CHAPTER 8

Four Play Pedagogies and a Promise for Children's Learning illford Press

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Play . . . is a right of every child -United Nations High Commission for Human Rights

All children need time and opportunity for play in childcare and school because play is a natural tool for learning in the early years. It is in active play that children develop knowledge, creativity, problem solving, self-reliance, and resilience. They learn through their playful interactions with ideas, objects, and others. But play is changing in a changing world. There is less time for play; now, children play less than 16% of the time that they did in 1981. There is less opportunity for play at home, in neighborhoods, and at school due to hectic and overscheduled family life, a lack of safe places to play, and academic pressure to learn the 3R's at an earlier age. Play, some argue, is "under siege" by strong curricular forces focused on cognitive development, literacy, and mathematics that have dramatically reduced children's opportunities to play at childcare or school or even at home (Zigler & Bishop-Josef, 2004). Adults cannot let this happen to children; we must invest in play as a foundation for learning, especially for poor children whose access to playful learning may be seriously limited. Educators can help by providing rich opportunities for indoor and outdoor play at childcare and school.

In this chapter, we focus on play's contribution to conceptual and content knowledge. Children's storehouse of knowledge and basic concepts increases dramatically during the early years, and play can facilitate this process. Immature concepts of space, time, probability, and causality can be tested and revised during play (Johnson, Christie, & Wardle, 2007). The abstract concept of time, for example, comes to have meaning within the context of play. When children wait for their turn to use a toy or to perform their part in a script, expressions such as "in a few minutes," "a little while," "tomorrow," and even "next week" come to make more sense. Although time and space often are altered in play episodes, sequence and structure often are preserved and can become better understood.

To promote play's contribution in children's learning, we describe, in some detail, several play pedagogies that should be in every early childhood classroom for children ages 3–7. We focus first on a rationale for the pedagogy—why it is important for children's development and well-being, and how it builds their capacity for play as an opportunity for knowledge acquisition—and then describe what each looks like in real-world settings, describing what is essential for good effect on learning potential. What we hope to show is how play can *support* children, and not only teach them important knowledge about the world, but also to help them to be kind, generous, happy, creative, and engaged in meaningful work.

Four Pedagogies

Brian to his young pal, Michael: "We're pretendin' we're police. There's a fire. We gotta get every cop we have—and we need that fire 'stinguisher, too—the heavy-duty one! Huh, Michael?"

This brief exchange reminds us that learning is *in* the play. Adults create the conditions for rich play, perhaps nudge it along a bit, but then must step back to let children take charge. When children are in charge, they experience the satisfying power of play and immediately see the results of their own decisions and actions. This sense of agency taps the learning potential of play activity; it allows children to explore ideas, and to talk and listen in deeply focused ways.

The child at play and in charge, however, presents educators with a "Goldilocks" problem. Too much may result in frivolous, nonproductive activity that does not support deep conceptual learning; too little may stifle engagement, exploration, and creativity, turning play into academic work. What seems to be "just right" for classroom purposes is a proper mix of content, structure, and process that involves children with ideas, concepts, and language in a playful way. The four play pedagogies presented below reflect this proper mix, providing instructional frameworks for meaningful actions in play contexts that lay the foundations for academic learning.

Story Drama

Grandmother to teacher: "Alex just loves all books about animals. He loves The Three Little Pigs 'cause I'll go, 'I'll huff and I'll puff and I'll blow your house down!' And Alex will look at me and he'll say: 'Let's play!'"

Although this grandmother may not realize it, in reenacting The Three Little Pigs, which can be delightfully scary, she is helping young Alex to learn important literary concepts and skills found in most early learning content standards (e.g., the concept of character as a story element). Solid research evidence shows that children learn narrative structure and elements through story drama (i.e., the playful reenactment of stories). Saltz, Dixon, and Johnson (1977), for example, found that story drama helped preschool children connect separate events into logical sequences: what happens first, next, and last. Related research on story comprehension (e.g., Pellegrini, 1984) showed gains in both specific story comprehension (i.e., understanding of the story that was reenacted) and generalized story comprehension (i.e., understanding of other stories), suggesting that story drama may enhance children's knowledge of narrative story structure. As play pedagogy, story drama is easy to implement because it replicates traditional story retelling using creative drama techniques. The basic approach is to act out a familiar piece of literature: (1) a story is read and discussed, (2) props are made, (3) roles assigned, and (4) the reenactment occurs.

