May 18th, 2022

THE ROLE OF PLAY IN DESIGNING EFFECTIVE EARLY LEARNING ENVIRONMENTS AND SYSTEMS

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ABOUT THE PROJECT

The concept of play and its role in designing effective learning is a thorny, often misunderstood concept. Though many acknowledge the power of play and its importance for child development, there is less agreement about its role as an instructional strategy. Questions and debates about play pervade, particularly in the context of systems-building, policy-based early education initiatives, including those that involve school districts, designed to drive stronger academic outcomes.

Under the guidance of Amy O'Leary and the team at Strategies for Children, I conducted a series of interviews with experts and stakeholders in the field to further explore this topic. Guiding question for the research included:

- **What** is play, and what makes an early childhood program "play-based."
- **Why** does play remain a divisive issue? What are the misunderstandings and misconceptions about play-based pedagogy?
- **How** do we ensure that all children have the opportunity to learn through play? How must we communicate with policymakers, practitioners, and parents about the effects of play in young children's learning and development?

THE INTERVIEWS

The interviewees included practitioners, researchers, members of Boston Public Schools and the Department of Elementary and Secondary Education, and other leaders in the field of early education and care.

MEGINA BAKER
Director of Teaching and Learning, Neighborhood Villages

NANCY CALRSSON-PAIGE
Professor Emerita at Lesley University; Co-Founder of Defending the Early Years

JILLAYNE FLANDERS
Deputy Director, Center for Educational Improvement

JODILYNN MACHADO
Early Childhood Director, YMCA Southcoast

BEN MARDELL
Project Director, Pedagogy of Play

ABBY MORALES
Coach and Program Director, Boston Public Schools

KELLY PELLAGRINI
Co-Founder & Co-Director, Charlestown Nursery School

DAVID RAMSEY
Program Director, Boston Public Schools

JERRI ROBINSON
Chairwoman, BPS Committee; Former VP of Early Childhood Initiatives at the Boston Children's Museum

DONNA TRAYNHAM
Early Learning Team Lead, Massachusetts Department of Elementary & Secondary Education

THE PROCESS

The interviews were conducted in April and May of 2022. In addition to the interviews, I visited one of Strategies for Children's 9:30 calls to talk about the project and to share a survey to engage more early education professionals in the process.

This paper discusses the key takeaways and recommendations that emerged from the interviews, as well as further questions and areas of focus for stakeholders and promoters of play-based learning.

PLAY: DEFINITIONS AND TERMINOLOGY

Just a few of the many ways play was defined and described throughout the interviews.

First and foremost, there is not yet a consensus of how "play" should be defined, and what "play-based learning" looks like in practice. In fact, there was not even agreement as to whether the term "play" should be used at all, with many interviewees describing it as a "four letter word," which they often refrain from using so as to not diminish the high-level work of the already under-valued workforce.

Others, however, note the importance of centering play and proudly explaining its uses within early learning settings. "This is how kids learn," explained Donna Traynham at DESE. "We aren't going to hide it or disguise it. When we hide it, it looks like it's something that we shouldn't be doing. But that's not what our research tells us."

Others advocate for a shift to "playful learning" over "play," with the idea that playful learning implies a higher-level order of play with intentional teaching strategies embedded within the acts of play.

It is unlikely that a single definition of play will emerge, nor is that the ideal. Some see play-based learning as highly-intentional and standards-aligned, others see it as fully rooted in the child's own agency and desire to lead their learning. Both forms of play (and everything in between) can and should be used as instructional tools throughout a child's early educational experiences. Nonetheless, the range of definitions and explanations of play should be simplified and made accessible to those both within and without the early childhood sector.

For the purpose of this paper, I employ the terms "play," "play-based learning," and "playful learning," all to mean instructional tools that focus on a high-level of student engagement, allow students to think critically, take risks, explore their creativity, follow inquiry, and experience joyful learning.

WHAT THE RESEARCH TELLS US...

There is an abundance of research which speaks to the importance of play in early childhood educational settings. Selected highlights include:

A 2022 META-ANALYSIS OF 17 STUDIES ON PLAY SHOWED THAT:

GUIDED PLAY HAD A GREATER POSITIVE EFFECT ON EARLY MATH SKILLS THAN DIRECT INSTRUCTION.

A SERIES OF STUDIES EXAMINING THE RELATIONSHIP BETWEEN PLAY AND DIVERGENT PROBLEM SOLVING FOUND:

THAT THERE IS A COMPLEX AND RECIPRICAL RELATIONSHIP BETWEEN THE DEVELOPMENT OF PLAY SKILLS AND THE DEVELOPMENT OF PROBLEM SOLIVING SKILLS.

