencies is the point. Risk should be mitigated, competency builds over time, and decision-making is the skill that bridges the two. We grow by assessing the results and consequences of our decisions (Keeler, 2020). But it is a process: when we see videos on social media of small children competently using a very sharp tool, or handily starting and using a cooking fire, or fluidly playing an instrument in front of hundreds of people, or expertly climbing a tall rock face, what we are seeing is actually a low-risk situation. We are seeing a situation where someone—probably an adult who cares about them—helped that child develop their skills, making the activity *less risky*. The younger person took on what they could and grew into the skill. At the point of the viral video, what the child could take on might indeed be high stakes; that is, something quite bad could happen. But if something is high-stakes, that is the best reason for it to be low-risk. That high-stakes situation is now within that child's capabilities because they feel competent, know their boundaries, make informed decisions in the moment, and will be resilient if things do not go as planned. And the children's community, we hope, will be there for them no matter the outcome.

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Work in this area with children and youth has significant societal implications. In his far-reaching discussion of gun violence in the United States, Jens Ludwig (2025) describes a range of dangerous situations faced by youth. Each emerged from a relatively short, intense interval in which one or more of the young people involved made a series of very bad decisions. When youth navigate stressful day-to-day conditions and then face a physical or emotional challenge they cannot manage or avoid, good decision-making (or "self-interruption") can prevent a disastrous outcome. However, if we combine such a situation with access to a firearm, the heat of the moment can easily result in a fatal decision before any cooler heads or helpful bystanders can prevail. In such a moment, the stakes are indeed very high; the risks are extreme, and the competencies required—diffusing a situation, calming oneself, resisting the urge to be drawn into rage—may not be readily at hand (Ludwig, 2025).

Children's museums, like many youth-centered organizations, help children grow by encouraging them to take calculated risks and expand their intellectual, physical, and emotional horizons. Exhibits and programs that include child-led, intergenerational play can build decision-making muscles, build physical strength, and support internal well-being. We can help children (and adults!) learn some of those life skills through play, friendship, and community. Let's keep helping all children assess and mitigate risks and make good decisions, even when the stakes are high, so they can do what we really want them to do: become happy, healthy, competent adults.

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Play, Spiritual Development, Spiritual Flourishing

Deborah Schein, PhD

Introduction

Understanding the relationship between play and Spirituality in early life is essential, as it informs the role of play in development. The concept of play resonates across all ages. However, questions remain regarding how infants engage in play, what they experience during play, and how play and spirituality interact. Most importantly, we need to consider why this relationship matters.

Problem Statement

Currently, play is not viewed as a biological necessity for healthy or spiritual development and flourishing. It is also not commonly seen as a way to foster kindness or empathy in children. The need for free and open play, along with the time and space required for children to form deep connections of love and self-awareness, has diminished. In the 21st century, adults responsible for children are bombarded by societal pressures such as fear, anxiety, depression, and the constant demands of community, personal, and professional life. This overwhelming array of responsibilities can lead adults to overlook the importance of play for children.

Even in the absence of heightened fear or anxiety among adults, the current climate of unrealistic academic expectations continues to restrict the time and space available for children to engage in self-directed play. This reduction in play contributes to the emergence of negative traits in contemporary interactions, including narcissism, unhappiness, deceit, anger, and hatred. Such qualities often arise when individuals have not received adequate spiritual nurturing. Consequently, we must reevaluate the meaning and purpose of play in relation to Spirituality, particularly from the perspective of young children's spiritual development and flourishing.

Archbishop Desmond Tutu and the Dalai Lama assert that individuals cannot experience joy when under stress. Desmond Tutu emphasizes hope, stating, "Now, hope is different in that it is based not on the ephemerality of feelings, but on the firm ground of conviction" (2016, p. 122). Maria Montessori highlights the importance of Spirituality

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in human development, stating, "It is time to accept the spiritual side of our humanness and to respect the child as capable of guiding the world to a radiant future" (Claremont, 1967, p. 4). Peter Gray (2014) contends, "if we want our offspring to have happy, productive and moral lives, we must allow more time for play, not less."

A critical reassessment of the meaning and purpose of play in relation to Spirituality is warranted.

Background

The concept of Spirituality often elicits discomfort. However, it warrants careful consideration rather than avoidance or alteration. Defining play within the context of Spirituality is essential to understanding how integrating these concepts can inform approaches to supporting both Spirituality and play.

Suzanne Axelsson, an early childhood pedagogical consultant from Stockholm University, offers this definition (2025): Play as ritual occurs when adults in a child's life are responsible for creating space for children to experience (a) freedom, (b) discovery, (c) wonder, (d) curiosity, (e) sensory input and output, (f) repetition and ritual, (g) games, (h) food, and (i) everyday moments (p. 27). This definition of play matters because it reminds parents and educators that they are responsible for giving young children space to experience play in all the ways listed above. In his 2025 Substack post, *Play Makes Us Human*, Peter Gray explains that play gives people time to experience and engage with fundamental qualities of life. For this paper, the definitions below show how the essential elements of Spirituality and play align.

Recognizing that play facilitates experiences of essential elements of Spirituality, such as wonder, joy, awe, and inner peace, may alleviate discomfort with the term and redirect attention toward giving children opportunities to engage with these qualities (adapted from Schein, 2012; Schein in Kirmani et al., 2023).

Essential Elements of Spirituality

- *Wonder:* Feelings of surprise triggered by beauty, the unexpected, the unfamiliar, or the mysterious, often found within everyday experiences (Glaveanu, 2020). Wonder is also a verb that reflects a desire or curiosity about something of

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interest, prompting one to reach out, touch, or do (Schein, 2017). Wonder often implies a desire or curiosity to know more about something, leading to pondering, puzzlement, or a big new question. All kinds of wonder abound in the lives of young children, as everything is new to them.

- *Awe:* Feeling of wonder with a touch of fear or disbelief (Schein, 2017). Keltner (2023) describes awe as human encounters with vast mysteries that are not yet understood. Research suggests that awe is partly about focusing on the world and discovering that it is filled with marvelous things that are not us (Sturm et al., 2020). Some studies are linking awe to empathy (Van Elk et al., 2019).
- *Joy:* Feelings of pleasure and happiness (Nodding, 2007). Nodding's behavioral research indicates that individuals who experience happiness tend to learn more effectively, exhibit less aggressive or harmful behavior, and show greater resilience in the face of adversity. Infants contribute joy through their presence, while nature fosters joy by facilitating a sense of connection to the earth.
- *Inner peace:* Feelings of inner calm, centeredness, and presence. Inner peace can lead to a flow state or the opposite of stress or anxiety (Dalai Lama et al., 2016). Inner peace appears innate in babies, as they naturally breathe from their bellies. This kind of breathing can be revisited later in life via mindfulness exercises (Langer, 2014).

Defining Spiritual Development and Spiritual Flourishing

- *Spiritual Development*: Follows a Piagetian view of stage development where the infant grows, matures, and progresses in a linear fashion; one stage at a time. In a Montessori classroom, the child's play is structured to incorporate these stages of development.
- *Spiritual Flourishing*: Follows Vygotsky's (1962) social constructivist theory, in which children grow, thrive, and prosper in social contexts with others and in and with nature.

In Reggio-inspired schools in the United States, children spend time engaged in play that often involves questions that lead to investigations that may span months. Both Spiritual Development and Spiritual Flourishing occur naturally in nature or forest

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schools. And in the end, human Spirituality requires both development and flourishing to last a lifetime.

Froebel created "gifts and occupations for children," such as wooden blocks and puzzles, so children could be "active and engaged in meaningful play at the very beginning of life" (Provenzo, 2009, p. 87). His first gift was a basket of primary-colored yarn balls. The balls invited infants to grasp, swing, roll, drop, and hide them, helping very young children learn concepts such as "here, there, over, right, left, larger, and smaller" (Provenzo, p. 89). Froebel's theory of play went beyond learning to include his desire for children to appreciate natural forms and harmonies found not only in objects (Provenzo, 2009, p. 86) but also in nature (Provenzo, 2009, p. 97). Froebel may have been one of the first to invite parents and educators to think more deeply about the inner workings, essence, and spiritual side of very young children in relation to play.

Froebel's words resonate with similar thoughts made by Stuart Brown, founder of the National Institute for Play. In a foreword written for *Playful Awakening: Releasing the gift of play in your life*, Brown explores the universal significance of play in the pursuit of happiness and authenticity across the lifespan and suggests that playfulness reconnects people to their truest selves (Gammage, 2012).

Montessori (1912) drew on the work of Édouard Séguin (a French physician and educator, 1812 - 1880), who sought to respect and understand each child while using sensorial materials for learning. Using the work of Seguin, Piaget, and other theorists as a springboard, Montessori developed a philosophy built around practical life activities, sensorial explorations, mathematics, literature, culture, geography, and nature. Montessori's classrooms were known for their unique, childlike-sized chairs and tables, their beauty, and the freedom they offered children within a prepared, stage-oriented environment. In this space, each child had time for self-chosen repetition and activity choice, reflecting each child's unique disposition. The materials were designed to be self-correcting for gentle guidance and clarity. In this way, children created their own paths for exploration, experiences, and discoveries within the Montessori classroom. Montessori viewed each child as competent and capable of guiding the world to a radiant future (Montessori as cited in Claremont, 1967).

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According to Montessori, a radiant future may depend on sustaining a spiritual perspective that integrates both spiritual development and flourishing. Although educators in the United States rarely use this terminology, Montessori offered a nuanced description of the spiritual dimension of play in early childhood, introducing the metaphor of the spiritual embryo. The spiritual embryo is believed to contain the energy or horme, a Greek term for "vital force" (Montessori as cited in Carter, 1963, p. 15). This *horme* signifies the intrinsic motivation that guides individuals toward growth, independence, knowledge, and learning (Montessori as cited in Claremont, 1967). This internal drive enables children to acquire skills such as walking, speaking, playing, and assimilating cultural practices (Montessori as cited in Gardner et al., 2001). Montessori's reference to play as children's work should be viewed as a process of self-creation that culminates in adults capable of fostering a peaceful and compassionate society.

Montessori asserted that the spiritual embryo, an innate and intangible force, is activated by love (Montessori as cited in Claremont, 1967). Specifically, this refers to the unconditional love that a parent or guardian extends to a child, which establishes a foundation of trust within the relationship (Schein, 2017, 2023). Experiencing such love fosters meaningful connections (Harris, 2007; Kirman, 2008). Educators may also demonstrate this form of love toward their students (Pestalozzi, 1898; Froebel, 1887, as cited in Best, 2016).

Spirituality and Relationships

To understand how love awakens the spiritual embryo, one can first turn to attachment theory, as posited by Bowlby & Ainsworth (as cited in Bretherton, 1992). Initially, it was observed that infants may feel love and eventually form an attachment to their mother because "the mother has satisfied the infants' primal needs" (Bowlby & Ainsworth, as cited in Bretherton, 1992, p. 767). Anyone who has watched an infant being fed, rocked, or sung to can attest that the infant's satisfaction is visible and palpable. But there is more: beyond this relationship, when one thinks about spiritual development, there is also the beginning of a developing sense of self. Without this inner awareness, it is difficult to imagine a radiant future. A sense of self-in-relationship to

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the world provides a foundation for trust, respect, openness, and hope, and it begins with a feeling of love.

In a healthy world, as babies are being cared for, it is not uncommon to see a baby staring intently into the smiling eyes of their parent or caregiver. The stare is so strong that it can appear unbreakable. The infant remains focused, present, and sometimes even in control of the movement of their head and eyes (Schein, 2017). The National Institute of Play, under "How We Play" (retrieved on 2/1/2026), called this attunement or harmony. The baby may think or feel, "Those eyes are looking at something and that something is me!" Simultaneously, the adult, who is sharing love with the baby, may also enjoy feelings of new life, hope, and joy simply by holding an infant in their arms and engaging in this stare. A spiritual awakening is taking place for both of them. The infant's focused engagement with the adult illustrates the significance of consistent, loving, and nurturing experiences.



Buber, a German-Jewish philosopher (1878-1965), offers the language of *I-It* and *I-Thou* to describe human relationships, another essential piece of the definition of Spirituality. He writes that every relationship is significant and meaningful, and describes how infants enter the world not yet really knowing themselves but sensing all (Buber, 1923, as cited in Kaufman, 1970). Over time, each relationship informs each child more about the world and more about themselves. Buber describes *I-Thou* relationships as a deep connectedness with the entire world, including the living and the nonliving, the natural, and other concrete objects (Buber, 1923, as cited in Kaufman,

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1970). Because of this, an "*It*" (such as objects referenced by Froebel) and other types of relationships immediately become an "I/Thou" relationship as soon as a child engages with an "*It"*. For instance, when a baby holds an *"It"* such as a rattle, shakes *it,* and mouths *it,* the "*It "* becomes a *"Thou"* and is immediately imbued with importance and meaning (Schein, 2017, 2023). Every *Thou* relationship is meaningfully present, honored, and important. Buber suggests that this is how a child integrates new understandings into their being (Buber, 1923, as cited in Kaufman, 1970, pp. 54-64), much as a child integrates a new schema into their mental awareness of the world (Piaget, 1954).

Buber discusses what happens internally in all humans when they experience I-Thou moments in nature or elsewhere. He suggests that the word *Thou* has no religious connotations (Buber, 1923, as cited in Kaufmann, 1970, p. 59). Instead, the word *Thou* reflects a *You-Spirit*, where the spirit simply exists between the *I* and *You* in an inner state described by Buber as "the air we breathe" (Buber, 1923, as cited in Kaufmann, 1970, p. 89). In this way, the words "*air"* and "*breath"* become synonymous with "*spirit"* and "*soul"*. The question remains: What fills that spirit or soul? Might it be wonder, awe, joy, and inner peace?

These same spiritual elements are often seen when children spend time in nature. In her book, *Nature and Spirituality During the Early Years,* Wilson (2026, p. 4) describes the connection between nature and humans. Numerous studies support these connections and highlight long-term benefits for children. Drawing on this body of research and her own experiences as an early childhood educator and scholar,

Wilson (2026) defines the kind of play that nature provides for children and its benefits. Natural environments and natural materials come richly endowed with play potential. They invite 'authentic play, which is the best kind of play for young children. Authentic play is open-ended and freely chosen. The rewards of nature play are intrinsic—no trophies, no winners and losers, no conforming to human-made rules—just joy, personal satisfaction, discovery, excitement, and a sense of efficacy.

A conversation about how ***significant relationships*** help children develop spiritually would not be complete without mentioning the term biophilia. A child's

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rapport with nature provides an exceptional relationship, known as biophilia. Wilson defines biophilia as people's love for and connection to the earth (Wilson, 1984, as cited in Ruth Wilson, 2026). The definition of biophilia also describes how humans are drawn to nature and how scientists have defined this yearning as an "innate tendency to affiliate with life and lifelike processes" (Ruth Wilson, 2026, p. 63).

As part of this relationship, young children must learn to care for and respect the earth with reverence and a sense of spiritual sacredness (White, 2011, as cited in Wilson, 2026). This relationship must begin early in life to ensure that children learn that nature is something we are all part of, not something to be used and controlled (Wilson, 2026). Ultimately, "nature play is a source of comfort, a place of discovery and delight, and a habitat where [children] can be their most authentic selves" (Wilson, 2026, p. 8). Everything outside of the child continues to inform the child's inner self and sense of who they are, sometimes referred to as "ecological consciousness" (White, 2011, as cited in Wilson, 2026). "Young children manifest ecological awareness when they engage with nature in caring, respectful, and reverential ways" (White, 2011, as cited in Wilson, 2026, p. 104).

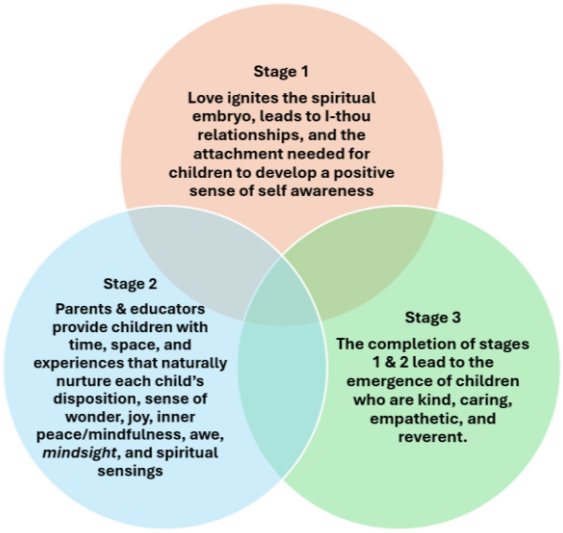
Froebel (1887) recommended that children spend much of each day outdoors playing with tools, planting, making observations, and exploring their immediate environment (as cited in Best, 2016). He suggested that adults in a child's life should walk alongside the child. This is especially true for very young children (Holman & Schein, 2025).

Both Spiritual Development and Spiritual Flourishing occur naturally in nature or forest schools. Ultimately, human Spirituality requires both development and flourishing to last a lifetime.

What does it mean that nature play promotes the spiritual development of young children? To answer this and other questions about Spirituality, the following definition of Spirituality will be used. It comes from findings of a research study conducted by Schein (2017). *Early Childhood Educators' Perceptions of Spiritual Development in Young Children: A Social Constructivist Grounded Theory Study* (Schein, 2012). Over the past several years, this definition has evolved (Schein, 2017; Schein as cited in

Kirmani et al., 2023; Holman & Schein, 2024, 2025). The definition of Spirituality maintains a non-religious view of young children's spiritual development, which begins with three stages and eventually becomes a working system.

- Stage 1: Describes how love ignites the spiritual embryo that leads to I-thou relationships and attachment needed for children to develop a positive sense of self-awareness. This is not ego or self-esteem, but rather awareness of self in relationship to self, others, and the earth.
- Stage 2: Describes how children move out into the world and how parents and educators provide children with time, space, and experiences (spiritual moments) that naturally nurture each child's disposition. A disposition is a child's unique character, nature, temperament, and passions. This is how the essential elements of wonder, awe, joy, and inner peace enter a child's life, as each child individually responds in their own way to different explorations, experiences, environments, and relationships.
- Stage 3: Describes how exposure to and experiences with qualities found in stages 1 & 2 can lead to the emergence of children who are kind, caring, empathetic, and reverent. At this point, spiritual development becomes a system, and spiritual flourishing is required to sustain a spiritual self (Schein, as cited in Kirmani et al., 2023).



Three Stages of Spiritual Development in Infants. (Schein 2017).

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Having established how Spirituality and play intersect to foster desirable human qualities in children, it is important to consider strategies for integrating spiritual elements into daily classroom routines. These approaches aim to prompt the early childhood education field to reconsider the significant contributions of both play and Spirituality in nurturing kindness and open-mindedness. Key questions include how best to support spiritual development and what insights can be drawn from leading educators past and present.