Let's take a look at story drama in Ms. Campbell's Head Start class. For the past few weeks the children have been studying gardens and flowers—reading books, exploring online sites, discovering gardens and flowers in the neighborhood, and growing plants on their own. They have read and discussed *Zinnia's Flower Garden* by Monica Wellington (2005) several times, and Ms. Campbell thinks the children might enjoy reenacting this story to deepen their understanding of plant growth. At Circle Time, she sets the stage for a story drama, indicating areas of the room where major scenes will occur, assigning roles to small groups or pairs of children, and providing a few simple props for each scene (e.g., seeds made out of construction paper; a watering can; a picture of the

sun). After a brief review of the story, she positions the children in the room for a reenactment. This time she reads the story aloud and directs children to "act out" the scenes: (1) planting the seeds; (2) watering, fertilizing, and tending; (3) making bouquets of beautiful flowers; and (4) collecting flower seeds to grow new flowers. Next time, she will phase out her assistance, asking the children to enact each scene and retell the story on their own for their peers.

One of the beauties of story drama as a play pedagogy is its adaptability. It can be used before or after storybook reading and with small or large groups. It can be used, for example, to prepare children for a book by introducing it and asking children to predict what it might be about; then, while reading short segments, children improvise actions (James, 1967). Or a whole-group story drama technique can be applied, using character props that consist of "necklaces" (e.g., a string with a picture of the character's face, worn around the neck) or stick puppets with pictures of the character (McGee, 2007). Children are assigned parts, and as the story is read aloud they act out their parts. The next time, the children can both speak and act their parts, thus promoting oral language expression and listening comprehension. Placing the character necklaces and the book in the library corner encourages children to enact the story yet again on their own or with friends.

Story drama not only appeals to young children's love of makebelieve, it also provides an excellent means for them to explore and interpret characters and plots, problems and issues, cycles and processes, at deeper levels of meaning. Listening to a story with the idea of acting it out encourages them to listen carefully and imaginatively, and to try to understand what is meant as well as what is plainly stated. As children engage in more story dramas, they develop an awareness of how stories are structured: the setting, a problem, the sequence of events, and a resolution. As text structures become internalized they provide conceptual frameworks around which children can build their own accounts and stories both orally and in writing.

Topic-Oriented Play

Children develop passions around topics they are curious about and often pursue them in their play with intensity and duration. Henry, now 5 years old, for example, is keenly interested in all things *Star Wars*—an interest that has progressed from narrative role play to movies and books about space and space travel broadly, and, more recently, to constellations and telescopes. Educators can identify children's passions in topic-oriented play that can be aligned with curricular goals in science,

mathematics, social studies, and the arts. This is not unfamiliar play pedagogy in early childhood, although it goes by many names (e.g., theme-based play, sociodramatic play, play centers, play-based curriculum). It is also widely accepted in professional practice, although evidence of its direct impact on children's content learning remains rather thin (Smith, 2010). Certainly, children's natural interactions with toys, objects, and people are interleaved with disciplinary content that children may pick up. Manipulating puzzles, nesting cups, and dollhouse furniture, for example, nurtures nascent mathematical concepts, such as spatial reasoning, one-to-one correspondence, and counting, among others (Sarama & Clements, 2009). Still, play is different from being taught. It is an autotelic activity that can introduce children to disciplinary concepts, but it is not set up to explain them, nor does it take into account children's often scientifically incorrect ideas, based on their natural interactions with their environment. It can help children discover that certain objects sink and others float, for example, but not necessarily help them discover why or how the principle of buoyancy works. In play, misconceptions and inaccuracies may go unchallenged, becoming more deeply embedded and making future learning more difficult. The real benefit of topic-centered play, therefore, may be more affective than academic, developing wonder, curiosity, interest, eagerness to learn, "liking science or math," or "wanting to become a scientist"—all important drivers in the pursuit of content knowledge (Rix & McSorley, 1999).

Topic-oriented play works best when aligned with curricular goals related to academic content in science, mathematics, social studies, or the arts (Roskos & Christie, 2007). For example, in large- and smallgroup instruction, children are taught academic content that fits with a topic (e.g., buildings, water pipes and pumps, communities), and in play they are encouraged to further explore these new ideas and to literally play with their meanings through talk and action. The instruction primes the play by tapping prior knowledge, sorting out confusions, and introducing relevant vocabulary and facts. The theoretical assumption is that the play context then affords focused and sustained attention to content and language use that contributes to understanding (Kounin & Doyle, 1975); it also provides conditions for joint participation, which stimulates talk about content and procedures, thus creating opportunities to express and request content information (Callanan, Rigney, Nolan-Reyes, & Solis, Chapter 4, this volume; Rogoff, 1990). Effective topic-oriented play depends heavily on play-setting design, where the teacher deliberately extends ideas, language, and objects from the instructional setting to the play setting. What does this look like? Here are a few examples that highlight different content learning areas.