A REPORT FROM THE LEGO FOUNDATION SHOWED THAT:

IN DISADVANTAGED COMMUNITIES GLOBALLY, CHILDREN SHOWED SIGNIFICANTLY GREATER LEARNING GAINS IN LITERACY AND SEL DEVELOPMENT WHEN ATTENDING EARLY CHILDHOOD CENTERS THAT UTILIZED FREE AND GUIDED PLAY THAN THOSE THAT UTILIZED ROTE LEARNING.

...AND HOW TO MAKE IT STICK.

Despite the ample evidence that exists to the contrary, play is still widely seen as a "soft skill." When asked what policymakers need to know about play, most interviewees discussed the ever-growing body of research which speaks to:

- The neurological development that play is essential for.
- The short-term and long-term positive impacts that play-based and playful learning has on student's SEL development and on student's academic development (e.g. in the form of MCAS successes).

The consensus amongst the interviewees is that the science of play must be disseminated more broadly, in clear, concise, "sticky," ways, to better reach policymakers and other stakeholders. While it is unlikely that a policymaker will read a full study that examines how rats' brains are stimulated by play and how this helps us better understand how play impacts human cognitive development, that same policymaker could very much be swayed by receiving a one-page illustration which depicts the study's key takeaways. Both researchers and play advocates must do more to ensure that such science makes its way off the page and into the hands of policymakers.

However, it is critical that play advocates help policymakers and other stakeholders connect such research and evidence to their own experiences as playful learners. A recurring idea amongst the interviewees was that many misunderstandings about early education and care arise from the fact that most adults simply cannot remember their own experiences and needs from that point in their lives. However, all adults can reflect on their own present needs to be active learners. As such, when disseminating the research of play, advocates must help policymakers and stakeholders connect what the research shows us to their own lived experiences.

RETHIKING PROFESSIONAL DEVELOPMENT

Professional development, in the form of coaching, workshops, or professional learning communities, can help educators bring play fully into their learning spaces, and use play-based teaching to support students' learning and development.

However, many interviewees pointed to the fact that professional development must extend beyond the classroom, and be brought to school administrators, district leaders, and even to families and broader members of the community. Many teachers report being eager to implement more play-based strategies, but face pushback from their administration's emphasis on fidelity to existing curriculums, skepticism from principals and district leaders, and confusion from parents and caregivers.

PROFESSIONAL DEVELOPMENT RECOMMENDATIONS

Offering professional development opportunities for play serves two purposes: it not only provides the opportunity for deeper professional learning about the importance of play, but it allows for programs, districts, and communities to elevate play and show its value. Recommendations include:

- Create workshops specifically for school and district leaders about both the value of play as an instructional tool, and the ways they can support their teachers in creating more opportunities for play-based learning.
- Provide individualized coaching for school and district leaders to support them as they navigate communicating about play to their communities.
- Create opportunities for school and district leaders to connect to their own ability to learn through play, modeling effective play-based learning strategies.

- Provide professional development for parents and community members through seminars, workshops, and events that serve to educate about the short and long-term impacts of play.
- Facilitate small group sessions in which parents and caregivers can reflect on their own observations of their child's play, and consider ways they can scaffold that play into deeper learning.

PLAY IS ANTI-RACIST WORK

Fixed ideas remain about who deserves to be in a play-based environment and who does not. There is an ingrained cultural belief that children who come from privileged "literacy-rich" homes can benefit from a play-based environment, but that other children— those who come from low-income communities, are English language learners, have any type of disability, or have faced any form of adversity— are in need of a more academically rigorous preschool setting. In an attempt to ensure that students are meeting standards and are set to perform at grade level throughout elementary school, children are denied the opportunity to learn through play in ways that speak to their curiosity, creativity, and desire to explore and engage with their surroundings.

The discrepancies in children's access to play-based learning opportunities are not new, but they are more pressing then ever. In light of concerns about pandemic learning loss, especially as it pertains to literacy delays, many fear that the opportunity gap will continue to widen. It is critical that we acknowledge the fact that it is children of color who are most likely to be denied the opportunity to play, and to be placed in an environment of "drill and kill" worksheets and rote learning. The issue must be considered part of anti-racist education. Black and Brown children must be in learning environments which offer them opportunities to have agency in their learning, and to have deep-learning experiences through rich, high-level play.

With kindergarten becoming "the new first-grade," preschool has in turn become increasingly academic and standards-driven-- especially for non-white and poor children. A 2016 Study of kindergarten teachers found that teachers who served students who were eligible for free or reduced-price lunch, or who were non-white, were significantly more likely to expect that their incoming students know the alphabet than those serving white and affluent communities.