Strategies within the Context of Spiritual Sensing and Play

Humans, including very young children, require diverse experiences to foster vitality and develop sound decision-making abilities (Eaude, 2009). Research by Kirmani, M. and Kirmani, S. (2009, 2013) demonstrates that both adults and children encounter senso-centric Spirituality through the senses of sound, sight, touch, taste, and fragrance, which can facilitate deeper spiritual awareness. Younger, a Scottish researcher, defined *spiritual sensing* as an invitation to experience intentional ambiguity and flexibility among the physical senses (touch, taste, sight, sound, scent), the affective realm (feelings, inklings, and intuitions), and values and principles (Younger, 2021). The following adaptations of Younger's sensings apply to this discussion.

Sensing meaningfulness arises when children investigate the function of an object, such as a loose part (a recycled item), a toy, or a natural element like a pinecone or stick. In play, the object takes on significance, shaping the child's sense of self and understanding of the world.

Sensing mystery encompasses experiences of wonder, joy, awe, and inner peace, which may prompt children to ask questions and reflect. Mystery-sensing can also occur when children use their imaginations in response to fear or the incomprehensible (Hay and Nye, 2006, as cited in Mata, 2011). This form of sensing closely aligns with the experience of awe.

Sensing values during play may emerge as children pursue kindness, fairness, honesty, and respect, particularly when they independently structure play with peers. Increased adult intervention can limit opportunities for children to perceive and

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internalize others' values. Additionally, when educators or family members dedicate time to acknowledge children's feelings during moments of spiritual awareness, they support the integration of cognition with emotional and spiritual development. For instance, during a class walk in the woods, if a child pauses to observe a falling leaf, the teacher can join the child in recognizing a potential spiritual experience. Once the teacher acknowledges value sensing, children can often continue their activities.

Sensing challenge, or provocation, prompts a child to pause and reflect. Through personal experiences with love, beauty, goodness, joy, empathy, and compassion, children can subsequently progress (Younger, 2021, adapted by Schein).

Awareness sensing involves self-awareness and the understanding of one's own thought processes. Although it was previously believed that conscious awareness does not occur in very young children, recent brain research indicates that even without conscious recall, experiences can significantly influence self-awareness, metacognition, *mindsight* (Siegel, 2010), and potentially spiritual development and flourishing (Francken et al., 2022). Play effectively strengthens awareness sensing.

These forms of sensing may contribute to the development of executive functioning and self-regulation in children. Peter Gray's extensive research on play highlights its role in fostering executive function, particularly self-directed control, which leads to greater happiness, self-reliance, and academic success (2013). In addition to these sensings, the concept of risky play may also serve as a valuable form of sensing.

Risky sensing entails approaching the limits of one's abilities, which can foster growth and new achievements (Keeler, 2020). This form of sensing lets children test their stamina, strength, perception, and problem-solving skills, especially through movement, exploration, imagination, and creativity. Engaging in risky sensing also supports the development of self-awareness and self-regulation. Recognizing personal capabilities is essential before taking risks, and doing so can empower individuals to navigate the challenges and opportunities of an uncertain and evolving world.

Froebel, an 18th-century German progressive educator recognized as the father of kindergarten, defined play as "the highest expression of human development in childhood for it alone is the free expression of what is in a child's soul" (Froebel Trust,

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n.d., para 1). He also emphasized the connection between Spirituality and play in nature, stating, "When children play, there exists a unity of nature, spirit, community, and an unfolding of the life of each child" (Froebel Trust, 2025).

Conclusion

Parents and educators model spirituality and create environments where children can experience their own joys. This approach involves being present with children without interrupting, overshadowing, or directing their actions, observations, or inquiries. The emphasis is on sharing in children's self-discovered moments. Adults are also responsible for providing environments, materials, and tools that support children's spiritual exploration and interactions. Achieving this requires a deep understanding of each child's disposition and what resonates with them (Holman & Schein, 2024). Furthermore, adults model spirituality by experiencing and sharing their own moments of wonder, awe, joy, and inner peace with children and others.

This perspective parallels Montessori's concept of the *absorbent mind,* wherein children rapidly and effortlessly assimilate experiences from their environment. Through this process, children construct their identities (Montessori, 1949, as cited in Claremont, 1967). From birth, children can absorb information from their surroundings (Prowant, 2023). Children are not simply undeveloped adults; they possess unique skills and intrinsic abilities that warrant acknowledgment and respect.

Contemporary neurological research demonstrates that young children can perceive and recall minute details due to the active role of dendrites in processing new information from both immediate experiences and the environment (Carlson, 2006; Gopnik et al., 2001; NAEYC, 2005; Shonkoff & Phillips, 2000; Siegel & Hartzell, 2003; Vygotsky, 1962). Research in Spirituality further supports these neurological findings, indicating that all humans possess an innate spiritual self from birth, which must be recognized and nurtured throughout life to enable flourishing (Miller, 2021).

Parents and educators should consider these findings, as they shape the experiences and environments that foster meaningful spiritual moments and opportunities for play. It is important to reflect on what children are actually absorbing from their surroundings. In the digital age, with increased technology use among young

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children, parents and teachers should critically evaluate the value and relevance of screen-based learning for children's spiritual development.

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How Reggio-Inspired Teachers Enact Playful Learning: Characteristics of the Reggio Emilia Philosophy in Practice

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Introduction

The Reggio Emilia approach is an educational philosophy that originated in the city of Reggio Emilia, Italy. Developed by Loris Malaguzzi and described as "a philosophical approach focused on listening and respecting children and their potential by witnessing their actions towards reformulating everyday practices, ideas and projects" (Santín & Torruella, 2017, p. 50). The first Reggio school, established in 1963, placed great emphasis on nurturing relationships between adults and children while fostering environments rich in opportunities for play, exploration, and discovery. Santín and Torruella (2017) note that arts education models in Reggio schools support self-expression, communication, and critical thinking—often expressed through playful interaction. In contrast to more rigid early childhood programs, the Reggio philosophy views the child as an artist, scientist, and active participant, without limiting creative or playful processes.

The philosophy, guided by eight core tenets, the philosophy integrates child-led play.

1. **The Environment as the Third Teacher** – Spaces are intentionally designed to invite playful exploration, experimentation, and creativity, allowing the environment itself to partner with play-based learning.
2. **100 Languages of Children** – Children communicate and make meaning through many forms of play: dramatic play, building, drawing, dance, music, storytelling, and scientific exploration.
3. **Long-Term Projects** – Often emerging from children's play interests, these projects allow extended engagement in imaginative narratives, problem-solving, and collaborative construction.
4. **Teacher-Researcher** – Teachers observe and participate in children's play to better understand their thinking, interests, and learning processes, using play as a key context for inquiry.

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5. **Image of the Child** – Children are viewed as capable, curious, and resourceful, with play seen as a powerful medium for demonstrating competence and agency.
6. **Negotiated Learning** – Learning goals and play themes are co-constructed between children and adults, allowing for shared ownership and direction of the play experience.
7. **Documentation** – Photographs, transcripts, and artifacts of children's play are collected and displayed, making learning through play visible to children, educators, and families.
8. **Social Relations** – Play is recognized as a social act that builds relationships and shared understanding among children, families, and educators.

Together, these tenets position play not as a separate activity but as the foundation of learning in Reggio-inspired environments. By integrating play into all aspects of curriculum and interaction, the approach affirms both developmental research and Article 31 of the United Nations Convention on the Rights of the Child, which asserts that every child has the right to rest, leisure, and play.

Background

A literature review indicates widespread adoption of the Reggio-inspired approach in early childhood settings beyond the preschools of Reggio Emilia, Italy. Researchers are interested in how Reggio-inspired teachers' perspectives align with or contradict the literature. The study used the existing literature from Santín and Torruella (2017) to gather information from teachers who self-identified as adhering to a Reggio-inspired philosophical approach to teaching young children. Specifically, the present study sought to determine how participants incorporated Santín and Torruella's (2017) framework into their classrooms.

Problem Statement

How Reggio-Inspired Teachers Enact Playful Learning:

Characteristics of the Reggio Emilia Philosophy in Practice

The study aimed to identify characteristics of the Reggio Emilia philosophy as determined by teachers who follow this approach in their practice. While eight core

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tenets (Santin & Torruella, 2017) define the Reggio-inspired approach, these concepts may not always be visible in the materials, interactions, and play opportunities found in early childhood classrooms. This approach aligns closely with the principles outlined in Article 31 of the United Nations Convention on the Rights of the Child, which recognizes play as a fundamental right for every child. In Reggio-inspired classrooms, play is not separate from learning; instead, play and learning are the primary ways children explore, experiment, and make meaning of the world. Because no formal means or standards exist to evaluate how closely a classroom or school aligns with this philosophy, the designation of "Reggio-inspired" remains open to individual interpretation.

Davies et al. (2012) found that children immersed in creative learning environments, a key component of the Reggio Emilia philosophy, experience a positive influence on their "academic achievement; increased confidence and resilience; enhanced motivation and engagement; development of social, emotional and thinking skills; and improved school attendance" (p. 88). However, children cannot benefit from these rich advantages if their teacher does not provide an authentic Reggio-inspired classroom setting.

Currently, no school accreditation or teacher certification program in the United States is associated with the Reggio-inspired approach. The study collected data to establish distinct characteristics that practicing teachers associate with the Reggio Emilia philosophy. Educators seeking to implement the Reggio approach in their own practice can use these findings. Furthermore, the results may inform researchers in developing Reggio-inspired training or classroom assessment tools for formal use.

Strategies

Research Design

A qualitative research approach was adopted to gain insight into the everyday practices of Reggio-inspired educators. As Starman (2013) states, qualitative research "is characterized by an interpretive paradigm, which emphasizes subjective experiences and the meanings they have for an individual" (p. 30). The *case study*, one of several qualitative research approaches, was deemed the most appropriate. A case study is

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defined as "a method of obtaining a 'case' or a number of 'cases' through an empirical examination of a real-world phenomenon within its naturally occurring context, without directly manipulating either the phenomenon or the context" (Kaarbo & Beasley, 1999, p. 372). Within the case study approach, researchers can choose from several methods based on the research goal. Exploratory case studies offer opportunities to gain a deeper understanding of the phenomenon under investigation through the subjects' perspectives. The goal of the exploratory case study is to "provide a cogent, detailed portrait of the phenomenon – the attributes it assumes, the variations it displays, the ways it appears to operate, and the combinations of factors that seem to shape the patterns observed in natural settings" (Ogawa & Malen, 1991, p. 274). The researchers determined that a qualitative, exploratory case study was the most appropriate approach to understand what the Reggio Emilia approach looks like in practice. A literature review identified a need to further explore what it means to be a Reggio-inspired educator.

The researcher sought to identify potential participants by gathering information from those who self-identified as embracing a Reggio Emilia-inspired approach to educating young children. The researcher used the social media platform Facebook for special-interest groups. The researcher identified four groups that both focus on Reggio-inspired approaches and are currently teaching. These groups included *Reggio Inspired Early Childhood Educators* (created in 2017; 60.8K members), *Reggio Emilia Inspired Resources* (created in 2017; 17.4K members)*, Inspired by the Reggio Emilia Approach* (created in 2019; 47.1K members), and *Reggio-Inspired Startup* (created in 2015; 9.5K members). As these Facebook groups were not associated with specific regions, the researchers assumed that the members represented a global population. The study participants did not include Reggio parent groups, as these groups would not be implementing the Reggio Tenets.

Sampling Procedures

The Reggio Classroom Assessment Measure (R-CAM), an author-created tool, was distributed via Facebook to the four identified Reggio Emilia teacher educator

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groups. The Facebook post invited participants to complete a Qualtrics questionnaire and enter a drawing for a set of blocks for their class.

> We are seeking input from practicing teachers who work in Reggio-inspired classrooms or programs. We are developing a tool to share with educators interested in implementing a Reggio-inspired approach but unsure how to begin.
>
> Please take a look at the chart below and note which materials, artifacts, and teacher facilitation support each of the core tenets of the Reggio approach in your center (i.e., if someone came and observed in your classroom, what would they see that demonstrates your adherence to the Reggio-inspired approach?).
>
> Responses are entered anonymously into a database; there are no known risks to participating in this study.
>
> To participate, click here: https://lsu.qualtrics.com/jfe/form/SV_9nU08m9MFEGqt13
>
> Participants will be entered into a drawing for a 72-piece Wood Castle Block set. Follow the instructions at the end of the questionnaire to register.

This study used criterion sampling. Criterion sampling involves the researcher "choosing settings, groups, and/or individuals because they represent one or more criteria" (Collins et al., 2007, p. 272). To be eligible to participate in this study, participants had to be teachers who self-identified as following a Reggio-inspired approach and be members of one of the identified Reggio Emilia Facebook groups.

Participants

This case study accessed Facebook groups associated with the Reggio Emilia approach. A total of 79 educators participated in the online questionnaire. 75 of those participants consented to have their responses used in this study. For each demographic questionnaire item, 51 (68%) participants responded. According to the data collected, most questionnaire participants were female (92.16%), had earned a master's degree (37.25%), had taught for over 10 years (64.71%), and had adopted the Reggio Emilia

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approach between 2010 and 2015 (37.25%). See Tables 1-4 for complete demographic information.

Demographic information on participants' gender, years of teaching experience, education, and years of implementing the Reggio-inspired approach in the classroom.

Table 1

Gender	Number	%
Female	47	92.16
Male	2	3.92
Non-binary/third gender	1	1.96
Prefer not to say	1	1.96

Table 2

Years of Teaching Experience	Number	%
Less than 3 years	3	5.88
3-5 years	3	5.88
5-10 years	12	23.53
More than 10 years	33	64.71

Table 3

Education	Number	%
High School or GED	1	1.96
Early Childhood Certificate or CDA	10	19.61
Associate degree	2	3.92
Bachelor’s Degree	16	31.37
Master's Degree	19	37.25
PhD	3	5.88

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Table 4

Year the Reggio-inspired approach was adopted.	Number	%
Before 2000	5	9.80
2000-2005	2	3.92
2005-2010	12	23.53

Analysis Plan

The researchers used two coding methods to interpret participants' responses to the self-report questionnaires and analyze the data. Auerbach and Silverstein (2003) describe coding as "a procedure for organizing the text of the transcripts and discovering patterns within that organizational structure" (p. 31). The researchers examined each participant's responses and assigned keywords and phrases. They performed this descriptive labeling line by line for each survey response. This coding procedure aimed to identify recurring ideas among participants. Open coding was used to interpret the participants' responses to the questionnaire item, "In your own words, please describe the Reggio-inspired approach." Open coding is "a method of generating a participant-generated 'theory' from the data" (Blair, 2015, p. 17). Because this questionnaire item was open to participants' interpretation, open coding was the appropriate data analysis technique. Once all survey responses were coded, the researchers analyzed and organized the codes into code concepts based on their connections. The researchers used code concepts to identify the overarching themes in the data. Themes were defined as "an implicit topic that organizes a group of repeating ideas" (p. 38). The identified themes represented the perspectives and experiences of the participating educators.

Results

Teacher Descriptions of the Reggio Emilia Approach

This study aimed to understand what the Reggio Emilia-inspired approach looks like in practice. To gauge teachers' understanding of the philosophy, participants were asked, "In your own words, please describe the Reggio-inspired approach." Of the 75 consenting participants, 33 (44%) responded to this questionnaire item. We used open

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coding (Blair, 2015) to analyze participants' responses. Tables 5-11 present the themes, code concepts, codes, and code instances for this questionnaire item.

Table 2.

Reggio-inspired approach themes, code concepts, codes, and code instances.

Themes	Code Concepts	Codes	Code Instances
Child-Centered	Child-Centered Respect Support	Child Interests	12
		Respect for child	8
		Support for child	6
	Competent child	Child is competent/capable	14
Learning from the environment	Natural Environment Learning from Environment	Environment as the third teacher	9
		Natural Environment	7
Documentation	Documentation Reflection	Documentation	7
		Reflection	3
Inquiry	Inquiry Exploration Investigation	Inquiry/Inquiry-based	5
		Explore and experiment	4
Observation	Observation Teacher-researcher	Observation	6
		Teacher-researcher	3
Collaboration	Peer Collaboration Social Skills Communication	Learning with Others	6
		Communication	2
Community	Community Collaboration with Families	Community Involvement	3
		Cooperation among teacher, child, and family	3

Seven themes emerged from the participants' responses to this questionnaire item. After coding the responses, the code ‘child interests' was noted 12 times, ‘respect for child' 8 times, and ‘support for child' 6 times. Codes were grouped into the code concepts 'Child-centered', 'Respect', and 'Support'. The code ‘child is competent/capable’ occurred 14 times in the coded data. The code concept identified from these codes was ‘Competent Child'. Based on these similarities, these code concepts were combined to determine the overarching theme: *Child-centered*.

The code ‘environment as the third teacher’ was recorded 9 times, and the code ‘natural environment’ occurred 7 times in the coded data. The code concepts derived

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from these codes were 'Natural ' and 'Learning from the Environment'. The code concepts were generalized into the theme *Learning from the environment*.

The third theme identified was *Documentation*. Seven instances of the code ‘documentation’ were noted, and three instances of the code ‘reflection’ were noted. These codes also represent the determined code concepts.

Five instances of the code ‘inquiry/inquiry-based’ and four instances of the code ‘explore and experiment’ were identified. These codes were combined into the code concepts 'Inquiry', 'Exploration', and Investigation', which together formed the greater theme of *Inquiry*.

The code 'observation' was noted six times, and the code 'teacher-researcher' was noted three times. The code concepts classified under these codes are 'Observation' and 'Teacher-Researcher', which led to the overarching theme ‘Observation'.

Six instances of code learning with others and two instances of code ‘communication’ were recorded. From these codes, the code concepts 'Peer Collaboration', 'Social Skills', and 'Communication' were identified. These concepts were condensed into the theme *Collaboration*.

The code ‘community involvement’ and code ‘cooperation among teacher, child, and family’ were noted three times each. These codes were grouped into the code concepts 'Community' and 'Collaboration with Families', which determined the larger theme of *Community*.

Across all themes, participants' descriptions underscored that play was not an "extra" or separate activity but a primary mode of learning in Reggio-inspired classrooms. Play served as both a process and a context in which children explored ideas, practiced skills, and constructed meaning in collaboration with peers, teachers, and their environment.

Conclusion

This case study aimed to identify characteristics of the Reggio Emilia philosophy in practice. Participating educators were asked to describe this philosophical approach

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in their own words. Overall, the themes determined from the participants' responses largely mirrored the tenets of the approach as described by Santín and Torruella (2017), with many responses underscoring the role of play as a central mode of learning and interaction in Reggio-inspired classrooms.

The most prevalent theme generated from the coded responses was **Child-centered**. We recorded 40 instances of codes contributing to this theme, including *child interests*, *respect for the child*, *support for the child*, and the *child is competent/capable*. The codes recorded under this theme reflect the fifth tenet of the Reggio Emilia philosophy, *Image of the Child*. According to Santín and Torruella's (2017) definition, the child is a "powerful, competent, creative, curious, full of potential and ambitious entity" (p. 53). This view positions children as active agents who shape their own play experiences, using play to explore ideas and construct knowledge. As Dodd-Nufrio (2011) notes, the Reggio Emilia classroom is "an environment that allows the child to be a producer of culture and knowledge – the child is a knowledge maker" (p. 236). Participants described play, particularly self-directed play, as a key avenue for children to express agency, test ideas, and engage deeply with peers and materials.