Adding Props

One of the simplest ways to connect instruction to topic-oriented play is to add relevant props to popular centers, such as dramatic play. In this example, a teacher added numeracy props to a grocery store play center in order to help her students meet the school district's kindergarten mathematics standards:

According to her district's kindergarten math curriculum, Marilyn is expected to teach rote counting and recognition of numerals from 1–20. She also decides to experiment with turning the dramatic play center into a store. In addition to a balance scale, she is lucky enough to obtain an old hanging scale. She includes a Bates stamp with numbers that the children can rotate and change. She has several hand calculators and an old adding machine borrowed from a third-grade teacher. She also includes tubs of small objects, like Unifix cubes, that can be sold. She is delighted to find that she now has a use for out-of-date coupons and the weekly ads from local supermarkets. The pictures and numbers make the messages understandable for customers. The store is now open for business! On opening day, workers and customers discover that Marilyn has forgotten an important component: they need money. This leads to a group project making bills and coins. (Van Hourn, Scales, Nourot, & Alward, 1999, p. 175)

Marilyn has designed a play setting that provides opportunities for children to recognize numbers and to count—important objectives in her kindergarten math curriculum. She uses this play center as an alternative to more traditional forms of instruction, such as direct instruction and worksheets. The addition of math-related props transformed the center into an authentic environment for her students to learn about numbers and counting.

Extending Vocabulary

Along with concrete props, the teacher can deliberately link language and vocabulary to a topic-centered play area, such as a garage or a flower shop, to support content learning. Christie (2008) provided an example from a topic study of building and construction in a preschool classroom that highlights this technique. The teacher was teaching about construction tools. She began Circle Time with the shared reading of a rhyme poster. While the primary function of the poster was to teach rhyme identification, the teacher also focused the children's attention on two tool words in the rhyme. She had children make a hand motion when *hammer* was mentioned and use their fingers to show how small

the tiny little nails were. Next, the teacher did a shared reading of a big book about building a doghouse. This informational book had very few text words but contained several photographs that contained tools. Even though the tools were not mentioned in the text, the teacher paused to discuss them. After the story was read, the children transitioned to center time. The teacher had arranged the play environment to provide additional opportunity to encounter and use tool words. The dramatic play center had a cardboard frame that resembled a doghouse and contained toy replicas of many of the tools mentioned in the doghouse book: plastic hammers, "nails" (actually wooden golf tees), a circular saw that made a whizzing noise, measuring tape, and safety goggles. Several children spent nearly 30 minutes playing together, pretending to build the doghouse. In the course of their play, the names of tools were used frequently, and the children reminded each other how to properly use each tool (e.g., to put on safety goggles before using the power saw). The intentional integration of props, language, and vocabulary words in the topic-oriented play setting provided children with opportunities to practice and consolidate the vocabulary and concepts being taught in the instructional part of the curriculum.

Structuring Tasks

Scaffolding for playful learning increases when specific tasks are embedded in the topic-oriented play setting. The combination of props + language + task creates an activity setting that can be a deliberate extension of direct instruction (Roskos, 1994). For example, during a 6-week topic study on winter, two kindergarten teachers taught children how to read thermometers and how to record this information, using the symbol for degrees. To connect this content with play, the teachers supplied the discovery play center (science labs) with various types of thermometers, note pads and pencils for recording data, materials for an experiment measuring the temperature of water under different conditions (e.g., warm water, tap water, ice water), lab coats for dress-up, and printed directions related to the experiment. Children's play was videotaped and analyzed for academic talk and social behavioral talk. Results showed that a majority of the children's interactions were related to the content activity available in the center (e.g., using thermometers). What was more impressive, the children's engagement in these content activities persisted across the entire play period. The children did not shift to "offtask" activities such as visiting with friends or other forms of play. The combination of setting cues (the "lab"), objects (scientific tools), task (measuring), and peer talk around a common goal (to measure water temperature) engaged and "pinned" children's attention to the content.

Game Play

Four-year-old Claudia is organizing her friends to play a board game. But who will be first? Claudia has a way to decide, using her own version of "One Potato, Two Potato," which goes something like this while tapping her friends' outstretched hands: "Hola vicka, sola nicka, boo, boo, boo / Hola vicka, sola nicka, I pick you."

