

## PLAY-BASED LEARNING

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# How Guided Play Promotes Early Childhood Learning

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### Introduction

Parents, teachers, educators, and policy makers are all invested in children's learning. Members of all of these groups wrestle with the important question of what pedagogical approach is best to support learning, both in general and for particular domains such as math, reading, and critical thinking. Although direct instruction can be effective for early childhood learning, recent research suggests that more discovery-based methods may be even more effective. Given the widespread agreement in the research and education literatures that play is one of the most natural pathways to discovery and learning in early childhood,<sup>1</sup> a play-based pedagogy may be a particularly powerful mechanism for learning. While it is not yet known exactly how playful experiences can support learning of new content or skills, recent research suggests that guided play (a form of child-directed play with adult support) may be one approach that leverages the enjoyment experienced during free play while concurrently affording opportunities for learning content and skills.

### Subject

Play improves young children's health and well-being and also provides them with opportunities to explore social roles and to develop cooperative and self-regulatory skills.<sup>2,3</sup> Ongoing research explores the role of play in more traditional forms of learning (e.g., mathematics, reading, critical thinking), and it is becoming clear that guided play can be an effective teaching strategy.

## **Problems**

While there is widespread agreement that play is good for children's development in general, the research base is less secure about the role of play in children's learning specifically. As noted in a recent review,<sup>4</sup> many have concluded that play provides great learning benefits, but current science has not yet caught up with this claim, particularly when it comes to boosting particular skills such as problem-solving and teaching content knowledge.

## **Research Context**

It is undeniable that children find play enjoyable and derive some benefits from it. But when children are expected to achieve a particular learning objective, research suggests that it may also necessary to provide them with a more structured instructional environment in order to allow them to learn. Resolving the paradox between children's natural abilities to learn through play and the need to learn key content and skills involves realizing that there are different kinds of play, each of which can serve different goals.

## **Key Research Questions**

What kinds of learning experiences (e.g., free play, guided play, direct instruction) best support young children's learning of content and skills? Additionally, how can we leverage what researchers find in studies to improve academic and personal outcomes for children in classrooms and homes?

## **Recent Research Results**

When educators and parents talk about children's play, they are often referring to free play: unstructured time in which children are free to choose their actions with a range of objects or activities. This kind of play can confer some benefits, such as improving children's attention by allowing them to release excess energy. However, because it is so unstructured, free play may not be especially beneficial for children's learning of particular types of content knowledge.<sup>5</sup> In one study, for example, children were asked to learn about the criterial properties of shapes (e.g.,

triangles always have three sides and three angles). Children were able to learn this information when directly taught, using picture cards and bendable sticks as visual support, but not when they were simply given the cards and sticks to play with.<sup>6</sup> Thus, free play may not be optimal where there is a particular curricular goal in mind.

Fortunately, there is another kind of play that benefits children's content learning: guided play. This is a form of play in which the children's activities are scaffolded by a knowledgeable adult, allowing children's actions to lead them to the learning goal.<sup>7-9</sup> Adults can provide this scaffolding by structuring the environment in advance (e.g., providing certain kinds of toys, as in Montessori education) or by sensitively responding to children's actions in a play session and offering open-ended suggestions (e.g., encouraging children to explore materials they haven't explored yet: "What do you think would happen if you...?").

One of the most crucial features of guided play is that children's actions within the play session must be freely chosen. This is the hallmark of play – that children themselves are in charge and can choose what to do at any given moment. Both free and guided play share this feature. However, guided play additionally includes an important role for adults. In guided play, adults should allow children to maintain the locus of control but should also provide subtle guidance that will allow them to explore the right aspects of the environment to reach the learning goal.

Studies show that guided play is indeed effective at allowing children to learn. Specifically, research has found that children who engaged in guided play activities were more likely to learn a target piece of information than children who engaged in free play --- and in some cases, more than children who were directly instructed. For example, an intervention to teach new vocabulary words through book-reading activities found little learning when children played freely with toys related to the new words. Providing children with some adult guidance in their play, however, significantly increased the number of new words that children learned.<sup>10</sup> Similarly, several studies have shown that children can learn about new causal structures when they explore freely within highly constrained environments.<sup>11,12</sup> In support of these studies, a meta-analysis found that learning in guided play environments was comparable to if not better than learning through direct instruction, both of which were superior to learning through the unstructured environments available in free play.<sup>5</sup>

## **Research Gaps**

Just as all play is not created equal, all types of playful learning are likely not created equal when it comes to supporting different outcomes. For example, free play may be especially beneficial for building collaboration and communication in early childhood, but guided play may be increasingly important for learning content knowledge throughout early elementary or primary school. Much work remains to be done to determine which pedagogical approaches are best for different outcomes and at what ages and stages they are most beneficial. Future work should also focus on exactly what types of guidance are most helpful for different learning goals and for children of different backgrounds, since some target learning outcomes may benefit from more or less of an adult presence in the play situation.