A 2018 report from Defending the Early Years studying teachers of low-income preschoolers found that teachers reported that the mandated focus on direct instruction and assessment had a negative impact on their ability to use developmentally and culturally appropriate practices that met the diverse needs of their students. These teachers also shared that they believed that such curriculums had negative impacts on their students' overall development and learning, as well as their attitudes about school

THE CULTURAL COMPETENCIES OF PLAY

Many educators spoke to the importance of play as a way for children to bring their lived experiences into their learning settings. Through play, children can share their cultural values and their families' traditions and cultural practices. When engaging in play, children are in the act of exploring the world around them, including learning to understand and celebrate each other's differences. Providing more opportunities for such authentic playful experiences is a necessary measure to creating anti-racist and culturally responsive early learning environments and systems.

ADDITIONAL THOUGHTS

- Conversations about play are necessary and wanted. All of the respondents who completed the survey disseminated through the Strategies for Children 9:30 call indicated that they want to speak further about this topic, or might be interested in speaking further about this topic. (None indicated that they would not be interested in further conversation.)

- The lack of agreed-upon definitions and terminology creates opportunities for individual programs and settings to define what play looks like in their classrooms and in their own practices. Many (though not all) agree that play-based strategies should be unique to each setting, considering the diverse range of early education and care environments.

- While this project focuses on preschool education, many conversations extended into problems related to K-12 education. There is similarly ample research that addresses the need for play-based learning throughout elementary, middle, and high school, as well as the need for adults to learn through play. This remains a critical part of the conversation.

FURTHER QUESTIONS FOR CONSIDERATION

- Considering that all play is not created equal, how do we create and share tools to measure and analyze types of play and their effectiveness?
- What can researchers and scientists be doing to better disseminate their work outside of academia?
- Outside of PD, what supports do teachers, administrators, and district leaders need to fully support play-based approaches?
- Through it all, how do we ensure that this work is recognized for the high-level work it is and that there is respect for the mastery of skills play-based teaching requires. In other words, how do we ensure that this work leads to policymakers seeing that preschools need **more** resources, not fewer?

CONCLUSION

Play is not just a need, but a fundamental right of childhood. To fully integrate play-based learning into the early education and care landscape, better communication is needed to shift the cultural understanding of play. More must be done in the form of professional development to provide leadership and district-level buy-in, research must be disseminated in clear and digestible ways, and all in the field must come to see opportunities for play as an issue of equity and anti-racism.

REFERENCES

Allen, R., Iruka I.U., Neitzel, J., Shapeland, D.L,. 2021. Viewpoint. Creating Anti-Racist Early Childhood Spaces. NAEYC, *Young Children*, Vol. 76, No. 2.

Bassok, D., Latham, S., & Rorem, A. (2016). Is Kindergarten the New First Grade? AERA Open. https://doi.org/10.1177/2332858415616358

DESE (2021, March). *Approaches to Intentional and Playful Learning in Preschool through Grade 3 (PK-3) Classrooms*: A Joint Position Statement of the Massachusetts Department of Elementary and Secondary Education (DESE) and the Massachusetts School Administrators Association (MSAA)

Durkin, K., Lipsey, M. W., Farran, D. C., & Wiesen, S. E. (2022). Effects of a statewide pre-kindergarten program on children's achievement and behavior through sixth grade. *Developmental Psychology*, 58(3), 470–484. https://doi.org/10.1037/dev0001301

First 3 Years. (n.d.) *Promoting Healthy Child Development and Maintaining Strong Parent-Child Bond: Focus on Children in Poverty*. https://first3yearstx.org/the-importance-of-play-in-promoting-healthy-child-development-and-maintaining-strong-parent-child-bond-focus-on-children-in-poverty/

Golinkoff, R.M., K. Hirsh-Pasek, & D.G. Singer. 2006. *Why play = learning*: A challenge for parents and educators. In Play = learning: How play motivates and enhances children's cognitive and social-emotional growth, eds.

Henricks, Thomas, R. (2020). Play Studies, A Brief History. *American Journal of Play, v12 n2 p114-155*. https://files.eric.ed.gov/fulltext/EJ1255272.pdf

Levin, D. E., Van Hoorn, J. (2016). *Defending the Early Years*. Teachers Speak Out: How School Reforms Are Failing Low-Income Young Children. https://dey.org/wp-content/uploads/2019/03/teachersspeakfinal_rgb.pdf

Liu, C., Solis, S. L., Jensen, H., Hopkins, E. J., Neale, D.,Zosh, J. M., Hirsh-Pasek, K., & Whitebread, D. (2017). *Neuroscience and learning through play: a review of the evidence (research summary)*. The LEGO Foundation, DK.