Claudia's bid for play with friends hints at the primary features of game play: rules, roles, challenge, and, above all, social interaction (Baines & Blachford, 2011). The literature on the role of games in children's social and cognitive development at home, in school, and on the playground is wide ranging, so we limit our description of game play as a pedagogy to the use of board and digital games in early childhood education settings to support curriculum goals. That game play in the early years is related to content learning (e.g., the "hard" skills of mathematics and science) rests largely on correlational evidence, and any evidence of transfer across contexts is questionable (Goldstein, 2011; Okita, 2004). The "more research needed" refrain is often repeated to show the effects of game play on content knowledge, yet perhaps the impact of game play on "soft" skills, such as social understanding, perspective taking, self-regulation, and sustained attention, is a better bet and more relevant to the 21st-century learning skills children need (e.g., collaboration; Baines & Blachford, 2011). We don't know yet, and thus in the meantime encourage a game-play pedagogy that creates opportunities for practicing cognitive and behavioral skills. So what's involved?

Board games both commercial and teacher made are ubiquitous in early childhood classrooms—the likes of Candy Land, Chutes and Ladders, Memory Game, Connect Four, Scrabble, and Monopoly, to name a few. Use of board games for content learning is perhaps most prevalent in early mathematics, where research in general shows positive effects (e.g., Ramani & Siegler, 2008). Much of this research points to three essentials in the effective use of board games to promote content learning (Schuler & Wittmann, 2009): (1) teacher awareness of the content potential in the board game; (2) teacher presence to explain rules and goals, help children to follow rules, solve conflicts, and facilitate a sense of competence; and (3) substantive conversations that stimulate explanations, encourage reflections on action and thought, and challenge assumptions and hypotheses. Some of these features are illustrated in the following interchange between a teacher and her preschoolers:

Beth has just finished reading Snow Day! by Devra Speregen (2005) to a small group of children and engages them in a

teacher-made board game to practice new words introduced in the story. The board game consists of a winding road, a toy tractor (Barney Backhoe), and cotton balls to represent snow. Along the road are picture cards for the target vocabulary words and stop signs. She places the cotton balls on the road, and asks, "What am I doing here?" The children respond in a chorus of "Putting snow on the road." She confirms and demonstrates the game, "Yes, I'm putting snow on the road. I'm going to take my little tractor, and I'm going to push the snow off the road. When I get to a stop sign what should I do?" All respond, "Stop!" She says, "Stop . . . that's right. And then we're going to tell where we're at and the signs will help us remember." The children take turns pushing the toy tractor along the road, plowing pretend snow, until they come to a stop sign. Then they say the word that is represented by the picture near the sign. For example, the first child to play pushes the tractor and "snow" a little bit past the stop sign by the picture of a town. "Did you get to a stop sign?" she asks. "What do you need to do?" The child backs the tractor up to the stop sign and says, "Stop," "And where are you?" she queries. And the child looks at the sign (which has the word town and an accompanying photo) and says, "That's a city." Beth explains, "It's a city, or another name is a town [a target word]. Look at the word it starts with a t: /t/ /t/ /t/ town." The child leans into the sign, looks at the word, and says, "Town!"

Board games like this one are excellent for the playful learning of important content. They cost next to nothing (parents, in fact, are often eager to donate or make board games), are easy to assemble and store, and can be easily inserted into daily routines. And they are highly motivating for students as learning contexts: we have not yet met a child who does not relish board game play, participating with sustained attention and considerable control, especially when it comes to selecting tokens, spinning spinners, and tossing dice.

In game play, access to electronic games is rapidly increasing in early childhood classrooms via SMART boards, touch-screen computers, and mobile devices. While educators often worry that electronic game playing may lead to social isolation, passivity, limited imagination, and aggressive behaviors, so far research evidence does not give grounds for these fears (Goldstein, 2011). Digital games, in fact, keep children and youth on task longer, improving the chances that what they have to offer may take hold in active minds (Owston, Wideman, Lotherington, Ronda, & Brown, 2007). Well-designed "educationally relevant" games incorporate fundamental principles for playful learning—putting learners in control, confronting them with challenges, encouraging different

ways of thinking—and have been found to promote knowledge and cognitive processing among students of all ages (British Educational Communications and Technology Agency, 2001; McFarlane, Sparrowhawk, & Heald, 2002).