Another theme participants identified was **Learning from the environment**, with 16 code instances. Codes included *'natural environment' and 'environment' as the third teacher*. This theme corresponds with the first tenet of the Reggio Emilia philosophy, *The Environment as the Third Teacher*, which holds that "teachers organize the space in a way that is inviting for students to explore, experiment and investigate" (Santín & Torruella, 2017, p. 53). In practice, this often translates into environments designed for open-ended, playful exploration—such as loose parts, natural materials, and outdoor spaces that invite imaginative play and collaboration. The philosophy's socio-constructivist foundation supports this connection, emphasizing that "both children and adults co-construct their knowledge through interactions with people and the environment" (Dodd-Nufrio, 2011, pp. 235–236). Nature-based play, in particular, was seen as promoting a sense of belonging and community connection (Omidvar et al., 2019).

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The third theme, **Documentation**, included 10 instances of codes such as *Documentation* and *reflection*. This theme aligns with the seventh tenet of the Reggio Emilia philosophy, where Documentation serves as a way to "present and represent the experiences, thoughts and ideas of the students and to showcase their learning processes" (Santín & Torruella, 2017, p. 53). Participants often described documenting children's play as a way to deepen learning—using photographs, transcripts, and artifacts from play episodes to revisit ideas, extend narratives, and make children's thinking visible. Hart (2006) emphasizes that in the Reggio approach, Documentation not only records the history of a project but also guides play-rich learning experiences.

Inquiry, the fourth theme, had nine code instances (*inquiry/inquiry-based* and *explore and experiment*). These playful investigations often began as spontaneous interactions with materials or environments and evolved into structured explorations or collaborative problem-solving. Inan, Trundle, and Kantor (2010) confirm that the Reggio approach is "grounded in inquiry, values play, embraces a constructivist and social-constructivist approach to teaching and learning" (p. 1187–1188). Play provided a natural context for posing questions, testing hypotheses, and refining ideas through trial and error.

The fifth theme, **Observation**, emerged from codes such as *'observation'* and *'teacher-researcher'*. This theme corresponds with the fourth tenet of the Reggio approach, which emphasizes that "the teachers' role is not reduced only to provide information to students, but to listen, observe and to document the work of children" (Santín & Torruella, 2017, p. 53). In participants' descriptions, Observation often took place during play, as teachers used children's play behaviors, conversations, and problem-solving strategies to understand their thinking and plan future experiences. This data aligns with Hart's (2006) framing of Observation as part of a reflective process that is integral to supporting rich, playful learning environments.

The sixth theme, **Collaboration**, was associated with codes such as *learning with others* and *communication*. This theme reflects the eighth tenet, *Social Relations*, which positions children as active social actors in co-constructing knowledge (Santín & Torruella, 2017). Participants described play as a powerful context for collaboration,

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from negotiating game rules to building a shared structure or acting out a story together. Such collaborative play fosters communication, empathy, and teamwork—skills essential for lifelong learning.

Finally, **Community**, the seventh theme, was associated with *community involvement* and *cooperation among teachers, children, and families*. This data aligns with the Reggio view of education as a community-based philosophy (Hart, 2006). Participants noted that play-based projects often incorporated family and community engagement, blurring the lines between classroom and home and reinforcing learning as a shared, relational process. Involving families in children's play experiences also reflects the philosophy's emphasis on respect for parents as partners in the educational journey (Altan, 2019; Yıldız & Durmuşoğlu, 2018).

Across all themes, participants' descriptions reinforced that play was not an optional activity but an integral process in Reggio-inspired environments—an avenue through which children explore, question, collaborate, and connect with others. These findings affirm that play in Reggio contexts is deeply purposeful, blending joy, creativity, and inquiry to support holistic development while honoring children's rights under Article 31 of the United Nations Convention on the Rights of the Child.

This study addressed the research question, "How do Reggio practitioners define the Reggio-inspired approach?" An analysis of the participants' descriptions of the Reggio Emilia approach revealed seven distinct themes. These themes are *Child-centered*, *Learning from the environment*, *Documentation*, *Inquiry*, *Observation*, *Collaboration*, and *Community*. While each theme relates to one of the eight core tenets of the Reggio approach (Santín & Torruella, 2017), three tenets were not represented in the participants' responses. The tenets of the Reggio Emilia philosophy not expressed in these final themes were *100 Languages of Children*, *Long-Term Projects*, and *Negotiated Learning*. Future research could explore why these three tenets were absent from participants' descriptions of their Reggio-inspired practices and whether Reggio-inspired educators understand or implement them less consistently.

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Limitations

One limitation of this study is that the collected demographic data did not include participating teachers' locations. Although the questionnaire was designed in English, this does not indicate that the participants teach in English-speaking schools. Because it was disseminated online, the questionnaire may have been accessible to an international audience. Additionally, the demographic data did not capture the ages of the participating teachers. Collecting this demographic information could have shown the prevalence of the Reggio-inspired approach across age groups, education level, years of experience, and regions.

Clinical Implications

This study aimed to identify teachers' perspectives on the Reggio Emilia philosophy and examine how they enact this approach in practice. Seven key characteristics emerged—Child-centered learning, Learning from the Environment, Documentation, Inquiry, Observation, Collaboration, and Community—each reflecting play's central role as a medium for exploration, meaning-making, and relationship-building.

The findings provide a practical framework for educators, administrators, and teacher trainers seeking to design and sustain environments that honor children's right to play. By recognizing play as the primary context for Reggio-inspired learning, educators can intentionally create spaces and experiences that support autonomy, creativity, and collaboration. Documentation and Observation of play can guide curriculum decisions, while environments rich in natural, open-ended materials can extend opportunities for inquiry and imagination.

For professional development, these results highlight the importance of preparing educators to facilitate play-based learning that is child-led yet skillfully scaffolded, ensuring that play retains its integrity as a joyful, self-motivated process. Beyond the classroom, the study underscores the need for policy-level advocacy to protect and promote children's right to play, as articulated in Article 31 of the United Nations Convention on the Rights of the Child.

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In alignment with the International Play Association's mission, these findings reinforce that play is not an "extra" but an essential component of quality early childhood education. Embedding play deeply into practice is both an educational imperative and a matter of upholding children's rights.

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Phenomena-Based Play in the Outdoors

Brian A. Stone, EdD

Introduction

Outdoor play is essential to a healthy, well-balanced life. When children have regular opportunities to explore, wonder, create, imagine, and authentically play in outdoor settings, they benefit across multiple domains, including physical health, social interaction, emotional regulation, executive functioning, and sustained attention (Yogman et al., 2018). Much of the research suggests that time outdoors tends to increase physical activity, build imagination and creativity, and support whole-child development. However, today's competing indoor/screen routines often displace or diminish those gains (Larson et al., 2019).

A key advantage of outdoor play is the meaningful opportunity it provides to interact with real-world phenomena, events, or patterns that students can observe and explain (e.g., water flowing downhill, shadows shifting, ice melting, leaves falling, insects foraging, or wind moving objects). The Next Generation Science Standards (NGSS) define *phenomena* as occurrences in the natural or designed world that students can explain or predict using scientific knowledge (NGSS Lead States, 2013). Anchoring learning in such phenomena is central to three-dimensional science because it invites sense-making through practices, core ideas, and crosscutting concepts (Achieve & Next Gen Science Storylines, 2016).

This paper uses the term Phenomenon-Based Play to describe child-led, unstructured outdoor play that naturally centers on such phenomena without adult-imposed objectives. In contrast to classroom-based Phenomenon-Based Learning (PhBL), where a teacher selects an anchoring phenomenon to guide instruction, Phenomenon-Based Play relies on discovery and the child's curiosity to drive observation, prediction, testing, and revision of ideas. Research on anchoring phenomena underscores why play provides a critical opportunity for children to engage with the world around them. Authentic anchors are observable, compelling, too complex to explain in a single step, and rich enough to elicit children's questions and investigations (Penuel & Bell, 2016). These are properties that are abundant in everyday

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outdoor contexts. Children need plenty of time and exposure to these "anchors" through their play.

Phenomenon-Based Play represents a powerful, practical response to an overly digital world. By protecting unstructured time outside and resisting the urge to push adult objectives, we preserve children's innate curiosity to meet a world rich with observable phenomena. The result is playful inquiry that builds scientific sense-making while simultaneously supporting the whole child in fostering children who are physically active, socially connected, emotionally resilient, and deeply interested in how the world works.

Problem Statement

Despite these benefits, outdoor play is declining, as is play in general. Gray (2011) suggested that outdoor play had been declining for the past 50 years because of cultural shifts in Western society, and he made this claim only a few years after the release of the first iPhone (2007). Since then, personal technology has been rapidly adopted across the country. Nearly two-thirds of American children have their own smartphone by age 10, and by age 13, as many as 99% of American children own or regularly access a smartphone (Stephens, 2025). With the rise in personal technology, the prevalence of short-form entertainment, and the continuous, instant access that children have to the world's information, children are far less likely to spend significant time playing outside (Larson et al., 2019; Andjić & Ivić, 2023; Tremblay et al., 2021; Kar et al., 2025). They are far more likely to spend time watching YouTube, TikTok, or other social media than to be playing (Stephens, 2025).

When coupled with the high cost of living, rise in dual-income homes (i.e., two working parents), and the hustle culture that dominates adulthood, it is often easier for parents to let their children spend hours on a device within the safe confines of their home rather than to allow or encourage their children to spend time playing outside (Boxberger & Reimers, 2019; Bhutani et al., 2025; Zong et al., 2024).

Therefore, when children have fewer opportunities to play outside and the overall value and time for play is diminished, children will lack the critical foundational benefits

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provided by play. Furthermore, children who do not regularly play outside will miss meaningful opportunities for outdoor inquiry, exposure to natural and designed scientific phenomena, exploring and investigating their world, and building an identity as an explorer, scientist, and engineer. The loss of imaginative and playful inquiry harms not only the future health and success of the child who spends time cooped up indoors in front of a screen, but also the health of our society as a whole.

Background

Phenomenon-Based Play allows children to interact with scientific phenomena through the natural engine of curiosity, fostering a sense of wonder about the world around them. This concept is an innovation of the previously mentioned classroom strategy, Phenomenon-Based Learning (PhBL), in which students explore real-world, observable events through instructional units in a standards-based classroom. In PhBL classroom settings, the teacher often selects the phenomenon (called anchoring), which is typically complex and requires interdisciplinary and critical thinking skills to unravel the concepts driving it (Fields & Kennedy, 2020; Penuel & Bell, 2016). Instructional PhBL is frequently driven by inquiry or questioning strategies in the classroom. The teacher uses the phenomenon to get children to ask the right questions needed to understand multiple, complex scientific concepts.

However, in Phenomenon-Based Play, children are naturally exposed to phenomena (typically outdoors), observable events in the world that they can use scientific knowledge to explain or predict (NGSS, 2016). This happens effortlessly through play, and it is important to note that there is no teacher or adult to guide the learning process. This is free, unstructured, child-led play in outdoor settings that exposes children to scientific phenomena through explorations in which they observe an event or object and then playfully engage with it through their own authentic inquiry. The "anchoring," instead of being a purposeful selection by a teacher, is the organic, happenstance discovery of something that captures the child's attention and interest. Then, through curiosity, the child interacts with the phenomenon, often by poking, prodding, digging, and generally experimenting. The child engages in high-level scientific processes without adult interference, formal instruction, objectives, or

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extrinsic rewards (such as grades). They will playfully engage because they are interested and curious.

When children investigate these outdoor events or anchors through play, they spontaneously engage in scientific thinking (e.g., asking questions, modeling, planning and carrying out tests, analyzing cause-and-effect). Beyond inquiry, the broader benefits of outdoor play are well documented. Systematic reviews and large studies find links between outdoor time and healthier activity profiles, social skills, and connection to nature (Hinkley et al., 2018; Lee et al., 2021); conversely, escalating screen time is associated with less outdoor time and weaker nature connectedness in youth. Importantly, these trends are not evenly distributed. Girls and some racial/ethnic groups report less outdoor time and more screen time, highlighting equity considerations for access (Larson et al., 2019).

At the same time, opportunities for outdoor play have declined due to cultural, environmental, and technological shifts. More structured time, safety concerns, urban design barriers, and the growing pull of screens have led to the long-observed decrease in free outdoor play. In turn, this has been linked with broader concerns for children's mental health and autonomy.

Appropriate Approaches/Strategies

In order to understand what Phenomena-Based Play could look like, imagine a young girl wandering through a wooded area after a night of rain. While jumping over a log, the child observes a small stream of water trickling downhill, carrying bits of leaves and dirt. For the child, who is perhaps on a walk with her parents, this is an unexpected discovery. The phenomenon captures the child's attention, and the parents allow a break in the walk for the child to investigate.

Curious, the girl sits beside the stream and begins placing sticks, leaves, and pebbles into the flowing water. These self-chosen, playful actions also reflect a scientific process born of curiosity. No one makes her do it or teaches her through it. She is naturally drawn to engage in this activity. She observes what floats or sinks, what gets stuck, and how the water changes direction around the objects. She pokes at the water

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with her fingers and experiments by digging tiny channels, observing how the stream splits, slows, or speeds up.

Without realizing it, the child is engaging in high-level scientific thinking, including:

- predicting what might happen if she moves a stick across the stream
- observing how water flow changes with obstacles
- comparing how different materials behave in water
- testing ideas, revising them, and trying again
- developing foundational conceptual knowledge about the properties of water

This process is embedded in the child's play. She does not know, or even care, that she is engaged in what adults call three-dimensional science, or Phenomenon-Based Learning. She engages because she chooses to, and because it is enjoyable. Furthermore, there is no teacher, or instruction, or goal; there is just the child's authentic, self-driven inquiry into a natural event. The "anchoring event" was simply the happenstance discovery of moving water, and all scientific engagement emerged organically from the play itself. This approach is highly congruent with Discovery Learning, an active learning strategy in which learners construct knowledge through experience, inquiry, and problem-solving. According to Kaiser et al. (2018), the self-generation of knowledge that is a hallmark of Discovery Learning and Phenomena-Based Play can activate deeper thinking and improve long-term memory when compared with the passive reception of information (teacher-directed instruction). Therefore, a play-based, discovery approach is highly beneficial for children to construct their own understanding through their self-chosen, playful experiences.

Approaches to maximize Phenomena-Based Play opportunities include intentionally decreasing screen time and exposure to short-form entertainment. Furthermore, parents and educators should dramatically increase the amount of time children spend outside (whether it is in urban parks or rural wooded areas). To create meaningful opportunities for Phenomena-Based Play, adults should rarely, if ever, bring instructional goals or objectives into outdoor settings. Even if a teacher-directed goal is planned for an outdoor activity, adults should always provide ample time for children to

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explore, investigate, and play freely. With more time outside, children have more chances to encounter phenomena and engage in natural, playful interactions.

Conclusion/ Recommendations

Children need less screen time and more play time. They need frequent, sustained time outdoors. They need less direct instruction and more self-generation of knowledge through experience. Teachers will always have a role. Children are not going to "discover" or "self-generate" terminology, but that transmission of knowledge can always come after or alongside experiences as they are built by children. Curiosity is a powerful driving force shared across humanity. Adults need to value this force and provide time for children to explore through their play.

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Design for Play in Early Years

Mugdha Thakurdesai, MArch

Introduction

Curriculum-driven planning has led many schools to adopt conventional classroom-based layouts as a standard architectural response for all age groups, including early years education. This one-size-fits-all approach overlooks the unique developmental and psychological requirements of children aged 0–6. Learning environments that rely heavily on enclosed classrooms and rigid spatial definitions often inhibit play, exploration, and movement, thereby reducing their effectiveness in supporting holistic development. There is a clear need to move away from static, classroom-centric models towards learning environments that are flexible, mobile, and responsive—spaces that enable young children to navigate, explore, and engage with their surroundings as integral parts of the learning process.

Problem Statement

To follow a specific curriculum, most schools provide traditional classroom setups as the architectural solution for all age groups across the school. This includes the early years. Given this age group's specific needs for growth and psychological development, confining young minds to classrooms or highly structured spaces creates environments that are ineffective for their development. This approach needs to change so the design supports children's flexibility and mobility within the learning premises.

Background

India—the world's most populous country with a rapidly growing economy—faces a significant challenge in providing quality learning environments for early years education. While policy frameworks such as the *National Education Policy 2020* (Ministry of Education, 2020) and the *National Curriculum Framework for the Foundational Stage* (NCERT, 2022) emphasize foundational learning and holistic development, infrastructure often falls short of age-appropriate needs.

Across urban and rural areas, early childhood centres are proliferating rapidly, particularly in cities. However, many operate out of single-family homes or commercial

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buildings never designed with young children in mind. Such spaces typically lack dedicated play areas and developmentally focused learning environments, limiting opportunities for movement, exploration, sensory experiences, and social interaction—all foundational to early childhood development.

Strategies: Appropriate Approaches

In the Indian context, early childhood learning environments are shaped by high-density urban conditions, limited land availability, climatic extremes, and diverse socio-cultural practices. Many early years centers operate in repurposed residential or commercial buildings, often with limited access to dedicated outdoor play areas. As a result, conventional models of large, open playgrounds are frequently impractical. This requires rethinking how play-based learning environments are spatially conceived and implemented.

While theories of play and cognitive development, such as those proposed by Piaget (1962), remain universally relevant, their architectural translation must respond to local realities. In India, outdoor learning environments are often most effective when designed as a network of semi-outdoor and transitional spaces rather than expansive open grounds. Courtyards, verandahs, shaded spill-out zones, terraces, and covered walkways can collectively function as active learning landscapes that support exploration, movement, and socio-emotional interaction while protecting against heat, monsoon rains, and environmental pollutants.

These spatial strategies are deeply rooted in traditional Indian architectural typologies such as the courtyard and the verandah, which historically functioned as spaces for social interaction, informal learning, and play. Reinterpreting these familiar typologies in contemporary early childhood settings helps learning environments remain culturally resonant while supporting modern pedagogical objectives. Such spaces encourage child-led exploration, peer interaction, and imaginative play, reinforcing the notion of children as active participants in their learning process.

From a design perspective, zoning outdoor and semi-outdoor areas to support varied play behaviours—functional, constructive, and symbolic (Frost, 1992)—becomes a critical strategy. Even within constrained sites, intentional layering of play zones can

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support diverse learning outcomes. Gross motor development can be supported through climbing, balancing, and movement-based activities, while fine motor skills can be enhanced through tactile experiences such as sand play, gardening, water play, and interaction with natural materials (Fjørtoft, 2004). Undefined or flexible spaces often emerge as powerful catalysts for imaginative and collaborative play, enabling children to negotiate, cooperate, and build social relationships.