Siviy S. M. (2016). A Brain Motivated to Play: Insights into the Neurobiology of Playfulness. Behaviour, 153(6-7), 819–844. https://doi.org/10.1163/1568539X-00003349

Skene, K., O'Farrelly, C. M., Byrne, E. M., Kirby, N., Stevens, E. C., & Ramchandani, P. G. (2022). Can guidance during play enhance children's learning and development in educational contexts? A systematic review and meta- analysis. *Child Development*, 00 1–19. https://d o i.or g /10.1111/c d e v.1373 0

Wyver SR and Spence SH. 1999. Play and divergent problem solving: Evidence supporting a reciprocal relationship. Early Education and Development, 10(4): https://www.tandfonline.com/doi/abs/10.1207/s15566935eed1004_1

Yogman M, Garner A, Hutchinson J, et al; AAP Committee on Psychosocial Aspects of Child and Family Health. AAP Council on Communications and Media. The Power of Play: A Pediatric Role in Enhancing Development in Young Children. *Pediatrics. 2018;142(3):e20182058*

APPENDIX A:
SAMPLE INTERVIEW QUESTIONS

- How would you best categorize and the idea of play? Is it a developmental need? A pedagogical practice? A way of engaging with the world? All of the above?
- What are the essential features that make an activity or approach play-based?
- How do we talk about play in a culturally responsive and respectful way which responds to the needs of various communities?
- What issues of inequity and lack of access do we see in terms of play?
- What misconceptions and misunderstandings do you see about play?
- What are the barriers to bringing play more firmly into the curriculum and classroom?
- How do those barriers vary amongst different early education settings?
- Do we see play being misused/implemented poorly? How do we prevent that?
- What do you think is missing from the conversation/understanding of play?
- How can the early childhood workforce be better prepared to lead their students in learning with and through play?
- When we talk about aligning play with standards-- what is that process? Do we begin by looking at the standards and designing activities which address that standard? Or, do we look at existing activities that we believe to be successful and see how that can be standards aligned?
- What do policymakers need to know about play? How can we better frame and position play for better stakeholder understanding and buy-in?
- How do we continue teaching and learning through play as students continue on in elementary school and beyond?
- How did the state of play change during the pandemic?
- Can you tell me about an environment you saw/were part of where you saw the transformative power of play?

APPENDIX B: SUGGESTED SIMPLIFIED DEFINITIONS

Term:	Definition:	Additional Details:	In an Effective Learning Environment:
Play	The act of engaging in materials, ideas, and other individuals for the purpose of joy, exploration, and creativity.	Play occurs in all environments, amongst all ages, through all stages of life.	Too often, play is relegated to recess or outdoor time, or is used as a reward. In an effective play-based setting, play is infused throughout the curriculum and throughout the day.
Free Play	Play which is entirely child-directed, and the child has the ability to choose their activities and levels of engagement.	Free play (which can include outdoor play, dramatic play, imaginary play, constructive play, and more) is one of the ways children explore the world around them, take risks, ask questions, and learn how to interact with others.	Despite being defined by being child-led, free play provides an important opportunity for educators to observe children and get a sense of how they interact with their peers, how they solve problems, their oral vocabulary, and much more.
Intentional Play	Play which is aligned with learning standards and has clear learning goals and outcomes. Often the adult carefully prepares the environment for the child in advance.	Intentional play blends the child's need to learn through play with a focus on supporting children to achieve mastery of skills.	Intentional play is play with purpose. It can be used to ensure children are achieving developmental milestones, and provides a clear way for parents to be informed of their child's learning and progress.
Guided Play	Similar to intentional play, though guided play may originate in more free play with a teacher stepping in to provide opportunities for deeper learning based on the play that is occuring.	The hallmark of guided play is the adult as a "guide on the side," joining in to ask questions, help the child consider a new possibility, or introduce a new idea which is emerging from the play.	Guided play is an excellent tool to support students in their SEL growth, vocabulary expansion, math skills, critical thinking skills, and more. Because it is entirely responsive to the child's play, it is an authentic mode of learning which can be applied to many settings.

APPENDIX C:
GUIDES FOR PROFESSIONAL DEVELOPMENT WORKSHOPS

For Leaders and Policymakers:

- Generate ideas about definitions of play-- what comes to mind when you hear that word?
- Reflections on one's own childhood experiences with play, both in-school and out of school.
- What is a skill that you mastered recently, or are in the process of mastering?
  - How did you go about learning this skill? Would you consider it play-based?
- Engage in hands-on workshop led by an educator modeling a play-based activity. (e.g. city planning with loose parts play.) Educator uses both elements of free play and guided, intentional-play to help learners explore the material.
- Group debrief and final discussion on play as an instructional strategy.

For Parents and Families:

- How does your child engage in play? Dramatic play? Imaginary Play?
- Conversation about observing children during play. Are they:
  - Solving problems?
  - Collaborating with playmates?
  - Making connections to things they've learned in school or at home?
- Conversation about the way parents see their role in engaging in their child's play.
- Watch a short video (or selection of videos) of educators engaging with children in play.
- Conversation about what they notice about how the educator deepens the play and the potential for learning.
- Conversation about ways to employ similar practices at home.