What do these digital games look like? Here is a research-based case example from early literacy. Living Letters (Letters in Beweging from Bereslim) is a digital game, developed in the Netherlands (Kegel, van der Kooy-Hofland, & Bus, 2009), which uses a child's proper name as a stimulus to prime knowledge of the alphabetic principle. Its design is modeled on name-writing research and includes three building blocks to the alphabetic principle: (1) recognizing the name in print, (2) associating the initial name letter with its sound, and (3) identifying the sound of the initial name letter in other orally presented words. The game automatically adapts to the child's proper name or defaults to the word mama and provides the child with targeted instruction on sound-letter relationships, modeled after parental instruction (see Anderson, Boyle, & Reiser, 1985). The game automatically registers the player's immediate responses to tailor the game to individual differences. Three skill levels are built into the game, each more difficult than the last. Level 1 (i.e., easiest) provides practice in the recognizing the proper name; Level 2 focuses on identifying the first name letter (e.g., T in Tom); and Level 3 (i.e., hardest) requires identifying pictures that start or end with the first name letter.

The game starts with an attractive animation to explain how to play (e.g., the main characters, Sim and Sanne, discuss their names and discover that they begin with the same sound). Errors are followed by increasingly supportive audio feedback in the following order: (1) repetition of the task (e.g., "Find the word that starts with the same sound as your name"); (2) a clue (e.g., "Tom starts with /t/"); and (3) demonstration of the correct solution (e.g., "You hear /t/ in Tom and tent"). Apart from increasingly supportive feedback, errors lead to one to three repetitions of the same assignment. Tasks, as well as oral feedback, are adapted to the child's name. Figure 8.1a shows a screenshot from Level 1: Sanne is the magician who finds words that start with the /s/ of Sanne. Figure 8.1b is from Level 2: Tom has to find the word that starts the same as his name. Figure 8.1c shows Bear, a personal tutor, providing a cue when the child has not succeeded twice to find his or her name among the three alternatives. Figure 8.1d is a screenshot from the scene at the end of a game level session.

Children, especially those showing early signs of delay in lettersound knowledge, benefit from playing *Living Letters*, gaining ground in early literacy skills and building capacity to take advantage of beginning

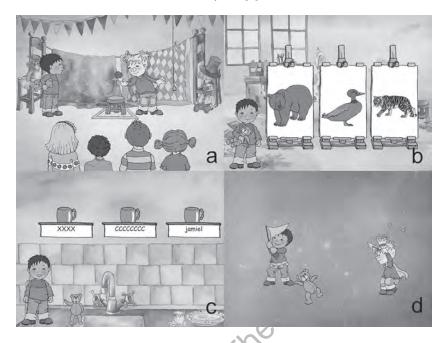


FIGURE 8.1. Screen shots from four different elements of the *Living Letters* game: (a) the animation at the game start, (b) a game task, (c) bear provides a cue after an error, and (d) game end after each level. From Kegel, van der Kooy-Hofland, and Bus (2009). Reprinted with permission.

reading instruction (Van der Kooy-Hofland, Bus, & Roskos, 2011). As a case example, *Living Letters* illustrates the thoughtful design of a "serious" digital game that combines specific educational goals with guided play. What to look for, then, in digital games that build learners' knowledge and capacity? Good concept—media match; educational content at the heart of game play; and feedback and hint structures that support and scaffold learners into challenging content (Fisch, 2005).

Outdoor Play

Several boys are huddling around a pile of sticks in the corner of the school garden. They are looking intently at one of the sticks using a magnifying glass. One of them says, "There's spiders in there." Another asks, "How do you know that, huh?" And the one with the magnifying glass says, "'Cause I can see their eyes."

Outdoor play is fun, exploratory, adventurous, invigorating—and rapidly disappearing from the lives of too many children. Excessive TV and computer use, unsafe neighborhoods, busy and tired parents, and elimination of school recess all take time away from outdoor play. Yet exploratory play outdoors is one of the best labs for learning about science, math, ecology, seasons, times of the day, and weather. Outdoor play can answer questions like: How does ice feel and sound? Can sticks stand up in sand? Why do we slide down instead of up? When are shadows long? When are they fuzzy? What does a chrysalis change into? Do butterflies have to learn to fly? (Johnson et al., 2007). Although these concepts can be taught in a variety of other ways (e.g., books, videos, or computer software), outdoor exploratory play provides direct, concrete experiences that can make it easier for learners to process and retain information (Ormrod, 1999).