This approach also challenges the conventional hierarchy that positions indoor classrooms as the primary learning environments. In early childhood education, where learning is predominantly play-driven, indoor spaces can be reconceptualised as extensions of the outdoor learning landscape. Indoor environments function as specialised ateliers—spaces for construction, storytelling, role-play, creative arts, and music and movement—complementing and reinforcing learning experiences initiated outdoors. This "out-to-in" framework aligns with India's climatic and cultural context, where learning and social interaction have traditionally flowed seamlessly between interior and exterior spaces.

By adopting context-responsive, play-based design strategies, early childhood learning environments in India can move beyond space limitations and infrastructural constraints to create holistic, scalable, and culturally grounded settings for early learning. This approach aligns with national educational priorities that emphasize experiential learning and the integrated development of physical, cognitive, and socio-emotional skills in the early years.

Recommendations for Early Childhood Learning Environments

1. Establish Play-Based Learning as a Spatial Driver: Design guidelines for early years must explicitly recognise movement, exploration, and play as core modes of learning.
2. Establish Minimum Semi-Outdoor Learning Requirements: Where open playgrounds are not feasible, designate semi-outdoor spaces as mandatory learning areas, not ancillary amenities.

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3. Integrate Indigenous Spatial Typologies: Courtyards should serve as learning cores; verandahs as transitional play zones; and shared open spaces as community-oriented learning areas.
4. Optimize Space Use in Urban and High-Density Contexts: Activate terraces, ramps, rooftops, and multi-use zones to create layered play opportunities within compact sites.
5. Balance Safety with Risk-Based Play: Adopt age-appropriate risk through scaled elements, natural surveillance, and material choices, rather than relying too heavily on barriers and padding.
6. Embed Nature and Sensory Learning: All early years centres should incorporate at least one nature-based learning component, such as a grow garden, a sand- and water play zone, or a tactile landscape element.

Conclusion

The design of early childhood learning environments must be fundamentally reoriented towards play-based learning as the primary spatial and pedagogical framework. Early years facilities should move away from rigid, classroom-centric models and adopt flexible, landscape-based learning environments that support movement, exploration, and child agency. Prioritize the integration of semi-outdoor and transitional spaces to ensure climatic responsiveness and year-round usability, particularly in dense urban contexts.

Design frameworks must draw from indigenous spatial typologies, embed nature and sensory experiences as integral learning tools, and allow for adaptability across varying site constraints. Importantly, early years environments should balance safety with opportunities for risk-based play, enabling holistic physical, cognitive, and socio-emotional development. Aligning these design approaches with national education priorities will ensure that early childhood learning environments are scalable, culturally grounded, and developmentally appropriate, laying a strong foundation for lifelong learning.

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1001 Pathways to Learning Through LEGO® Play Pedagogy: Play as a Vessel for Justice and Belonging

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Introduction

Play is the oldest, most enduring, and most generative learning relationship humans establish with the world. For this reason, play should not be reduced to an activity squeezed into "free time"; rather, it is the child's (and indeed the human being's) way of making meaning of the world, building relationships, structuring thought through trial and error, and expressing the self. This perspective requires that we treat play not merely as a pedagogical method, but as a foundational ground for the nature of learning itself (Tuğrul, 2017, 2019, 2024).

Children's play is recognized internationally as a right. Article 31 of the United Nations Convention on the Rights of the Child guarantees the child's right to rest, leisure, play, and to participate in age-appropriate recreational activities (United Nations, 1989). This framework reminds us that the right to play is connected not only to well-being, but also directly to learning, development, and participation. At the same time, it positions play as inseparable from creativity, imagination, self-regulation, social negotiation, and participation in cultural life (NAEYC, 2022). Key frameworks in early childhood literature and child health strongly emphasize play's role in cognitive, socio-emotional, and self-regulation development (Ginsburg, 2007). Clinical reports from the American Academy of Pediatrics further demonstrate that play deprivation poses risks to children's health, attachment relationships, and motivation to learn. Play is indispensable for healthy child development (Yogman et al., 2018).

This White Paper approaches the pedagogical value of play through the lens of LEGO® Play Pedagogy (Learning through Play) and argues that play is not the opposite of learning, but learning itself. Within this approach, the educator's role is redefined not as "managing" but as opening space; assessment is understood not as measuring products, but as making thinking processes visible. The text offers concrete examples of how this becomes possible through an approach that generates many possibilities with a

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limited number of materials. In doing so, play is addressed not merely as a classroom preference, but as part of how school and learning are positioned-and as part of broader debates on justice and access.

Problem Definition and Key Challenges

In recent years, children, beginning in early childhood, have been systematically distanced from play; as institutional schooling expands, play is pushed into an increasingly narrow space. In many contexts, play is still framed as a reward, a break, or the opposite of "serious" learning—making it difficult for the idea that play is the language of learning to gain pedagogical legitimacy. This shift in perception moves play outside learning rather than integrating it into learning goals; it weakens children's cycles of curiosity, experimentation, risk-taking, and trying again. However, a strong body of scientific evidence shows that, during play, children naturally develop higher-order skills such as planning, problem-solving, self-regulation, and social negotiation (Feyman et al., 2021; Güneş et al., 2019, 2020).

A second challenge is the growing pressure toward academicization and standardization in early childhood. Crowded classrooms, rigid schedules, narrowing assessment expectations, and the excessive valorization of early academic performance make it difficult to position play as a sustainable classroom learning approach. This pressure does not arise solely from structural school conditions; it is also reinforced by families' tendency to interpret schooling primarily in terms of academic outcomes. This climate creates a cultural frame that codes play as "wasted time." At precisely this point, the right to play goes beyond being a pedagogical choice and becomes an obligation grounded in children's rights and developmental needs.

Third, teacher self-efficacy and the ambiguity of pedagogical mediation come to the fore. Even when many teachers believe in the value of play, they may feel insufficiently prepared to accompany play without disrupting it, deepen play, ask productive questions, know when to step back, and collect qualitative data from play processes-and they may lack systematic support. Because the impact of play-based learning is often context-sensitive and process-oriented, evidence of play becomes invisible in systems dominated by short-term, standardized measurement tools (Zosh et

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al., 2017). This invisibility reproduces doubts about play's pedagogical value and creates a vicious cycle.

Two contemporary "extremes" further deepen this cycle. On one end, consumer culture increasingly shapes childhood. Abundant toys, fast boredom cycles, and the normalization of "more" may flatten rather than enrich the quality of play. "More objects" does not always mean "better play"; some studies show that with fewer toys, children sustain attention longer and deepen their play. As consumer-oriented childhood turns play into a consumed product, capacities for producing, transforming, rebuilding, and patiently experimenting may weaken (Dauch et al., 2018).

On the other hand, inequality and access remain a major problem. For children who cannot access toys, books, quality education, or safe play spaces, the issue is not the quality of play but whether play is possible at all. UNESCO and UNICEF's work on early childhood education emphasizes that inequalities in access at early ages directly affect lifelong learning opportunities and developmental equity. In this context, play pedagogy should be considered not only as a classroom method, but also as an area related to pedagogical justice and children's rights.

Finally, debates about digital intensity and technological dependence widen the distance from tangible play. Excessive early screen exposure may pose risks for attention regulation, self-control, and the development of executive functions. Moreover, rapid feedback and ready-made stimulation cycles can make it harder for children to enter a deeper flow of play. This makes play with open-ended materials grounded in "hands-on and minds-on" experiences even more critical (Christakis, D. A., 2019; McHarg, G., & Hughes, C., 2020).

The core claim of this White Paper is as follows: LEGO® Play Pedagogy does not offer a "miracle solution" to these diverse clusters of problems on its own; rather, it can respond as a scalable network of inspiration that re-legitimizes play, strengthens teacher mediation, makes processes visible, and enables the creation of many possibilities with limited materials.

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Background

A Theoretical View of Child-Centered Play-Based Learning Through LEGO® Play Pedagogy

The theoretical foundations of LEGO® Play Pedagogy are grounded in constructivist and constructionist learning approaches. These approaches argue that knowledge is not transmitted from outside; individuals actively construct it through experience, trial, and interaction (Piaget, 1972; Bruner, 1966). Seymour Papert's constructionism emphasizes that the deepest learning occurs while "making something" (Papert & Harel, 1991). While Piaget's cognitive constructivism emphasizes that children actively construct knowledge, Vygotsky argues that play provides a developmental arena that deepens learning through social interaction and language (Vygotsky, 1978).

LEGO® Play Pedagogy treats these theoretical approaches not as opposing but as complementary, positioning play as a holistic learning process across cognitive, social, and cultural dimensions. Considering the structural, pedagogical, and cultural barriers facing play-based learning, LEGO® Play Pedagogy holds significant transformative potential for education systems. The approach repositions play as a pedagogically legitimate pathway to learning, supports teachers' pedagogical self-efficacy, and makes the child's role as an agent in the learning process visible. In this respect, play-based learning can be understood not only as an in-class method but as a pedagogical paradigm that requires education systems to be rethought holistically.

LEGO® Play Pedagogy offers an integrated framework that moves play from an activity pushed outside education systems to the center of learning. In this framework, play is not limited to cognitive outcomes; it is a learning space that supports foundational components of lifelong learning, such as socio-emotional development, self-regulation, collaboration, cognitive flexibility, and problem-solving. Play, learning, and development are connected through a multidimensional, reciprocal relationship; play pedagogy places this relationship at the center of the learning process (Mardell, Ryan, et al., 2023).

In play-based learning environments, children experience error as a natural part of learning; they learn to take risks, try, and try again within a safe context. LEGO®

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Play Pedagogy provides concrete experiences that make visible what children think and how they think. Here, the focus is not on reaching the "correct" outcome but on producing meaningful learning experiences. Play is positioned not as the opposite of learning but as learning itself, and the child is accepted as the active subject of the learning process. LEGO® Play Pedagogy is based on a constructivist view that recognizes children not as passive recipients of knowledge but as agentic actors who are curious, make mistakes, try again, and actively construct meaning (LEGO Foundation, 2018). This proposal outlines a structured yet open-ended learning ecosystem.

Content developed within LEGO® Play Pedagogy is aligned with the 5E Instructional Model (LEGO Education, 2024). The 5E model—grounded in constructivist learning theory—consists of the stages: engage, explore, explain, elaborate, and evaluate. Learners can integrate new knowledge with prior concepts by understanding and reflecting on activities in depth. A constructivist approach requires educators to embed inquiry, exploration, and evaluation into instruction. This positions teachers as facilitators who guide learners while they actively learn new concepts (Lesley University, 2024). As a constructivist process that encourages learners to generate knowledge and meaning from experience, the 5E model also integrates with LEGO® Education's 4C approach: connect, construct, contemplate, and continue. Within this framework, learners can experiment and explore as they acquire new knowledge and are encouraged to collaborate on open-ended tasks (LEGO, 2024).

One core principle of LEGO® Play Pedagogy is structured freedom—the pedagogical balance between leaving play entirely unstructured and over-structuring it. Children are free within play; however, this freedom occurs within a consciously designed pedagogical structure that supports learning. In this context, the teacher's role is not to be an authority who controls play. However, the teacher is a pedagogical mediator who designs the learning environment, observes the process, and accompanies the child's meaning-making through play with sensitivity. In this way, play becomes a learning ecosystem that integrates academic learning and socio-emotional development (Mardell et al., 2023).

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During play, the child identifies problems, develops hypotheses, tries solution paths, makes decisions, collaborates, and regulates their own learning process. These processes contribute not only to learning content but also directly to "learning to learn" skills. The child is not a passive implementer following steps determined by the teacher; rather, the child is an active participant who influences the direction of play, makes decisions, and constructs meaning. This aligns with Tuğrul's (2024) view of play as a learning process that emerges from children's developmental needs and is shaped under children's leadership. In learning environments where the child is positioned as an agent, motivation becomes internalized; learning is grounded not in external rewards but in curiosity and discovery (Ngalonsa et al., 2024). LEGO® Play Pedagogy supports this internal motivation through open-ended materials and flexible learning environments, strengthening the child's active participation in learning.

Building processes with LEGO® enable children to test ideas, notice errors, develop alternative solutions, and try again. In this view, error is not something to avoid but a natural and valuable component of learning. Neuroscientific findings on play-based learning also support this approach (Liu et al., 2017). Play naturally activates executive functions such as planning, attention control, working memory, and cognitive flexibility (Diamond, 2014; Zosh et al., 2017). LEGO®-based play requires children to set goals, plan processes, generate solutions to problems, and shift strategies when needed. This turns learning into a durable and meaningful experience fueled by internal motivation rather than external rewards. LEGO® Play Pedagogy treats play not only as a fun activity but as a holistic learning environment in which children build thinking, planning, and abstract concepts through concrete representations (Resnick, 2017; Papert & Harel, 1991). A child playing with LEGO® makes their thinking visible with their hands; this visibility makes learning observable and pedagogically interpretable for both children and adults (Ackermann, E 2014). In this respect, LEGO® is positioned not as a tool of learning, but as a language of learning.

Key characteristics of LEGO® Play Pedagogy include open-endedness and a process-oriented stance. Open-ended play legitimizes not a single "right" answer but multiple solution paths, individual differences, and creative thinking (Tuğrul, 2017, 2025). A process orientation makes it possible to evaluate learning not only through the

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final product but through thinking steps, decisions, and interactions (Mardell, Wilson, et al., 2023). This helps learners recognize and regulate their own thinking processes.

LEGO® Play Pedagogy centers the learner's agency and enactment. The child decides what to build, how to proceed, and when to change course. This sense of agency turns learning into a personal, meaningful, and owned process (Ryan & Deci, 2000). The ability to express thinking through tangible materials facilitates children's self-expression, justification, and restructuring—particularly in early childhood. This strengthens not only the cognitive but also the emotional and relational dimensions of learning (Tuğrul, 2019, 2020). LEGO® Play Pedagogy does not limit learning to a single method; instead, it offers a flexible framework that enables multiple pathways to learning. Individual building processes, collaborative constructions, story-based narratives, problem-based scenarios, and sensory-kinesthetic experiences form different facets of this framework (Resnick, 2017; Project Zero, 2025). The metaphor of "1001 pathways to learning" is not a quantitative measure of abundance but a pedagogical expression that highlights the contextual, individual, and situational nature of learning.

In traditional educational settings, adults often occupy the center of the process; what will be done, how it will be done, and what is correct are predetermined. In LEGO® Play Pedagogy, this center shifts and the focus of learning becomes the child. In this context, the educator takes on a role that does not give instructions but asks questions; does not determine outcomes but observes processes; does not correct mistakes but makes meaning of them. This transformation deepens rather than diminishes pedagogical power. Expertise is grounded not in control, but in reading the process, intervening at the right moment, or deliberately stepping back (Resnick, 2017; Ackermann, E., & Gauntlett, D., 2009; Ackermann, E., 2014). "Opening space" refers to creating a learning environment where the child can safely bring forward thoughts, trials, and decisions. This environment must be physically accessible, emotionally safe, and pedagogically open-ended. An educator who opens space does not think for the child; they leave room for the child to think. The child's sense of being able to influence the process is a key determinant of internal motivation and engagement in learning (Ryan & Deci, 2000; Tuğrul, 2024, 2025). In LEGO® Play Pedagogy, assessment is not a separate action performed at the end of learning; it is an inherent component of the

learning process. Assessment aims not to measure what the child produces, but to make visible how the child thinks, tries, gives up, and begins again, and to make sense of the process. For this reason, traditional measurement and assessment tools often respond only in limited ways to the nature of play pedagogy (Zosh et al., 2017).

Therefore, assessment in LEGO® Play Pedagogy is grounded in processes of monitoring and interpretation. The educator observes how the child begins, responds to challenges, changes ideas, interacts with others' ideas, and regulates learning. These observations provide qualitative data about executive functions, self-regulation skills, problem-solving strategies, and social interactions (Diamond, 2014; Zosh et al., 2017). Play pedagogy reminds us that learning, by its nature, cannot be standardized. Each child's learning pathway is different, and these differences should be treated not as problems but as assets in assessment. Thus, assessment in LEGO® Play Pedagogy is oriented not toward comparison, ranking, or labeling, but toward understanding and supporting. Assessment represents an ethical stance that makes strengths visible rather than a mechanism that identifies deficits (Tuğrul, 2017, 2019). In short, assessment in LEGO® Play Pedagogy is not about "trying to measure play" but about understanding the thinking processes that emerge through play. Learning is assessed not by numbers but by meaning.

Appropriate Approaches and Strategies

LEGO®, Six Bricks, ATAÇ, and 1001 Pathways to Learning: Building "More" with "Less"

The name LEGO® derives from the Danish phrase "LEg GOdt," meaning "play well." This naming positions play not only as enjoyable time, but as an integrated pedagogical understanding intertwined with learning, thinking, and producing. In LEGO® Play Pedagogy, "playing well" is not a random pastime; it refers to a high-quality learning process that makes room for trying, exploring, making mistakes, and rebuilding (LEGO, 2024).

A frequently cited concrete indicator of this philosophy is that six 2×4 LEGO® bricks of the same color can be combined in 915,103,765 different ways. The fact that six standard bricks can generate nearly a billion possibilities shows how rich, varied, and

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open-ended play and learning can be—even with limited materials. This number is not only mathematical data; it can also be read as a powerful pedagogical metaphor demonstrating that learning cannot be reduced to a single correct path or constrained to predetermined routes. Even with the same six bricks, the same child, and the same teacher, a different learning pathway can open each time. Six Bricks pedagogy and practices—often considered the "homeland" of this understanding—were developed within Care for Education in South Africa, and sources explicitly refer to Brent Hutcheson as the "inventor of Six Bricks." Hutcheson developed Six Bricks to create short, repeatable, structured play experiences using a small number of standard, accessible materials to support children's perceptual-motor skills, attention regulation, cognitive flexibility, and executive functions. Care for Education's official descriptions emphasize that Six Bricks is grounded not only in building, but also in an approach to learning that transforms thinking through knocking down and rebuilding (Care for Education, 2024a). Six Bricks localized its pedagogical framework in Türkiye through the ATAÇ: Altı Tuğlayla Az Çoktur project—developed with the coordination and academic consultancy of a group of academics and early childhood teachers—which became a pedagogical language and found widespread application in early childhood education. Implemented as an eTwinning project, ATAÇ's process has been made visible through teacher networks, workshops, and digital sharing platforms. The project's institutional digital traces appear on its official Instagram account, opened in January 2022, and in open-access video materials (ATAÇ: Altı Tuğlayla Az Çoktur, 2022). ATAÇ concretizes the idea of 1001 pathways to learning by reinterpreting the limited-material approach of Six Bricks through the philosophy of "building more with less." In the 2021–2022 school year, 346 guided games developed by 112 early childhood teachers across Türkiye's 81 provinces were played simultaneously with 2,047 children aged 4–6 (Tuğrul et al., 2022). Inspired by Six Bricks, the ATAÇ project offers an open-ended pedagogical framework that emphasizes that many games, learning experiences, and strategies can be created with a limited number of materials. The "few" bricks do not limit learning; instead, they strengthen children's creativity, flexibility, problem-solving skills, and active participation. In this respect, ATAÇ offers teachers a pedagogical compass to connect play to learning goals without reducing play to a purely instrumental activity for achieving teacher-defined outcomes. The same materials can

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serve different learning domains, such as attention regulation, executive functions, language and narrative, mathematical thinking, social negotiation, and creative problem-solving (Yaman, 2025). This demonstrates that learning occurs through multiple pathways and that the richness of learning experiences stems not from the quantity of materials used, but from how they are positioned and experienced (Yöndem, 2024; Güneş, 2019).