## **Conclusions**

Many educators and researchers take opposing perspectives on play, either believing that all play leads to learning or that play and learning are entirely separate processes. In an attempt to bridge this gap, recent research has begun to examine the ways in which different types of play can support different types of learning objectives. In particular, research has shown that guided play, a form of adult-supported play experience, can be particularly beneficial to children's learning. We believe that the secret to guided play's success is in its combination of adult support and child independence. Having an adult set up the situation and provide nudges along the way ensures that children's exploration is appropriately constrained. But allowing the autonomy to remain with the children keeps the situation fun and interesting to them, harnesses their natural proclivity to learn and explore, and allows their own interests to guide their actions, all of which leads to increased learning.

## **Implications for Parents, Services and Policy**

All parents, educators, and policy makers want to ensure that today's children are tomorrow's successful adults. Often, this desire leads to tensions between children's desire to play and adults' desire to impart specific content knowledge (e.g., mathematics or reading) or capabilities (e.g., communication, creativity, or collaboration). Time in childhood is limited and expectations are high. This combination can lead to decisions that promote direct instruction (e.g., flashcards, repetitive lessons) over exploration and discovery. Research suggests that this tension may be misguided. Guided play, in which adults help structure a play activity but allow children to take the lead and direct the session, is not only more fun for the child but also may be particularly effective for learning. While research remains to be done to determine the best pedagogical

approaches for teaching different types of knowledge and skills across development, research to date finds that having a more nuanced understanding of play that includes guided play may provide the outcomes that we are all looking for when it comes to children's learning. Finally, when studying this issue, it is crucial that researchers investigating how children learn collaborate with teachers and parents who are actually teaching children to develop evidence-based curricula and experiences that best support children's learning.

## References

1. Ginsburg KR. The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *Pediatrics*. 2007;119(1):182-191. doi:10.1542/peds.2006-2697.
2. Singer DG, Golinkoff RM, Hirsh-Pasek K, eds. *Play = Learning: How play motivates and enhances children's cognitive and social-emotional growth*. New York: Oxford University Press; 2006.
3. Pellegrini AD, Smith PK. Physical activity play: The nature and function of a neglected aspect of play. *Child Development*. 1998;69(3):577-598.
4. Lillard AS, Lerner MD, Hopkins EJ, Dore RA, Smith ED, Palmquist CM. The impact of pretend play on children's development: A review of the evidence. *Psychological Bulletin*. 2013;139(1):1-34.
5. Alfieri L, Brooks PJ, Aldrich NJ, Tenenbaum HR. Does discovery-based instruction enhance learning? *Journal of Educational Psychology*. 2011;103(1):1-18.
6. Fisher KR, Hirsh-Pasek K, Newcombe NS, Golinkoff RM. Taking shape: Supporting preschoolers' acquisition of geometric knowledge through guided play. *Child Development*. 2013;84(6):1872-1878.
7. Weisberg DS, Hirsh-Pasek K, Golinkoff RM, Kittredge AK, Klahr D. Guided play: Principles and practices. *Current Directions of Psychological Science*. 2016;25(3):177-182.
8. Weisberg DS, Hirsh-Pasek K, Golinkoff RM. Guided play: Where curricular goals meet a playful pedagogy. *Mind, Brain and Education*. 2013;7(2):104-112.
9. Weisberg DS, Zosh JM, Hirsh-Pasek K, Golinkoff RM. Talking it up: Play, language, and the role of adult support. *American Journal of Play*. 2013;6(1):39-54.
10. Toub TS, Hassinger-Das B, Nesbitt KT, et al. The language of play: Developing preschool vocabulary through play following shared book-reading. 2017. Manuscript under review.
11. Cook C, Goodman ND, Schulz LE. Where science starts: Spontaneous experiments in preschoolers' exploratory play. *Cognition*. 2011;120(3):341-349.
12. Sim ZL, Xu F. Learning higher-order generalizations through free play: Evidence from 2- and 3-year-old children. *Developmental Psychology*. 2017;53(4):642-651.