Consider, for example, this play from Ms. Thompson's pre-K class where the children are studying water pipes and pumps. The children are busy building the Fix-It Plumbing Shop as the indoor locale for their studies. To get started they experimented with water pressure using plastic cups and pipettes. "We looked in the toilet [tank]," reported Tyrese, "and we were lookin' in there. We pushed the handle and the water went down, down, down. The yellow float thing went down, too, and the blue valve jumped up. Ms. Thompson told us." Then they went outside to investigate the water hose connected to a water pipe and tested different sprayer settings and decided that the little holes spray harder and mistier, noting again that water pipes create water pressure (i.e., force). Later they measured water pipes and they found that smaller pipes (like in a nozzle) create more water pressure than bigger pipes (like a hose without a sprayer).

A key feature of this example is the connection between indoor and outdoor play in the context of the children's Fix-It Plumbing Shop. The children, of course, are focused on their shop and their emerging expertise as plumbers, but going about it involves them in the scientific method: making guesses, testing them, and either proving or disproving them. To engage children in this kind of outdoor exploratory play requires planning on the part of the teacher—not to mention, in this instance, a good understanding of how water pipes and toilets work.

Here's another example of outdoor exploratory play. Although less structured and more imaginary in nature, it is not without its own lessons. Chris, Tyler, and Anubhav are three first graders who often play together during recess. In one corner of the playground they have "built" an imaginary fort, using a few loose pieces of concrete, small branches, and a stray bandana. Every day they race to the fort and prepare to defend it from imaginary enemies. On this particular day, they must

go on a risky mission to retrieve the green energy crystals, stolen by the enemy, and return them to the fort. Their ensuing play is at once intensely physical, social, and conceptual. They coordinate their physical prowess with social interactions to create and maintain an imaginary world that they must negotiate and regulate to make the play work. This entails some rather sophisticated elements of thought: What is the purpose? What information is needed? How do I make sense of it? What's another point of view? As the imaginary play unfolds, each player must be self-disciplined, self-monitored and self-corrective, mindful of the problem, and willing to overcome egocentrism. Through joint participation around a shared mission, each player develops social, organizational, and linguistic skills related to real-world behaviors, as well as strategic thinking important for social success during childhood and, some would argue, adult life (e.g., Sluckin, 1981; Smith, 2010).

This is the important point from these two brief vignettes: outdoor play is not a recess from learning. Quite the opposite; it is a rigorous learning opportunity rich with potential for influencing growth and development, testing skills and knowledge, and exploring social relationships, not to mention forging lasting friendships. As educators, our goal should be more, not less, outdoor play. We should not be intimidated by fears that can be overcome if we put our minds to it. It may be cliché, but, to us, the Romans had the right goal: a sound mind in a sound body. We need to strive harder for that in childcare and at school.

Closing Remarks

Brian Sutton-Smith (1995), the eminent play theorist, commented that play is a "medium for propaganda for one propaedeutic sort or another" (p. 283), implying that "children learn something useful from their play" (p. 279). That they do learn something useful has not been scientifically proven, although considerable scholarship indicates that play provides opportunities for children to develop knowledge about the world in general and about academic content in literacy, mathematics, and science (see Van Reet, Chapter 2, this volume). Whether it has been proven useful or not, children play—and adults can tap the learning potential of this activity in ways that benefit children.

Our chapter describes several play pedagogies for tapping into play's learning potential toward the goal of increasing children's knowledge and skills, and cultivating their dispositions for learning. The pedagogies—story drama, topic-oriented play, board/digital games, and outdoor play—are instructional frameworks for organizing a wide range of play activities that may support and scaffold children's academic and social

learning. They are adaptable, flexible, and manageable frameworks that can be used across educational settings and over time, from preschool to high school. Although there is no dearth of play activities in books and online and no lack of play advocacy in books, journals, and blogs, both are perhaps best served by pedagogic frameworks for instructional action applied faithfully and thoughtfully in educational practice.

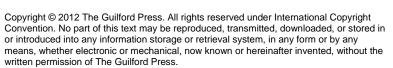
Pedagogies, we argue, provide a means for putting play in the learning curriculum. This is not without a few caveats, however. First, educators need to ensure sufficient time and opportunity for play. In addition, they need ongoing professional development to fully engage all children in play and to help other adults and parents understand the role of play in human development, cognition, and health. They also need to respect, read, and pursue research that explains the role of play in academic learning from early childhood to adulthood. Above all, adults—educators, parents, policymakers, community members—must promise to preserve children's right to play. They need to interlock their little fingers and, as children say, "pinky swear."

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