When LEGO®'s "play well" philosophy, the Six Bricks approach, and the hundreds of millions of possibilities supported by ATAÇ are considered together, it becomes more visible why learning through play is a powerful, sustainable, and universal pedagogical approach.

Conclusions and Recommendations

The primary recommendation is the re-legitimization of play in education systems—at both formal and cultural levels-as the language of learning rather than the opposite of learning. This is not merely a change in discourse; it requires redesigning time, space, and assessment mechanisms. The right to play and play-based learning should be positioned as a measurable priority in early childhood policies.

The second recommendation is to treat "accompanying play" as a distinct area of expertise within pre-service teacher education and in-service professional development. Rather than trying to manage play flow, teachers should design safe, accessible, open-ended spaces where play becomes learning; ask questions at the right time, step back at the right time, and interpret the process through observation and documentation. These competencies are core to the sustainability of play pedagogy.

The third recommendation is to shift assessment from product-focused measurement to process-focused interpretation. Observation, documentation, and the child's own narrative should be included as ethical and pedagogical tools in standard practice repertoires to make the learning value of play visible. This enables both teachers and families to read play as an evidence-based learning space.

The fourth recommendation is to strengthen the philosophy of "building more with less" in response to childhood experiences shaped by consumer culture and digital

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intensity. Creating rich thinking possibilities with limited but open-ended materials (e.g., ATAÇ) can support children's capacities for contentment, deepening, focus, patience, and creative problem-solving.

The fifth recommendation is to consider scalable micro-material approaches (such as the Six Bricks pedagogy) alongside access policies in contexts of inequality. To keep play pedagogy from becoming a privilege of high-resource environments, expand low-cost, replicable models. UNESCO–UNICEF's emphasis on access, quality, and equity in early childhood provides a key policy-level foundation for this strategy (UNESCO & UNICEF,2024).

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Author Biographies

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A - B

Kim Adams | Stephanie Adams | Akosua Obuo Addo | Sarah Aiono
Jenn Beideman | Anna Beresin |Jennifer L. Berube | Preston Blackburn
Kimberly Blitch | Charlene Woodham Brickman | Daniel Burton

Kim Adams, MA, Leadership, Play Advocate and Consultant

Kim Adams (she/her) is a passionate play advocate, educator, and speaker with over 35 years of experience in early childhood education. She holds a BA in Creative Arts from San Jose State University and a Master's in Leadership from Saint Mary's College of California, where her action research focused on supporting teachers in embracing play as pedagogy.

Kim is the owner and lead teacher at Barron Park Playschool in Palo Alto, California, a play-responsive environment grounded in creativity, connection, and child-led learning. Beyond her school, she partners with public schools, private programs, and community organizations to provide professional development, consulting, and coaching that helps educators integrate play and creativity into curriculum, assessment, and practice.

A certified Positive Discipline Parent and Classroom Educator, Kim blends relational and restorative practices with hands-on, experiential learning. She has presented nationally and internationally for organizations including NAEYC, Region 9 Head Start, California Head Start, CAAEYC, EveryChild California, and the International Play Association (IPA). She currently serves on the board of Play-Learn-Live and is part of the leadership launching the California chapter of IPA USA.

Kim's work is fueled by the conviction that play is not just a strategy but a right, a mindset, and a catalyst for healthy development, creativity, and educational transformation.

Stephanie Adams, DHSc, OTR/L, OTA

Stephanie Adams, DHSc, OTR/L, OTA,is a seasoned Occupational Therapist with over 31 years of experience. Her career began in early intervention, where she helped parents integrate play into daily routines to support developmental milestones. While working in public schools for a decade, she tailored therapeutic strategies to meet the unique learning needs of the children she served.

Dr. Adams transitioned into higher education and now serves in an administrative role at Graceland University, where she is leading the

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development of a new Occupational Therapy Doctorate program. Her ongoing research and presentations focus on the vital connection between play and cognitive development. Deeply passionate about preserving the role of play in an increasingly digital world, Dr. Adams believes that play is the foundation for all neurofunctional development and must remain central to how we support growth and learning across the lifespan.

Akosua Obuo Addo, PhD

Dr. Akosua Obuo Addo's research interests include international education, collaborative and comparative research on music play. Associate Professor Addo teaches elementary music methods to both non-music and music majors, and supervises student teachers. In the graduate program, Dr. Addo teaches qualitative research in arts education, research and scholarly issues, world music in the classroom, and supervises thesis writing.

Prior to her University of Minnesota appointment, Dr. Addo was assistant professor of music education at the University of Connecticut, Storrs, CT; a Visiting Postdoctoral Research Fellow at Roehampton Institute, London; and an administrator for the Centre for Intercultural Music Arts, City University, London, England.

Sarah Aiono, EdD, Longworth Education, Aotearoa New Zealand

Sarah Aiono is CEO of Longworth Education and a leading New Zealand expert in play pedagogy. A former classroom teacher turned international speaker and researcher, Sarah is dedicated to transforming education through evidence-based, culturally sustaining play practices.

She co-developed the Play-Based Learning Observation Tool (P-BLOT, 2018, 2024), a framework guiding teacher practice and coaching. In 2026, the P-BLOT was recognised as one of the top 100 global education innovations in the HundrED Global Collection and endorsed by Montessori Global Education for its global impact on child-centred pedagogy.

Through Longworth Education, Sarah and her team deliver professional learning across New Zealand, Canada, Australia, the UK, Nigeria and India, equipping teachers to balance curriculum demands with child-centred, developmentally appropriate practice. She also serves as New Zealand’s representative for the Global Recess Alliance and Oceania HundrED Community Lead, amplifying global conversations on the critical role of play.

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Jenn Beideman, MPA

Jenn Beideman is a public policy leader and seasoned government affairs professional with a proven track record of driving systems-level change to improve child health, equity, and community well-being. Throughout her career, Jenn has built strong partnerships across government, nonprofit, and community sectors to advance policies that center whole child health and elevate the critical role of play in child development.

As Deputy Chief of Staff to the Rochester City Council, Jenn advises elected leaders on policy strategy, legislative initiatives, and constituent engagement. Before her government role, she served as Director of Whole Child Advocacy at Common Ground Health, where she led their children's health coalition, advancing local and statewide policy change through community partnership, policy analysis, and strategic communications. For a decade, her work advanced policies that advanced whole child health in our region – and ensured equitable outcomes for Rochester's children in the places they learn, live, and grow.

Among her signature accomplishments, Jenn created the **PlayROCs** campaign — a resident-led movement dedicated to creating safe, accessible play spaces in neighborhoods and schools across Rochester. Through this initiative, she empowered residents to reclaim public spaces for play while advancing the critical role of unstructured play in child development both in schools and communities. Her leadership has contributed to:

- Increased investment in city infrastructure for parks, green spaces, and traffic safety;
- The adoption of daily active recess policies in the Rochester City School District;
- The development of **Play Walk Downtown** and **Story Walks** at local libraries;
- Rochester's first **Playful Learning Summit**, convening cross-sector partners around play-based learning;
- Distribution of over 7,750 play kits during the pandemic to ensure continued access to play;
- Coordination of over 250 community play days through city-wide play events.

Jenn's expertise extends beyond Rochester, contributing thought leadership nationally through speaking engagements with the National Recreation and Park Association, the International Play Association, and the US Play Coalition. In recognition of her professional accomplishments and community impact, she was named a *Rochester Business Journal Forty Under 40* honoree.

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Jenn holds a Master of Public Administration from SUNY Brockport and a Bachelor of Arts in Political Science from the University of Toronto. Driven by her passion for equitable public policy and the power of play, she continues to build coalitions that drive meaningful, lasting change for children and families.

Anna Beresin, PhD

Anna Beresin, University of Pennsylvania, Philadelphia, PA; PhD, Folklore and Folklife; PhD, Psychology of Education, Child Cultures, joint degree, conferred with distinction, 1993.

A prolific writer and present. A founding member of the Global Recess Alliance

Jennifer L. Berube, PhD

An educator for over twenty-five years, Jennifer Berube, PhD., taught preschool, first grade, and third grade in Massachusetts and New Hampshire. Currently a playful learning coach with the Playful Learning Institute, Jennifer holds a CAGS in Educational Leadership and is a certified arts integration specialist. She has presented nationally and internationally. Jennifer believes in the power of teacher growth, reflective practice, and professional learning communities. She researches how play pedagogy affects teachers' well-being and self-efficacy. Jennifer supports teachers as they implement meaningful, creative, playful learning experiences for students.

Preston Blackburn, BA

Preston Blackburn, BA created Pop, Hop & Rock™ in 2000 when her daughters were preschoolers. What started as a simple exercise program has evolved into one that creates opportunities for kids to hone the fundamental strengths, skills, and motor patterns they need for a successful and happy school journey. Pop, Hop & Rock™ Coaches lead proprietary curriculum in school settings in the Richmond, Virginia area, where new games and activities are tested and honed before being shared widely. In 2019, Preston created Pivot to Play® to help teachers get kids moving during the school day to fill the play gap. Using brain science and logic, along with a treasure chest of games that help kids understand how to use their bodies for schoolwork while laying neural wiring for improved focus and behavior, Preston uses fun to help classrooms move from chaos to calm.

Preston has been honored to share her knowledge with educators and play advocates coast to coast and even abroad. In 2025 alone, she will travel almost 20,000 miles to spread the message that more physical play means happier classrooms.

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Preston's proudest accomplishment is her two daughters, who initially inspired Pop, Hop & Rock™ and now use their career experience to advise and consult Pivot to Play® growth and development

Kimberly Blitch, PhD, The University of Alabama, Alabama Infant Toddler Specialist Network

Kimberly Blitch, PhD, is the program director of the Early Childhood Education (B.S.) major at The University of Alabama, which is accredited by the National Association for the Education of Young Children (NAEYC) and serves both on-campus and distance-learning students. As a teacher educator, she teaches students early childhood curriculum and instruction. In collaboration with Dr. April Kendrick, she oversees the Alabama Infant Toddler Specialist Network.

Charlene Woodham Brickman, PhD

Recess & Play, LLC is part of Athens Kids Collective, which is located in Athens, Georgia (USA). AKC is a hub for parents, meeting the needs of children and their families through speech therapy, mental health services, and tutoring. We also host professional character entertainment for your family and community celebrations! We are five female-owned small businesses under one roof and are proud to serve Athens-Clarke County, GA & the surrounding counties!

Daniel Burton, BEd

Daniel BEd is the CEO and co-founder of Educated by Nature, a world leader in play-based nature education since 2014. Playwork Practitioner - Foundation Course and Rites of Passage Facilitator - Level 1, The Rites of Passage Institute

With a background as a qualified primary school teacher, education consultant, rites of passage facilitator, musical theatre artist, and passionate nature connection mentor, Daniel plays a pivotal role in shaping the organisation's vision and initiatives.

Drawing on over ten years of experience working with thousands of Australian children, Educated by Nature has developed a suite of research-based pedagogies to bring education outdoors and has gained international acclaim for its innovative approach to outdoor learning. Daniel aims to be a thought leader, sharing expertise through workshops, speaking engagements, and consultation sessions in Australia and further afield.

Daniel's passion for nature and commitment to holistic education shines through in his work. He combines current research with practical examples,

drawing on a lifetime of learning and experience to provide comprehensive programs and transformative experiences for educators, parents, and children

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alike. Through Educated by Nature, Daniel continues to advocate for the importance of play and outdoor learning, empowering individuals to explore, discover, and thrive in nature's classroom.

For more information visit Educated by Nature.

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C - D

Elsie Shih-Hua Chang | Susan Chlebowski | Tony Christopher | Cindy Chung | Marjorie Cole
Tabitha Dell'Angelo | Cynthia DiCarlo | Mina Dilip

Elsie Shih-Hua Chang

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Elsie Shih-Hua Chang is a content marketing consultant and coach with over twelve years of experience in the content industry. She began her career as a feature journalist and editor, specializing in interviews and content strategy. Today, she helps professionals create content that drives meaningful business results and sustainable revenue.

Susan Chlebowski, UK-trained Playworker and Forest School Leader

Susan Chlebowski is a UK-trained Playworker and Forest School Leader, Nature Play Consultant, and teacher trainer. She served as the director/head teacher of two nature preschools and facilitated a Forest Days program at an urban public school in Philadelphia. She works with universities, community leaders, and childcare providers to provide professional development that honors a child's right to experience play and nature as part of a healthy, happy childhood.

Tony Christopher, MBA, National Institute for Play

Tony Christopher, MBA - Tony bridges scientific play research with NIF Play's practical applications, helping to ensure the Institute's work remains grounded in current science while maintaining its credibility as a trusted, evidence-based authority. As the former Executive Director of NIF Play, he played a formative role in shaping the Institute's digital and intellectual foundation, including building its initial website, developing its early library of play research and resources, and launching the NIF Play newsletter.

Cindy Chung, Play Taiwan

cindychung@ppfcc.org

Cindy Chung currently serves as the leader of the Public Playground Group within PPFCC. She joined PPFCC while advocating for the renovation of her neighborhood playground. Through continuous participation in playground renovation meetings across various locations, she became familiar with relevant regulations and gained a deeper understanding of government agencies' maintenance and management considerations, as well as the constraints faced by design firms due to inspection standards. Today, she serves as a bridge facilitating communication in meetings, speaking up for children so that playgrounds can better reflect their needs.

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Marjorie Cole, MEd, President, IPA – Canada

Marjorie has over 25 years of experience in education and is a certified teacher with a background in Language Arts and English. She has taught children of all ages—from preschool to post-secondary—in public, private, provincial, and international settings. Based in Calgary, Alberta, Canada, she currently works in early intervention for a play-based service provider, teaches part-time in early childcare certificate and diploma programs, and is a practicum advisor for elementary teachers at a local university.

Marjorie serves as President of the International Play Association (IPA) Canada. She also delivers presentations and workshops, sharing her passion for play and supporting children and educators to reach their full potential. She holds a B.Ed. and M.Ed., with a focus on early childhood and mental health, and enjoys collecting early childhood children's books that promote resilience.

Tabitha Dell'Angelo, PhD

Dr. Dell'Angelo is a professor at The College of New Jersey and holds a Ph.D. in Interdisciplinary Studies in Human Development from the University of Pennsylvania. In 2009, she launched the Urban Education Program at The College of New Jersey, which is focused on recognizing and responding to conditions that contribute to inequities in schools. Over the years, she has worked on large- and small-scale program evaluation as well as consulting on projects aimed at working with underserved communities to create positive change.

She is also a playwright and storyteller and enjoys teaching and doing improvisational acting. She loves working with schools on how to incorporate playfulness and the arts in the classroom. Check out her TedxTCNJ Talk.

Cynthia DiCarlo, PhD, Louisiana State University

cdicar2@lsu.edu

Cynthia Fontcuberta DiCarlo, PhD, Diane Toups Goyette Professor in Early Childhood Education, is the Executive Director of the Early Childhood Education Institute at Louisiana State University.

Mina Dilip, MA, Play Therapist

Mina holds an MA in Psychology and is a PTUK-registered Play Certified Play Therapist from Leeds Beckett University, UK, as well as an accredited Sand Tray Therapist certified by the Sand Tray Training Institute of New Mexico, USA. Mina is a qualified supervisor in her field, offering supervision, guidance, and mentorship services to other therapists. Mina holds a Master's degree in

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Psychology from Madras University, and Diplomas in Child Psychology and Advanced Counseling Skills from Stonebridge Associated Colleges, UK.

As one of the few fully certified and accredited Play Therapists in India, Mina works intensively with children and adults, offering psychotherapeutic services through non-directive play therapy. Mina also guides and supports parents regularly. She offers parental coaching and uses simple neuroscience concepts to focus on co-regulation, helping parents build a secure connection with their children.

Mina has been associated with various educational institutions such as MOP Vaishnav College for Women, Montfort College, Bangalore, and Spastics Society of Tamil Nadu for several years, where she conducts training programs for students and staff on topics related to Psychology, Expressive Arts Therapy, and Play Therapy.

Occasionally, Mina offers group counseling and stress management programs in the corporate sector, and has worked with MRF, HCL, Accenture, FedEx, R R Donnelley, Wells Fargo, Barclays Bank, etc. She is registered with the Chennai Counselors' Foundation (CCF) as an RPC member and was recently elected President of CCF.

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E - F

Chima Abimbola Eden | Julie Ernst | Michelle Fazio-Brunson | Tori K. Flint
Kate Allen Fox | Rachel Franz

Chima Abimbola Eden, MSc

Chima Abimbola Eden is an educational researcher, author, and advocate for equity and innovation in learning. With an MSc in Applied Educational & Social Research from the University of Strathclyde and a background in law from Madonna University, Eden brings a unique interdisciplinary perspective to educational scholarship.

Currently serving as an Online Adviser specializing in AI-Enhanced Education at Easy Learning Foundation School, Eden has pioneered the integration of artificial intelligence in educational settings while maintaining a steadfast commitment to diversity, equity, and inclusion. Her research focuses on teacher well-being, educational technology accessibility, and culturally responsive pedagogy, with particular expertise in primary education in Nigeria and cross-cultural educational practices.

Eden is a prolific author with over 10 peer-reviewed publications in international journals, exploring topics ranging from AI-driven pedagogical strategies to social equity in education.

As an active member of professional organizations including the Teachers Registration Council of Nigeria, Eden continues to shape educational discourse through her research, writing, and mentorship. Her scholarly work bridges the gap between educational theory and practice, offering evidence-based solutions for creating more inclusive and effective learning environments.

When not writing or researching, Eden is passionate about community service and has dedicated significant time to mentoring students and supporting educational initiatives across Nigeria and internationally.

Julie Ernst, PhD

Julie Ernst is a Professor of Childhood Nature Studies and Environmental Education at the University of Minnesota Duluth. Her research focuses on the impact of nature play on children's learning, well-being, and development - see Flourishing in Nature research briefs. She can be reached at jernst@d.umn.edu

Michelle Fazio-Brunson, EdD, Northwestern State University of Louisiana

Michelle Fazio-Brunson directs the Early Childhood Education graduate programs at Northwestern State University. Dr. Brunson earned her B.A. in Elementary Education and her M.Ed. in Gifted and Talented Education at

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Louisiana State University in Shreveport. She also holds an M.Ed. in Early Childhood Education and an EdD in Supervision, Curriculum, and Instruction, with a Concentration in Elementary Education and a Focus in Reading, from Texas A&M University in Commerce.

She was recently awarded the Marietta Lebreton Louisiana Studies Award (2024) and the Jean d'Amato Thomas Lifetime Achievement Award (2021) for her work in Cradle to Cradle to Prison Pipeline intervention, a collaborative effort with her husband, the Natchitoches Parish District Defender. She is passionate about using service learning and experiential learning opportunities, while maintaining community relationships, to remap the Cradle to Prison Pipeline into a Cradle to College Pipeline in her parish and across Louisiana.

Dr. Brunson lives with her husband, Brett, and son in Natchitoches, where she enjoys attending his school functions, athletic events, and musical performances.

Tori K. Flint, PhD

Tori K. Flint, PhD. is an Associate Professor of Literacy & Early Childhood Education at the University of Louisiana at Lafayette. She is also the Co-Founder and Co-Director of the Louisiana Center for Research and Education on Languages and Literacies. Her research spans early literacies, play, children's literature, and multimodality. Her new book is called *Sparking joyful learning: A teacher's guide to connecting play and reader response* (2024). Dr. Flint believes education should be joyful and that we should listen to and learn from children's brilliance.

Kate Allen Fox, MPP

Katie Allen Fox, MPP, is an award-winning children's author, speaker, and arts educator who specializes in picture books about science, nature, and the natural world.

Before transitioning to children's literature, Fox worked in public health. Combining her health sciences background with a passion for writing, she began creating picture books designed to inspire curiosity and wonder in children about STEM and nature.

Rachel Franz, MEd

Rachel Franz, MEd (she/her) is the Early Childhood Advocacy Program Director at Fairplay and a champion for the children's right to play. At Fairplay, she specializes in early childhood development and exposes how companies mislead families into believing screens are essential for kids to thrive. A former preschool teacher and director of an all-outdoor preschool in Seattle, Rachel also consults

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with and trains early learning programs nationwide to expand access to play and nature. She is a member of IPA, serves on the advisory board of the Washington Nature Preschool Association, and lives in Seattle.

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G - I

April Giddens | Stephanie Goloway | Gennie Gorback | Ruth V. Guirguis | Jackson R. Ham | Myae Han
Callie Hendricks | Celia Hogan | Danielle Hunter | Opeoluwa Ihediohia

April Giddens, EdD, Northwestern State University of Louisiana

giddensa@nsula.edu

Dr. April Giddens is the Interim Director and an Associate Professor in the School of Education at Northwestern State University in Natchitoches, Louisiana.

Stephanie Goloway, EdD

Stephanie Goloway, EdD is a lifelong educator and advocate for play, storytelling, and imagination. She has taught preschool, elementary school, and special education, and has also been a children's librarian and professional storyteller. She is now Professor Emerita of Education at the Community College of Allegheny County in Pittsburgh. Stephanie is the author of Happily Ever Resilient: Using Fairytales to Nurture Children Through Adversity, published by Redleaf Press, and loves to share “the ordinary magic of resilience” in her weekly newsletter and on her website, Imagination on the Move.

Gennie Gorback, MEd

Gennie Gorback, MEd, is an Early Childhood Educator, curriculum and picture book writer, former toy designer, and founder of Kindling Education Consulting. She serves on the Board of Directors for the California Kindergarten Association and has advocated for play for decades. She lives in the San Francisco Bay Area with her college sweetheart, two young daughters, and two cats.

Gennie is a co-author of the book GO PLAY: How Parents Can Empower Kids to Build Their Own Worlds, published by Broadleaf Books in Spring 2026.

Ruth V. Guirguis, EdD

Dr. Ruth Guirguis (she/her/ella) is a professor in the Teacher Education Department at BMCC/CUNY and President of the Association for the Study of Play (TASP). Her research, published articles, and books focus primarily on the relationship between self-regulation and play, as well as pedagogical practices that support students in higher education.

Jackson R. Ham, PhD

Jackson Ham, PhD is a neuroscientist who earned their from the University of Lethbridge. Their research explores play behaviour across a wide range of species, with a particular focus on the neurobiology of play and its functional and developmental consequences. Through this work, they aim to uncover how play

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shapes brain function, social behaviour, and development. Dr. Ham is currently a post-doctoral research fellow with the Alzheimer Society of Canada.

Myae Han, PhD

Myae Han, PhD, is a professor in the Department of Human Development and Family Sciences at the University of Delaware, a past president of The Association for the Study of Play (TASP), and a past chair of the Early Education and Child Development SIG at the American Educational Research Association (AERA). She is a coeditor of Play & Culture Studies, Vol. 15, Play and Curriculum, and V. 16, Play and Literacy. Her research includes play-based intervention, early language and literacy development, and professional development of early childhood teachers.

Callie Hendricks, BS

Callie Hendricks was a UNCW undergraduate student in the Environmental Science department. Her research is centered around K-12 watershed education. She graduated in May of 2026, with a B.S. in Environmental Science with a concentration in conservation.

Celia Hogan, Nature Education Specialist

Celia Hogan, Diploma in Outdoor Education, is a passionate advocate for outdoor learning, nature play, and child wellbeing from Aotearoa New Zealand. She founded *Little Kiwis Nature Play*, co-chairs *Education Outdoors New Zealand (EONZ)*, and is an ambassador for *Smartphone Free Childhood NZ*. With a background in outdoor education, bush kindy facilitation, and parent education, Celia works across early childhood, primary, and adult sectors to strengthen connections between people, place, and practice.

Through her work with children, parents, and educators, Celia champions the right to play as a cornerstone of healthy development. Her mahi focuses on helping families and schools rediscover the power of unstructured, nature-based play and reducing the impact of screens on childhood. She combines current research in brain development with real-world practice to inspire more playful, connected, and resilient communities.

Danielle Hunter, EdD

Danielle Hunter, EdD, is an ECE professional with 17 years of experience in Early Childhood Education. During her career, Danielle has served as a teacher, assistant director, director, and most recently, Director of Education for a large, multi-state childcare company. In this role, Danielle has led curriculum

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initiatives, developed educator training programs, and provided support to leaders and teachers at various levels.

Danielle holds a Doctorate in Early Childhood Education from National University, a Master's in Elementary Education from the University of St. Joseph's, and a Bachelor's in Communication Disorders from SCSU.

Danielle is most passionate about elevating the value of early childhood education and the extremely important role that these teachers play in shaping young children for a lifetime. She strongly believes in the power of high-quality teaching in these early years and advocates for developmentally appropriate classroom practices driven by what is best for young children, not outside pressures.

In addition to her work as an educator, Danielle is a mom of two and lives in Connecticut with her husband and their five dogs.

Opeoluwa Ihediohia, MEd, BEd

Opeoluwa Ihediohia is a Lagos-based preschool educator and early-years instructor with an M.Ed. in Early Childhood Education and a B.Ed. in Education Economics from the University of Lagos. Since 2016, she has worked at Grace Schools, where she designs engaging, child-centered learning experiences that build foundational academic, social, creative, and developmental skills. Her practice emphasizes safe and stimulating classroom environments, play-based learning, observation of individual learner needs, and strong support for children’s holistic development.

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J - K

Mark Jackson | Denisha Jones | Lucinda Jones | Dinah Awino Kawino | April Kendrick
Fiona Kirkland | Richard A. Kissel | Stephanie Kuntz-McAllister

Mark Jackson, BS Criminal Justice

Driven criminal justice student, focusing on crime and criminal behavior. Committed, I want legal knowledge to support marginalized communities, promote fairness in legal processes, and advocate for community-based solutions to injustice. As I work toward becoming a paralegal, I want to start with what matters to me personally: “It takes a village to raise a child,” which is one thing that led me to where I stand now.

Denisha Jones, PhD, JD

Denisha Jones, PhD, JD (she/her/ella), is the Executive Director of Defending the Early Years and an adjunct professor at Sarah Lawrence College and Howard University. Her research interests include organizing activist research projects that examine grassroots movements to achieve racial justice in education, documenting the value of play as a tool for liberation with an emphasis on global approaches to play, and collaborating with parents and educators to foster positive racial, ethnic, and cultural identity development in the early years. Her first co-edited book, *Black Lives Matter at School: An Uprising for Educational Justice*, was published in December 2020 by Haymarket Books. Denisha is a highly sought-after keynote speaker, educator, and consultant. For more information on her workshops and courses, visit D Jones Consultant | Joyful Teaching & Liberated Learning.

Lucinda Jones, Early Interventionist and Key Worker

Lucinda Jones is an enthusiastic and passionate Key Worker, Early Interventionist and Sector Capacity Building Project Officer at Bathurst Early Childhood Intervention Service (BECIS) in regional NSW. Graduating with a Bachelor of Education (Early Childhood- Special Education) from CSU Bathurst in 2001, Lucinda has over 25 years of experience across a diverse range of Early Childhood Services and Tertiary Education before taking on her multifaceted role at BECIS. Often described by her peers as a passionate and persuasive Early Childhood Professional, all aspects of Lucinda’s work are driven by a dedication to play advocacy for children, especially those with developmental concerns, delays, or disabilities, their families, and community. Embedded in this passion is her advocacy for play rooted in connection, nature, loose parts, real-world resources, practicality, and unhurriedness. Lucinda’s role within BECIS gives her the opportunity to advocate that play is an essential element in a child’s early intervention journey. She is committed to empowering all stakeholders to

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recognise that each child's play is as diverse, individual, joyful, and amazing as the child. Lucinda does this through direct key worker involvement with children and their families, as well as building the capacity of current and emerging Early Childhood Professionals within her community. In 2024, Lucinda undertook the Certificate in Playwork Practice (Foundation) with Play Australia. This solidified Lucinda's certainty that Early Interventionists play a vital role in promoting and advocating for children with developmental concerns, delays, and disabilities to flourish when interventions are provided through play. Lucinda thrives in sharing her passions in Early Childhood and has the ability to deliver with enthusiasm, excitement, and practicality, all with a splash of humour. She avidly advocates from the heart, promoting that play must be accessible, inclusive and equitable, with diversity in play celebrated. It is important for Lucinda to inspire peers to prioritise, promote and celebrate play as the most successful early intervention approach for each child.

Dinah Awino Kawino, BS in Environmental Education

Dinah Awino Kawino, BS in Environmental Education, is the founder of AkadiEco & Mentorship Ventures, a passionate Environmentalist & Green Transitions consultant. Her work focuses on nature-based connections; she knows eco-disconnection from her own lived experience, so she empowers both child-led play and adult re-pursuing of eco-agency, nurturing socio-ecological belonging, eco-empathy, and authentic environmental identity. Through her program Pendo Mazingira, Dinah partners with teachers and schools in Kenya to embed low-cost, culturally grounded nature play into everyday learning spaces.

April Kendrick, PhD, The University of Alabama, Alabama Infant Toddler Specialist Network

April Kendrick, PhD is an associate professor in the College of Human Environmental Sciences and Director of Child Development Resources at The University of Alabama, which is an agency primarily funded through multiple grants serving the following primary areas: Training early childhood teachers; providing Parent Services; developing a statewide Infant Toddler Specialist Network; and Infant Early Childhood Mental Health. April has a BS in Early Child Development, a Master's in Human Development and Family Studies, and a PhD in Developmental Psychology, all from The University of Alabama. She has taught in the Human Development and Psychology departments, focusing mainly on *early childhood development*. Dr. Kendrick also has over 25 years of experience in early childhood, including teaching and directing large child development programs (state-licensed, NAEYC University Lab Schools) and supporting diverse programs. Her research interests include children's play behaviors, infant and early childhood mental health, and kindergarten readiness.

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Fiona Kirkland, MEd, Play Scotland, Leading for Play

Fiona Kirkland, MEd is the Play Pedagogy Programme Lead at Play Scotland, the national organisation for children's play in Scotland. She co-developed and leads the Play Pedagogy Award, a national framework that supports schools to embed play-based learning across primary education. Fiona also co-authored the SQA Level 8 Pedagogy of Play qualification and delivers professional learning focused on play pedagogy, children's rights, and educational change. With a background in early years and primary education, she has worked with diverse communities across Scotland and contributes to national projects on play sufficiency, place-based learning, and curriculum reform. Fiona regularly shares her work at national and international conferences, including presenting at the IPA World Conference in Glasgow (2023). She holds a BA in Childhood Practice and is completing an MEd in Early Years Pedagogy at the University of Strathclyde. Her work is grounded in practice but driven by a commitment to educational equity, children's rights, and system-level change.

Richard A. Kissel, PhD, Chief Program Officer, The DoSeum

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With 30 years of experience in the museum field, Dr. Richard Kissel is the Chief Program Officer at The DoSeum, where he oversees guest experience, educational programming, and special events for San Antonio's only museum dedicated to early learners. He also serves as an instructor and course developer for the online Museum Studies graduate program at Johns Hopkins University. Before his current work, Richard served in leadership and education-based roles at Yale's Peabody Museum; the Paleontological Research Institution in Ithaca, New York; and Chicago's Field Museum. Richard holds an MS in Geosciences from Texas Tech University and a PhD in Ecology and Evolutionary Biology from the University of Toronto.

Stephanie Kuntz-McAllister, PhD

Stephanie Kuntz-McAllister, PhD, holds a degree in Human Development and Family Sciences from the University of Delaware. She holds an M.S. and B.S. in Child Development from the University of La Verne. Stephanie has worked at NAEYC-accredited Child Development Centers. She has also worked as an Early Intervention Home Visitor, using parent coaching to support children ages 0-3 with developmental delays or at high risk of developing them, and their families. Her research aims to help promote positive outcomes and resilience in young

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children with disabilities and their families. As a practitioner, Stephanie supported parents in utilizing the power of play to support their children with disabilities. As a researcher, she explores play as a source of resilience for children with disabilities and their families. As a course instructor, she integrates playful approaches to teaching and curriculum design for her undergraduate students to help empower them as advocates for play.

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L - M

Anne Lamont | Debra Lawrence | Kyler P. Leiter | Christine Jie Li | Eugenia Lin | Xiang-Ru Lin
Abby Loebenberg | Miriam McCaleb | Jonathan McCloud | Emma Melo | Sarah Jayne Meyer | Lin Moore

Anne Lamont, MEdSt

Anne Lamont is an experienced education leader with more than 35 years in South Australian public education, recognised for building collaborative cultures, developing leadership capability, and improving outcomes for children and young people.

Since 2018, Anne has been Education Director of the Felixstow 3 Portfolio, which includes preschool, primary and secondary schools. In this role, they provide strategic leadership and coaching to school and preschool leaders, fosters innovation, and strengthen collective capacity across diverse educational contexts.

A hallmark of Anne's leadership has been cultivating a culture of trust and professional learning through structures such as the "Leaders Sharing Practice" program, enabling leaders to reflect openly on their challenges and successes. Key initiatives have included leading the Time2Play project to expand opportunities for unstructured play, with measurable benefits for student wellbeing, creativity, and social development. Anne has also co-designed targeted action projects to strengthen sustained student achievement in literacy and numeracy.

Previously, Anne was Principal of Stradbroke School (2008–2017), successfully leading the amalgamation of the junior primary and primary schools and strengthening delivery of the International Baccalaureate Primary and Middle Years Programmes. Earlier roles included principalships at Wynn Vale Junior Primary School and Terowie Rural School, as well as curriculum and leadership positions at district and state levels. Anne's work is guided by a belief that even the most complex challenges can drive creativity, collaboration, and positive transformation for both learners and leaders.

Debra Lawrence, PhD in Early Childhood, M.A. in Early Childhood, Professor, Delaware County Community College

Debra L. Lawrence has over 48 years of experience in early care and education.

She has presented workshops and seminars at international, national, state, and local levels. Debra's leadership positions include Colorado AEYC President, Governor-Appointed Early Childhood School Readiness Legislative Committee member, and NAEYC Governing Board Member. She is currently the President of

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the American Association for the Child's Right to Play, the International Play Association's USA affiliate.

She is the author of *How Public Investment Contributes to High-Quality Early Childhood Programs, Lessons from Pennsylvania,* and contributed to *Learning from Head Start*. In addition, she has a chapter on Bronfenbrenner and Play in the publication *Scholarly Snapshots*. She has two articles in the IPA USA White Paper. She is the recipient of numerous awards. She recently received the National Association for the Education of Young Children Ed Klugman Lifetime Achievement Award as an Advocate for Play and the Delaware County Community College President's Award for Excellence.

Debra holds a bachelor's degree in social research, social structure, and social change, a master's degree in early childhood education, and a Ph.D. in Early Childhood Education.

Her research interests include curriculum and environments that strengthen learning dispositions, play as the foundation of all curricula, and positive and supportive environments that foster children's ability to reach their potential.

Kyler P. Leiter, PhD, Equity, Inclusion, and Trauma-Informed Committee Chair

Dr. Kyler Leiter is a passionate early childhood scholar and educator with over 10 years of experience in public education. In addition to teaching pre-K, he teaches play courses at Mount St. Mary's University, where he serves on the ECE Advisory Board. He also chairs IPA's Equity, Inclusion, and Trauma-Informed Committee and is committed to advancing innovative research, developing play-based curricula, and mentoring future educators for diverse and equitable early childhood settings. His research interests include international perspectives within early childhood education, play-based pedagogies, redefining the professionalism of ECE educators, and examining gender differences within play schemas.

Christine Jie Li, PhD

Dr. Christine Li works at the University of North Carolina Wilmington as an Assistant Professor in Environmental Education and Outreach. She earned her B.S. in Environmental Science, her M.Ed in Environmental Education from University of Minnesota Duluth, and her Ph.D. from the School of Forest, Fisheries, & Geomatics Sciences with a graduate minor Research and Evaluation Methodology from the College of Education at the University of Florida. Dr. Li's has experience as a science teacher in K-12 settings, nature centers, and colleges. Her research aims to assess the needs and effectiveness of EE programs involving

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youth and adults from underserved communities and understanding factors in participation. She utilized public deliberation and curriculum development to support educators on environmental issues such as climate change. She is a member of the North American Association for Environmental Education, an organization that supporting educators and all citizens with cutting-edge education resources, programming and civic engagement. She enjoys hiking with her dog, traveling, crabbing with her family, and baking

Eugenia Lin

eugenialin806@gmail.com

With ten years of experience in online content planning and editing, Eugenia Lin is an advocate for children's right to play and a mother of two. She hopes every child can easily find play spaces that fit their physical and emotional needs, so that play becomes part of everyday life. She believes play is the foundation of growth. Through play, children can challenge themselves, express their preferences, and develop confidence, courage, and creativity. This "power that no one can take away" is the driving force behind her work.

Xiang-Ru Lin, LLB

Xiang-Ru Lin majored in law during her undergraduate and graduate studies, originally aspiring to pursue a career in the legal field, but took a significant turn after having children. Recognizing that Taiwanese society has limited understanding of children's right to play and children's right to expression, she became involved in advocacy work with the Taiwan Alliance for Children's Right to Play. She hopes to influence more adults to appreciate children's play, listen to children's voices, and protect children's right to play.

Abby Loebenberg, PhD

Abby Loebenberg, PhD, is an Honors Faculty Fellow and Teaching Professor at Barrett, the Honors College at Arizona State University. She holds a PhD in Social and Cultural Anthropology and an MPhil in Material Anthropology and Museum Ethnography from the University of Oxford. She received her B.Arch from the University of Cape Town. As a scholar, she studies play and games and has published in peer-reviewed journals, contributed book chapters, and presented at conferences. As a teacher who integrates an interdisciplinary approach to the study of material and visual cultures, her special interests are play, games, and design.

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Miriam McCaleb, PhD

Miriam McCaleb, PhD, is an award-winning researcher whose most recent project examined how best to support healthy smartphone habits for new mums during the transition to parenthood. This is important for prioritising the parent-infant connection, and therefore optimising child development.

Dr. McCaleb is a former kindergarten teacher who taught adults at Tennessee Tech University and the Christchurch College of Education in New Zealand. She has worked with parents, Police, and prisoners. She writes for various parenting magazines, is a founding member of the Brainwave Trust, and she sporadically blogs at baby.geek.nz.

As a presenter, highlights have been the International Neurosequential Model Symposium in Canada and the World Association for Infant Mental Health (WAIMH) in Dublin in 2023. That opportunity led to her ongoing involvement with the Global Digital Alliance, where she works within WAIMH to support education on distracted caregiving and digital childhoods.

Dr. McCaleb is the mother of two great girls; she believes RELATIONSHIPS & PLAY are vital life forces like oxygen or water, and she makes a mean courgette relish.

Jonathan McCloud, PhD

Jonathan McCloud is an Assistant Professor of Education at Roanoke College. He received his PhD in Curriculum & Instruction, with an emphasis in Educational Psychology, from Virginia Tech in 2015. His research and teaching have included peer observation of teaching in higher education, the pedagogy of play, and the relationship between play and health and well-being. Jonathan's scholarly pursuits are linked by respect and care for the individual, and he is most interested in how democratic structures and agentive practices foster play. Jonathan's work with pre-service and professional educators focuses on reflecting on underlying assumptions about the teacher/adult role in the educational environment. Jonathan is a former classical guitarist and enjoys learning about Mister Rogers, cooking, and gardening. He also likes sunshine on his shoulders.

Emma Melo, BA

Emma has a BA in English, Theater, and Dance and is the Program Coordinator at Highland Presbyterian Nursery and Weekday School in Louisville, Kentucky. She helps with curriculum development, professional development, play and learning facilitation, environments and materials, and teaches art. She is also a faculty member and adult student at the Louisville Ballet School. Emma

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believes wholeheartedly in the Reggio Emilia concept of the Hundred Languages of Children and that children express themselves through many modalities. She believes good teaching starts with good listening. As Early Childhood Educators, we strive to be close observers and interpreters of children's play, theories, ideas, questions, challenges, interests, growth, and development, and to respond in ways that expand, support, and continue that growth trajectory. As educators, we challenge ourselves to be curious learners alongside the children, with the responsibility to help them make meaning and understanding out of their work and play. Emma is a fierce advocate for childhood and that children have the right to have this short and special time in their lives preserved for growth through play, wonder, belonging, and joyful learning. She calls Highland Pres. "The Magical Place" and keeps a personal motto for what she does for a living: "The Art of Play." Emma prefers to be outdoors whenever possible.

Sarah Jayne Meyer, MSc

Sarah Jayne Meyer, MSc, holds a Psychology degree from the Open University and is currently pursuing an MSc in Psychological Research Methods at the University of Stirling. Her academic and professional interests centre around play, children's rights, and disability inclusion.

With over five years of experience in specialist education, Sarah's background also includes roles as a play and forest school assistant, as well as a previous career in marketing. A passionate advocate for free and adventurous play, she brings both professional insight and personal commitment as a mother to her work. She is currently developing a PhD proposal exploring the experiences of disabled and neurodivergent children in adventurous play settings.

Lin Moore, PhD

Professor of Early Childhood Education
Texas Woman's University
lmoore@twu.edu

Dr. Lin Moore is a Professor of Early Childhood Education at Texas Woman's University. She teaches courses in early childhood curriculum, play, action research, and leadership. Research interests include perceptions of play, parental engagement, English language learners, and mentoring programs. She edited an Early Childhood Education monograph, authored 35 articles/technical reports, and presented 100+ conference workshops. Recently, Dr. Moore co-authored a textbook for adoption by community colleges. Awards include Texas Teacher Educator of the Year, Who's Who Among America's Teachers, and Senior Fellow, Advanced Higher Education.

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N - Q

Angie Nastovska | Chris Navarro | Jonny Neen | Ananta Hari Noorsasetya | Ju-Pi Pan | Sharon M. Peck
Hans Petersen | Michele Hemenway Pullen | Veronica Purwaningsih | Suzanne Quinn

Angie Nastovska, PhD, iLEAD California

Angie Jasna Nastovska, PhD, is a globally minded educator and academic leader with over 20 years of experience in curriculum design, instructional innovation, and educational leadership. She serves as Director of Curriculum and Assessment with the iLEAD Schools Network, is an adjunct professor at United States University, and leads workshops for the IB Programs.

Angie holds a PhD in Educational Leadership and has led national and international initiatives in project-based learning, competency-based education, authentic assessment, and social-emotional learning. Her work includes collaborations with IB Global, MIT, Penn State, and the Deeper Learning Leadership Forum, as well as partnerships to redesign PBL and portfolio-based learning. Angie is a published author on the IB Career-related Programme Core and is deeply committed to learner-centered, globally connected education.

Chris Navarro, MA

Director, School & Community Programs
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Chris has 30 years of experience as a community educator – teaching K-12 theatre arts, ELAR, and digital communication and coordinating informal education programs. He is a Fellow in the Association of Science and Technical Centers' Diversity and Leadership Development Fellowship, a graduate of the National Association of Latino Arts and Culture Leadership Institute, and a Teacher Consultant for the National Writing Project. He directs The DoSeum outreach programming, including partnerships with schools, colleges/ universities, and community organizations. He directs the design of educational content, drawing on training from the Engineering is Elementary Teacher Educator Institute, Thinking & Learning in the Maker Centered Classroom from Harvard Graduate School of Education, and Visual

Jonny Neen, PhD Candidate

Jonny, a PhD candidate, has worked with children and young people of all ages, across three continents. He has experience in a range of settings including schools, OSHC clubs, summer camps and community play projects. He is a qualified teacher, Playworker and Playwork trainer.

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Jonny is a passionate advocate for children's right to play. Throughout his career, he has worked in many roles aimed at cultivating the conditions that children need to play, in the community, at home, and in educational settings.

Prior to joining Educated by Nature, Jonny worked in operational management and strategic roles in local governments in Wales. In Western Australia, he has provided independent consultancy to schools, communities and councils. Such services include play facilitation, mentoring, professional learning and policy development.

Jonny is a PhD candidate and part-time academic at Murdoch University, teaching on a variety of early childhood and play based units. His research examined the enabling and constraining influences on children's everyday play opportunities in Western Australian communities.

Ananta Hari Noorsasetya, PhD

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Doctor's Degree, Art Creation
LinkedIn Profile

Ananta Hari Noorsasetya, PhD is an experimental artist and academic focused on toy-inspired design using upcycled materials. Currently, he is a lecturer at the Faculty of Design and Creative Art at Mercu Buana University, Jakarta, Indonesia, and a Research Associate at the Industrial Heritage Museum (MUJI)

Education:

- Indonesian Art Institute (ISI Yogyakarta): Doctorate in Art Creation & Assessment, 2024
- Mercu Buana University, Jakarta: Masters in Communication, 2014
- Indonesian Art Institute (ISI Yogyakarta): Bachelor of Arts, 2007

Experience:

- Lecturer of design and creative arts
- Art Director for Wayang (Traditional Puppet Museum)
- Photographer for Antara News Agency

Ju-Pi Pan, Play Taiwan

rubypan@ppfcc.org

Ju-Pi Pan is currently serving as Secretary General of Taiwan Parks and Playgrounds for Children by Children. She is a children's play rights advocate with ten years of experience in teaching and implementing the Convention on the

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Rights of the Child. She focuses on child-friendly environment design, participates in and supervises the transformation of public space playgrounds, promotes national play policies, provides educational training to cultivate professional advocates, and is committed to realizing children's right to play and right to expression.

Sharon M. Peck, PhD

1 College Circle, Geneseo, NY 14454
(585) 729-4326
peck@geneseo.edu
X Profile: @puppeteller
LinkedIn Profile

Sharon M. Peck, PhD., is an Associate Professor of Literacy at the State University of New York at Geneseo School of Education. She provides undergraduate and graduate instruction, runs an urban literacy clinic, and studies play. As a play advocate, Sharon works with regional agencies to support children's access to play at home and at school. She is a teaching artist, puppeteer, balloon twister, and clown. Her interests relate to playful literacy pedagogy, language arts applications, urban literacy instruction, and place-based pedagogies.

Hans Petersen, MSE

Hans Petersen MSE (he/him) is the Regional Child Care Administrator for the Jefferson Region of Child Care Aware of Kentucky, a role he has held since May 2021 after three years as the region's Training Coach.

He holds a Master's Degree in Interdisciplinary Early Childhood/Special Education from the University of Louisville and has been in the field of early childhood education for nearly 30 years, working in child care center-based as well as public and independent school early care and education settings in the roles of lead and assistant preschool teacher, Spanish instructor, ESL teacher, assistant director, and curriculum specialist. He currently co-facilitates the Defending the Early Years Kentucky Area Working Group with his wife, Michele Pullen.

Michele Hemenway Pullen

Michele Hemenway Pullen is an educator with over 40 years of teaching experience. She has worked in justice and liberation curriculum writing for over 25 years, leading workshops with parents, teachers, and youth programming providers nationwide. She holds university degrees in **Psychology and Counseling,** as well as **Learning and Behavior Disorders**.

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Specialized Pedagogy: She has extensive, formalized background training in **Waldorf Education** and **Early Childhood Education**

Professional Certifications: She is a **Certified All Kinds of Minds evaluator**, a framework specialized in understanding variation in human learning to support neurodivergent students.

She teaches at the University of Louisville College of Education and Human Development. She is a project specialist for the Early Childhood Research Center, developing and implementing Early Childhood Professional Development and Student Teacher Supervision and Support. To read about her work, visit Exchange Press, where she's published. She is currently co-facilitating the Defending the Early Years Kentucky Area Working Group with her husband, Hans Petersen.

Veronica Purwaningsih, LLB

Veronica Purwaningsih, LLB is a lawyer who advocates for children's rights, drawing on two decades of experience empowering women and children across remote areas in Indonesia. She is currently based in Papua to support the development of civil society organisations focusing on women.

Education:

Faculty of Law, Gadjah Mada University, 1997: Bachelor of Law
Licensed Advocate of Peradi Indonesia

Experience:

- Facilitator of gender training for various civil society organizations
- Recovery and assistance for juvenile offenders
  - Assistance program for female laborers.

Suzanne Quinn, PhD, KOMPAN Play Institute

Suzanne Flannery Quinn, PhD (Syracuse University, USA), is the manager of KOMPAN Play Institute, Americas. In this role, Suzanne researches child development, focusing on how children and families use playgrounds. This research helps playground designers and playground owners to create exciting playgrounds that are thrilling for children of all abilities to play together in a common space, with sustainable materials in naturalized environments. Suzanne has a background in research and teaching at universities in the US and the UK, and is the author of a catalogue of peer-reviewed empirical research and theory in human development.

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R - S

Angela Rekers | Deborah J Rhea | Sierra Roussos | Alissa Rupp | Beth Saile | Deborah Schein | Sara Scott
Ridhi Sethi | Autumn E. Smith | Brian A. Stone | Bengi Sullu | Anna Sutanto | Evanthia Synodi

Angela Rekers, PhD

Angela Rekers, PhD, is an Associate Professor in the School of Education at St. Ambrose University, Davenport, Iowa, USA. She teaches in the Early Childhood Education/Special Education teacher preparation program. She is the Curriculum Lead for the Early Childhood Education with Special Education Endorsement teacher licensure program. A dual citizen, Angela spent 30 years in Wales, where she worked in outdoor education and play as a forest school leader and Level 4 trainer. She holds an MSc in Environmental Education for Sustainability and a PhD in Education and Communities with a focus on early childhood development, both in the classroom and at forest school.

Previously, Angela spent 20 years working for a non-profit organization in Wales, UK, delivering Forest School and outdoor learning and play training for teachers, playworkers, youth workers, and conservation staff. She also delivered sessions for people of all ages and abilities, including schools, refugee groups, women's shelters, families, and children with additional needs. Her expertise and publications focus on play, children's behavioral challenges/competencies, adult-child-environment interactions, and intra-activity. Angela has spoken on outdoor play at conferences, including The Children and Nature Network, Natural Start, American Education Research Association, British Education Research Association, European Early Childhood Education Research Association, and the University of Iowa Scanlon Center for School Mental Health BEST Summit.

Deborah J Rhea, EdD, LiiNK Project Director, Professor, Kinesiology, Texas Christian University

Project Creator & Director

Dr. Debbie Rhea, EdD, is a full professor in Kinesiology and Associate Dean of Research and Health Sciences in HCNHS at Texas Christian University. She prepares K-12 physical education teachers and is fully invested in her newest research called LiiNK (Let's Inspire Innovation 'N kids), which examines whole-child development through the addition of unstructured, outdoor play breaks and character development in the school day. Rhea has received national media attention for LiiNK from outlets such as The Today Show, The Washington Post, and NBC Nightly News. She has published in numerous journals and presented professionally on many different topics related to living a healthy and productive life. Rhea has received the Healthcare Hero award from the Dallas Business Journal and the Fort Worth Business Press for her research to create intrinsically

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motivated, active, healthy children. A Dallas native, Rhea graduated from Dallas Public Schools, the University of Texas at Arlington, and the University of Houston. Go to the LiiNK Center for Healthy Play for more information.

Sierra Roussos, MAE

Sierra Roussos, MAE (she/her), is a dedicated leader and educator known for fostering collaboration and building community capacity. As an early childhood educator, she advocates for children's rights and equity. She is devoted to ensuring all children have access to caring, child-centered, and child-led early learning environments that honor their autonomy and right to play, and works to extend evidence-based, student-centered, developmentally appropriate practice across all educational settings. Committed to continuous learning, she pursues opportunities for her own professional and personal growth while supporting the ongoing development of those she mentors. Sierra is currently pursuing a Doctorate of Education in Organizational Leadership at Marian University. She is excited to use her leadership skills as the Volunteer Research Coordinator for DEY to support the reach and impact of the DEY Advocacy Campaign.

Alissa Rupp, FAIA, NCARB, LEED AP

Founder and Principal, FRAME | Integrative Design Strategies
M. Arch, University of Washington, 1996
BA, Vassar College, 1989
+1.206.234.7217
Alissa@FrameDesignStrategies.com

FRAME founder Alissa Rupp is a recognized leader in designing places for community building, informal education, and lifelong learning. She works with the conviction that we can improve public life through the serious work of creating spaces where art, nature, culture and play intersect. Her wide definition of "client" includes an organization's staff, visitors, stakeholders, volunteers, collections, and even the flora and fauna of the project site.

Alissa's early career was forged in children's museums; her staff roles at the Boston and Seattle Children's Museums led her to pursue architecture and exhibit design so she could collaborate with many museums on significant projects. Since then, she has worked across the US and around the world, serving Informal Education and Playful Learning through design, strategic planning, and thoughtfully executed projects.

Career highlights include award-winning design and planning work on projects serving over 20 million people annually, including museums, gardens, visitor centers, aquaria, and children's facilities. Many of those projects are credited to

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her and the interdisciplinary team at The Portico Group, the Seattle firm where she spent 21 years and eventually served as CEO and President.

Alissa is the Co-founder of Design for Early Learning, encouraging design professionals and educators to collaborate on beautiful, joyful, and inspiring spaces for our world's youngest citizens. She enjoys presenting at national and international conferences on a wide array of topics, such as Effective Design and Planning for Cultural Institutions, Inclusive Design Strategies, Risk and Childhood in Design, and the Care and Feeding of Project Teams. She is a guest lecturer (2026) at the University of Washington, Department of Museology.

Beth Saile, MS

Beth Saile is completing her M.S. in Environmental Education and GIS Certificate at the University of North Carolina Wilmington (Dec 2025). Her graduate work focuses on place-based learning, including developing local environmental science lessons for upper elementary students and a teacher focus group study exploring classroom implementation. A lifelong nature enthusiast, Beth enjoys hiking, reading, and spending time with her daughter, Luna, and their five cats.

Second bio submitted: Beth Saile is completing her M.S. in Environmental Education and GIS Certificate at the University of North Carolina Wilmington (Dec 2025). Her graduate work focuses on place-based learning, including developing local environmental science lessons for upper elementary students and a teacher focus group study exploring classroom implementation. A lifelong nature enthusiast, Beth enjoys hiking, reading, and spending time with her daughter, Luna, and their five cats.

Deborah Schein, PhD

Deb has been an early childhood educator since 1972 and earned her PhD in ECE, with a focus on spiritual development, in 2012. She has taught at several colleges, most recently at Champlain College, where she taught the play-based Master of Education program. She founded Growing Wonder, which supports ongoing research, dialogue, and activities around spiritual development, nature, play, peace, and well-being. Deb has written two books on spirituality and is currently an editor for Soul to Soul, a journal for practitioners and researchers interested in all aspects of children's spirituality. She also founded a rock garden at Bass Lake in Saint Louis Park and co-founded the Loose Parts Laboratory of Minnesota, where materials are saved from landfills and made available for artists, educators, and tray-scapes for seniors.

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Sara Scott, BEd

Sara is a highly experienced and respected education leader with over 30 years of experience across the UK and Australia. She holds a Bachelor of Education (Hons) from Goldsmiths College, University of London, and has held leadership roles ranging from classroom teacher to principal and system-level education lead.

Currently serving as **Education Lead, Schools** at the Felixstow Education Office in Adelaide, South Australia, she supports school leaders through coaching, strategic collaboration, and system-wide professional learning. Her work focuses on improving student educational outcomes through inclusive practices, culturally responsive leadership, and evidence-informed improvement planning.

As **Principal of Ridgehaven Primary School and Preschool** (2021–2023), she led significant improvements in student wellbeing, inclusive education, leadership development, and community engagement. Before that, she was **Deputy Principal at Stradbroke School**, leading literacy, inclusive education, and teacher development initiatives.

Sara is known for her collaborative, thoughtful, and resilient leadership style. She has a strong record of building others' capacity, fostering shared learning, and aligning system priorities with local school needs to drive meaningful change.

Ridhi Sethi, PhD Human Development, MSc Child Development, MEd

Ridhi Sethi, PhD, has over twenty years of experience in human development, research, early care, and education. She works as a guest faculty member at the School of Vocational Studies at B.R. Ambedkar University. Before that, she worked as an assistant professor in the Department of Human Development and Childhood Studies at Lady Irwin College, New Delhi, India. She advocates for play and safe daycares for children and supports parents. She has researched in the I.T. industry for eight years and has advised organizations and industry bodies on helping parents at work. She founded an early childhood network called Child Care for All and runs a website that shares the latest early childhood research. She advocates for child care support for working parents, and as a needs assessment specialist, she has shown expertise in assessing employees' child care needs and recommending on-site child care programs. She is committed to translating her research for the public through articles, blog posts, and commentaries featured in outlets such as People Matters. She has been a consultant to Sesame Workshop India on programmes for children.

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She is trained at the Centre of Developing Child at Harvard University and is currently part of many international ECCE networks such as ARNEC and ECDAN. She has disseminated her work at several national and international conferences organized by several prominent institutions such as the London School of Economics and Political Science, ISSA, International Play Organization, NASSCOM, and CII. She is currently a member of the Assocham National Task Force on Early Childhood Education. She has conceptualized and conducted many research projects in early childhood. She has also researched preschool materials and ECCE teacher training available in India.

Autumn E. Smith, MEd, Louisiana State University

Lead Teacher
Pathways Trainer
asmi435@lsu.edu

Throughout college, I have spent the summers working at camps. I have worked at Camp Dynamics, a specialized camp for children with learning, communication, and behavioral differences, and at Tiger's Den, a summer camp held at the LSU UREC. I have also interned in pre-K and third-grade classrooms and was a student teacher in kindergarten and second-grade classrooms. In my spare time, I enjoy reading, baking, taking my dog on bike rides, going to LSU football games, and spending time with my friends and family. I believe the teacher's most important role is to give each student the tools and techniques needed to become a critical thinker and an effective agent of change in their society. Every student can positively influence the world, and by developing analysis and problem-solving skills, expanding global awareness, and adopting a cooperative, inquiring attitude, students can achieve this goal and thrive beyond the classroom. Society cannot progress without well-educated, self-motivated individuals equipped with the research skills and the desire to improve humanity needed to facilitate change.

Brian A. Stone, EdD

Brian Stone, EdD, is an Assistant Professor at Northern Arizona University. He is the faculty lead for the Museum of Northern Arizona Partnership program at NAU. He received his doctorate in curriculum and instruction with a content concentration in science and math education. He also holds two master's degrees, one in elementary education and another in World War II studies. He teaches both undergraduate and graduate courses, including courses in the doctoral program. Dr. Stone specializes in science education, but also teaches methods courses in social studies, math, literacy, and assessment. While at NAU, Dr. Stone has led multiple study abroad trips all around the world to study multiage

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education and integrated curriculum. He has taken students to New Zealand, Australia, the United Kingdom, Ireland, Germany, Austria, Switzerland, and France. Dr. Stone also serves as the editor for the STEAM section of the *International Journal of the Whole Child*. He is a member of the editorial board for the Journal of Research in Childhood Education. He is a Play Ambassador and recurring Expert Contributor for the Genius of Play (a non-profit website devoted to play advocacy), which is a part of The Toy Association. Dr. Stone has many areas of expertise and interest, including scientific inquiry, play, integrated curriculum, and multiage education. Before teaching in higher education, Dr. Stone served as a 4th-, 5th-, and 6th-grade multiage teacher. He was the lead multiage teacher at his school and helped other multiage teachers implement multiage strategies in the classroom. He also works as an educational consultant, traveling across the United States and around the world to help schools implement multiage programs. Dr. Stone has authored many peer-reviewed journal articles and book chapters in the aforementioned areas.

Bengi Sullu, PhD

Bengi is a Lecturer in the Department of Social & Behavioral Sciences at Medgar Evers College, CUNY. She earned her PhD in Critical Social/Personality & Environmental Psychology from The Graduate Center of The City University of New York, with concentrations in Critical Theory and Qualitative Methods. Her dissertation focused on the advocacy for children's right to play in Turkey (where she is from). She has published in journals like Children's Geographies and Qualitative Psychology. Her broader research interests are at the intersection of social and environmental change and human development.

Anna Sutanto, MEM

Anna Sutanto, MEM believes that playing in nature strengthens commitment to nurturing sustainability. Using her background in sociology alongside environmental management and development, she is the program director of PlastikDetox, an environmental organization based in Bali, Indonesia, while developing SUCI, a study centre for the Industrial Heritage Museum (MUJI).

Education:

- Atma Jaya University of Yogyakarta, 2005: Bachelor of Social Sciences
- Australian National University, 2016, Masters of Environmental Management and Development

Experience:

- Trainer and facilitator of waste prevention
- Relationship manager for F&B sector
- Researcher on the topics of social identity and child laborers

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Evanthia Synodi, PhD

Associate Professor of Comparative Early Childhood Education, Department of Preschool Education, University of Crete

Research Fields

- Teachers' Professionalism
- Initial Teacher Education
- Play
- Children's Rights
- Curricula for Early Childhood Education
- Gender and Education
- Oral Language in Kindergarten

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T - V

Katie Talarico | Mugdha Thakurdesai | Wei-Shun Tseng | Belma Tuğrul
Tugce B. Arda Tuncdemir | Claire Underwood | Omar Vigo

Katie Talarico, MSEd

Katie Talarico, MSEd is a certified digital wellness educator, parent, former teacher, and Princeton University graduate. She is passionate about healthy child development and has been a member of the Screen Time Action Network since 2017. She created the Let's Grow Brain P.O.W.E.R. program for the preschool she taught in to provide a simple, memorable way to remind families of the wonderfully simple ways they already help their children thrive.

Mugdha Thakurdesai, MArch

Mugdha Thakurdesai, MArch, is a Design Principal at Education Design International. An architect and designer at heart, she is deeply committed to creating sustainable, safe, and inspiring spaces for children. Her professional journey spans multiple continents, giving her a **global perspective on the future of learning environments**. Mugdha is especially passionate about **human-centric, child-friendly design**, approaching each project as an opportunity to foster agency, creativity, and well-being in students. She views learning spaces as a **third teacher**—a silent but powerful influence on behavior, interaction, and growth. She believes schools should be more than buildings; they should be communities that reflect learners' aspirations and society's values.

Her work is rooted in **ongoing research into learning outcomes and educational efficiency**, which she translates into creative learning communities worldwide. By integrating insights from **pedagogical and psychological research** into spatial design, she has created environments that support holistic growth, with particular emphasis on **play-based learning**.

Mugdha also loves sharing her knowledge by writing about design and architecture, and has contributed to various platforms. Her work reflects the belief that well-designed spaces can **empower students, inspire teachers, and strengthen communities.**

Linkedin Profile

Publications/ Articles:

- Beyond Brick & Mortar: Building Adaptable and Innovative Learning Spaces
- Designing Safe Spaces: Learnings From The Past, Plan For The Future
- Extreme School Makeovers

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Wei-Shun Tseng, OT, Play Taiwan

ofun.edu@gmail.com

An Occupational Therapist with nearly 20 years of clinical experience, currently working at Taipei Veterans General Hospital, focuses on interdisciplinary collaboration and providing holistic, client-centered care. His academic background combines expertise in both health education and clinical occupational therapy, enabling me to approach healthcare with a holistic and preventive perspective. In clinical work, he observed an increasing number of children with developmental delays and noticed that children are being exposed to mobile devices more frequently. so, play and playgrounds in daily life are extremely important and represent a vital area where occupational therapy and health promotion can come together in advocacy and action. As **Vice Chairperson of Taiwan Parks & Playgrounds for Children by Children** (2023 – Present). In this role, I collaborate with local governments and NGOs to promote inclusive, accessible, and child-friendly play spaces throughout Taiwan. And committed to making children's play spaces more diverse and challenging, protecting children's right to play, and advocating for their deserved playtime.

Belma Tuğrul, PhD, Istanbul Aydın University, Istanbul, Türkiye

A Leader Supporting Children's Right to Play

Prof. Dr. Belma Tuğrul is an educator who has pioneered significant efforts in defending children's right to play. With a broad vision in the fields of play and education, Through her academic research in the field of play, she has scientifically demonstrated the importance of play in child development, making valuable contributions to educational literature. Beyond defending children's right to play, she develops strategic approaches to enhance the applicability of this right. Her work highlights the critical role of play in children's cognitive, emotional, and social development, helping educators and parents become more aware and conscious of this issue.

During the pandemic, she founded the world's largest wall-less kindergarten, where teachers reached children through television, ensuring uninterrupted access to education. This innovative initiative not only contributes to the physical, mental, and emotional development of children but also provides a learning environment that fosters their sense of curiosity and desire to explore.

Her theses and projects in the field of play reflect her deep knowledge and passion. These studies provide essential data and strategies for advocating and promoting the right to play. Serving as a Play Consultant at the Ministry of National Education and UNICEF enables her to bring her expertise and

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experience to a broader audience. Through these roles, she contributes to the shaping of educational policies and child rights programs to include the right to play, taking significant steps towards the recognition and implementation of this right at both national and international levels.

The Lifeline project, in particular, involves work with village teachers, contributing to improving the quality of education for children in rural areas.

Tugce B. Arda Tuncdemir, PhD

Dr. Tugce B. Arda Tuncdemir earned her Ph.D. in the Curriculum and Instruction Department, with an Early Childhood Education emphasis, at Penn State University.

Her research interests are play, creative drama, social-emotional learning, anti-bias education, culturally responsive pedagogy, ethics in early childhood, and teacher education, shared through presentations, book chapters, and journals. She has been awarded the PPPIF at NAEYC Walter F. Drew Emerging Play Scholar Award 2018 and is the 2022-2023 President of The Association for the Study of Play.

Claire Underwood, PhD

Claire Underwood is a PhD at the Univ. of Cincinnati's Arlitt Center for Education, Research, & Sustainability. She has worked in nonprofit leadership and community organizing for over a decade, focusing on environmental and social justice. Her current work focuses on land-based pedagogies in early childhood education.

Omar Vigo, PhD, Louisiana State University

ovigo1@lsu.edu

Omar Vigo, Ed.D. candidate, is a faculty member in the bilingual Early Childhood Education program at the Community College of Rhode Island and an adjunct Early Childhood Education Professor at Baton Rouge Community College.

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W - Z

Jackie Wang | Jen Hsiu-Chuan Wang | Rebecca Wax | G. Kate Webb | Linnea Westerlind
Tivy Whitlock | Jessie Ming Sin Wong | Jill Wood | Sera Yöndem | Elaine Zweig

Jackie Wang, Play Taiwan

Jackie's career journey started as a tech journalist and e-commerce product manager. However, everything changed when she became a mom to twin boys. This new role opened her eyes to the lack of play spaces for children and a societal culture of overprotection in Taiwan.

This inspired her to become an advocate for children's right to play. She hopes to create a more child-friendly society with better play environments for the next generation. She's also the co-author of the book, *The Power of Park Play*.

Jen Hsiu-Chuan Wang, Play Taiwan

jenwang@ppfcc.org

Jen Hsiu-Chuan Wang is currently serving as Chairlady of **Taiwan Parks and Playgrounds for Children by Children**. She has extensive expertise in User Experience Research. Previously, she established experience metrics frameworks in enterprise environments and led research teams serving industry-leading companies across various sectors, helping companies create products and services that truly resonate with people. Currently, she is dedicated to introducing user-centered concepts to advocate for more play spaces for children. With substantial hands-on experience in child development and public policy, she has successfully transitioned from a technology industry researcher to a leading advocate for children's rights.

Rebecca Wax, BA

Rebecca Wax, BA, holds a Bachelor of Arts in Psychology from the University of Delaware and is currently pursuing a master's degree in Human Development and Family Sciences at the same institution. She works as a Registered Behavior Technician (RBT), supporting young children with Autism Spectrum Disorder (ASD). Her interests focus on supporting individuals with ASD through developmental transitions, particularly in early adulthood, as well as the critical role of play in early childhood. Her current research explores the continuity and evolution of services and support systems for individuals with ASD as they transition into adulthood.

G. Kate Webb, PhD, Adjunct Professor, Texas Christian University

G. Kate Webb, PhD, is a lecturer of Kinesiology at Texas Christian University, a NASM performance enhancement coach, and a certified Life Science and Physical

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Education teacher. Dr. Webb was an All-American heptathlete in college and is an Athletic Hall of Fame inductee in her hometown and at her alma mater, Tarleton State University. Dr. Webb spent her early career as a track and field coach and educator in Texas public schools, then transitioned into performance coaching and fitness. Dr. Webb's dissertation research highlights the importance of unstructured outdoor play in developing muscle strength, the use of unilateral, bilateral, and contralateral movements, and appropriate strength-testing measures needed to prevent injuries and increase future movement opportunities in children and adolescents. Dr. Webb has presented at conferences and published journal articles about her research.

Linnea Westerlind, MSocSc

Linnea Westerlind, MSocSc, is the author of *Discovering Seattle Parks: A Local's Guide* and the co-founder of the grassroots parent network Outdoor Childhood Puget Sound. As a volunteer with the King County Play Equity Coalition, she helped lead the successful statewide effort to mandate minimum recess time in Washington state in 2023. She serves on the board of her local YMCA branch and is an active PTA member. Linnea has a bachelor's degree in journalism/public relations from Western Washington University and a master's in development studies from Uppsala University in Sweden. A nonprofit communications consultant, she lives in Seattle with her family. LinkedIn profile (https://www.linkedin.com/in/linnea-westerlind/)

Tivy Whitlock, PhD, Community Programs Educator, The Doseum

210.572.0628
twhitlock@thedoseum.org

Dr. Tivy is a creative and inspiring educator who brings three decades of experience in education, workforce and professional development, and technology to the DoSeum as the Community Programs Educator. She is a master certified trainer who works with school-age parents as young as 11 and grandparents raising young children. Her research focuses on learning through play, adult development, parent engagement, strengthening teacher-parent relationships, and empathic communication. She's dedicated to building community and helping individuals reach their fullest potential through critical connections that align with new ways we think, learn, and interact.

Jessie Ming Sin Wong, PhD

Jessie Wong, PhD, is a passionate advocate for children's rights and brings a global perspective to early childhood education. A leader in her field, she is the current Vice President of the World Organization for Early Childhood Education

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(OMEP)-Hong Kong. Dr. Wong is the Program Leader in Early Childhood Education at Hong Kong Metropolitan University (HKMU), where her research on development and education policy has been published in prestigious academic journals and recognized with grants from the Hong Kong Research Grant Council.

In recognition of her work, she received HKMU's Outstanding Research Publication Gold Award in 2023. She holds a PhD in Early Childhood Education Policy and a Master of Social Work (Distinction) from The University of Hong Kong, as well as a B.A. in Psychology with a Specialization in Computing from the University of California, Los Angeles (UCLA). She is also a Registered Social Worker in Hong Kong.

Jill Wood, MLIS

Jill Wood, MLIS founded and manages Adventure Play at The Parish School, in Houston, Texas, one of only a handful of adventure playgrounds in the United States staffed by trained playworkers, and the only one based at a school for children with communication delays and learning differences. She is founder of Bayou City Play, a group of playworkers, artists, and therapists who partner with organizations to improve play opportunities in the Houston metro area, and is regional consultant for nonprofit Pop-Up Adventure Play. She is also a school librarian committed to the idea that play environments and book shelves are best when they have a lot of choices, make space for the full breadth of humanity, and no one is telling people exactly what to choose.

Sera Yöndem, MA, Istanbul Kent University, Istanbul, Türkiye

Sera Yöndem is a prominent Turkish educator, academic lecturer, and the LEGO® Education Academy Turkey Coordinator and Trainer. Born in Istanbul in 1983, she has become widely recognized for her pioneering work in preschool and primary education, with a particular focus on experiential "learning through play" models. Her career bridges theory and practice, with a focus on educational toy design, early STEM education, and AI literacy in early childhood classrooms.

Yöndem pursued her foundational higher education in early childhood and preschool education and eventually completed her Master of Arts (MA) in Education at İstanbul Aydın Üniversitesi. Early in her career, she discovered the profound impact that tangible building tools could have on children's cognitive development. This realization led her to travel to Denmark for international training through Teknokta, the official LEGO® Education partner in Turkey, where she became a certified international academy trainer.

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Throughout her career, Yöndem has gathered extensive hands-on teaching experience. She spent many years working as a preschool teacher and Turkish department coordinator at the prestigious Ulus Private Jewish Schools (*Özel Ulus Musevi Okulları*). She also contributed to public early education as a kindergarten teacher for TRT EBA Anaokulu.

Elaine Zweig, PhD, Educational Consulting

Elaine Zweig, PhD, is an Early Childhood Specialist with decades of successful experience in working with children of all ages and grade levels. Having taught as a professor and now as an Educational Consultant, Dr. Zweig has presented over 50 workshops at local, state, and national training conferences to showcase early childhood trends and teacher education. She has authored and co-authored textbooks and has reviewed books, articles, and technical reports. She believes that children develop a sense of self and learn to make sense of the world around them through play.

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Press Release

October 28,2026 – For Immediate Release

The International Play Association USA (IPA USA) and its Board of Directors proudly present the 2026 White Paper as a call to action for educators, policymakers, researchers, families, and advocates. Building on decades of scholarship and advocacy, this collection is an International Edition of 66 papers, written by 95 authors from six continents, 14 countries, and Hong Kong (Special Administrative Region of China), spanning 11 categories, and bringing together leading voices committed to protecting and advancing every child's right to play.

A Critical Moment for Childhood

The child's right to play stands at a critical crossroads.

Across the United States and around the world, children are growing up in environments that increasingly prioritize performance, productivity, and measurable outcomes over the experiences that support healthy development. Academic pressures, overscheduled childhoods, increased screen use, heightened safety concerns, and diminishing opportunities for independent exploration have steadily eroded time, space, and freedom for play.

The Myths surrounding play do not acknowledge why child-led free play is a requirement of childhood. Play is not a luxury, a reward, or a break from learning. Play is how children learn, develop, and thrive. Through play, children build social competence, emotional strength, creativity, decision-making skills, self-regulation, and the habits necessary for lifelong learning and well-being. Research spanning developmental psychology, education, neuroscience, public health, and child development consistently shows that play is a biological and developmental necessity.

Despite this growing body of evidence, denial of the necessity for child-led free play still exists. Too often, decisions affecting children are driven by short-term outcomes rather than a long-term understanding of what children need to flourish. As a result, childhood itself is increasingly at risk.

Within these pages, readers will find research-based insights, practical recommendations, and powerful examples that show why play matters and how to support it across homes, schools, communities, and public policy. More importantly, this White Paper serves as an advocacy resource, equipping readers with the evidence and tools needed to champion play in their local contexts.

The future of childhood depends on the choices we make today. By recognizing play as a fundamental right and an essential component of healthy development, we can create environments where all children have the opportunity to learn, grow, belong, and thrive.

IPA USA's Board of Directors thanks the 95 authors for their time and commitment to advancing the Child's Right to Play.

We invite you to read, share, and use this White Paper to strengthen your advocacy efforts and join us in safeguarding every child's right to play.

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