# **The Critical Place of Play in Education**

A Collaboration Between the US Play Coalition and The Association of Childhood Education International-ACEI





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**The Play in Education Issue.** The neighborhood play so prevalent for many Americans in the 1950s-1980s has changed as the dynamics of neighborhoods and neighborhood schools have changed. Children are spending more time indoors, and they are less likely to meet the children in their neighborhood and form friendships. Children are less likely to ride their bikes or walk to school as population, traffic and distances to school increase (McDonald 2007). Children of poverty are perhaps even more influenced by the changing dynamics because their socioeconomic status makes them more likely to become children who stay home alone rather than going to an after-care facility while their parents work. Many young children enter homes alone where there is no one with whom to play, or they have not observed or been a part of active play; thus, their selfchoice options for play are limited. They may be responsible for the care of younger siblings or held responsible for staying alone inside the house; and, by default, they are engaging in passive activity such as watching television rather than being mobile and engaging in physical activity. These patterns are becoming more typical and thus contribute to our current crisis with childhood obesity (Hedwig 2014).

And, because of crime, unprotected outdoor environments and lack of neighborhood friendships, children may be less likely to spend much play time out of doors or to have quality play spaces or other physical environments where the playground and equipment are well maintained. Parents are concerned about where their children can gather and still be monitored from harmful individuals who should not be on the playground or in the neighborhood (Farley 2007).

Some play opportunities at school that were once embraced, such as recess, have transitioned into more

organized activity or have been done away with, often because of the growing emphasis on academics or as a form of discipline for classroom behaviors. Physical education has experienced a decline as more pressing issues related to accountability and academics have increased. Opportunities for school play were once bountiful, occurring multiple times throughout the day, even beyond the kindergarten level. Many early grades once endorsed play-based centers and opportunities for free choice activities. There has been a continued decline in recess opportunities since No Child Left Behind (Jarrett 2014; Burriss and Burriss 2011; Arthman 2011; Ramsetter, Murray and Garner 2010; Schachter 2005).

We are finding that whether on the playground, in the classroom or during in-home play experiences, children are given less time for free, constructive and unstructured play. In an increasing number of situations, the children lack early play opportunities on which to build more complex play (Miller and Almon 2009). This is resulting in higher numbers of children who need teachers or others to scaffold their play experiences so that they can reach within themselves to create new and personal opportunities for self-exploration and understanding. Children need opportunities for hands-on, sensory learning and engagement with a variety of environments; they also need diversity of playmates that challenge their understanding and ways of engaging (Hancock 2011; Drew, Christie, Johnson, Meckley and Nell 2008).

Unfortunately, in areas such as early childhood education where the role of play has held a prominent and historical place in curriculum and learning, today we are beginning to see less understanding of children's play by teachers (Bennett and Wood 1997) and attitudes shifting away from the importance of children's

play as part of their educational experiences (Sandberg and Pramling Samuelsson 2003; Sherwood and Reifel 2013).

This paper is an outreach for advocacy during the *Decade for Childhood* 2012–2022 and beyond to proclaim that children's play is much more than a frivolous act. Instead, play is a building block for humanity as well as academic components such as literacy, science and mathematical skills, as well as the soft skills related to social and emotional development. With over two billion children in the world, many of whom live below the poverty level, advocates for children and their play must unite for a stronger presentation to the world of why play is essential to children's education and healthy development.

A wide variety of play-based activities must be a part of all children's educational experiences for their health, well-being, development, and overall learning.

A Definition of Play and Education. Often, when play in education is discussed, the role of recess and free play is separate from the curriculum or instructional time, which usually receives the most attention. (Please see "A Research-Based Case for Recess" by Olga Jarrett.) While recess time is critical to the education of all children, it has a unique place throughout educational experiences from early childhood and beyond. An appropriate definition of play that can be used for play policy development is captured in this definition by the Hampshire Play Policy Forum (2002):

Play is an essential part of every child's life and vital to its development. It is the way children explore the world around them and develop practice skills. It is essential for physical, emotional and spiritual growth, for intellectual and educational development, and for acquiring social and behavioral skills. Play is a generic term applied to a wide range of activities and behaviors that are satisfying to the child, creative for the child and freely chosen by the child.

Children play on their own and with others. Their play may be boisterous and energetic or quiet and contemplative, light-hearted or very serious. Therefore, when advocating for play in education we consider a broad range of experiences.

The role and definition of education are also important to consider as well. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO):

Education should be a means to empower children and adults alike to become active participants in the transformation of their societies. Learning should also focus on the values, attitudes and behaviors which enable individuals to learn to live together in a world characterized by diversity and pluralism. (unesco.org/new/en/social-and-human-sciences/themes/fight-against-discrimination/role-of-education/)

Thus, play in education becomes a part in transformative and empowering experiences that shape the lives of children, and education becomes more than merely learning new facts or skills. With these two definitions, play becomes a complicated and complex context for learning, but one that is critical. As stated by Peter Gray, "Play serves the serious purpose of education, but the player is playing for fun; education is the by-product. If the player were playing for serious purpose, it would no longer be play, and much of the educative power would be lost." (p.154)

Types of Play Available in Education. In educational settings for children from preschool through secondary education, there are many avenues for play. The most common forms of play in educational settings include: free or unstructured play, physically active play, rough and tumble play, indoor and outdoor games, and a play-based curriculum. In addition, technology continues to shape the curriculum for young children as well as adolescents. Technology games and other practices that integrate physical movement and activity are contributing to a new kind of play in educational settings.

Known Benefits of Play in Education. Highly respected research in several areas of human development supports play policies and resulting practices. For many professionals in need of research-based information and explanations to "defend" their play-based practices and to advocate for play environments in general, the following is helpful (Wisneski, D.B., and Reifel, S., 2011; Stegelin 2005). These research areas support play as a critical medium for the necessary, holistic and healthy development of young children and for continued well-being into adolescence and adulthood (Ginsburg 2007). In this paper, we focus on two important areas of research on known benefits of play in education: 1) Research related to physical health and mental well-being; and 2) Research on the cognitive and social benefits of play.

#### Research on Impacts of Play on Physical Development.

The rates of childhood obesity in the U.S. have doubled since 1970 (Reynolds, Jackson, Cotwright, Polhamus, Gertel-Rosenberg and Chang 2013; Elliott 2002; Edmunds, Waters and Elliott 2001). Obesity is defined as an excessively high amount of body fat in relation to lean body mass (Marcus and Baron 2013) or body mass index (BMI). The causes of obesity are believed to be multiple and complex and include genetics, nutrition, physical activity, family factors and socioeconomic status. The rapidly increasing rates of childhood obesity and weight-related health problems, exacerbated by poor nutritional choices, general physical inactivity, sedentary routines in schools and a lack of integrated experiences that require use of both mind and body, represent the first area of research (Larkin 2002). What are weight-related health problems for both children and adults? According to Freedman, Khan, Dietz, Srivinasian and Berenson (2001), childhood obesity is related to critical health and psychosocial problems, including 1) high blood pressure, 2) type 2 diabetes, 3) coronary heart disease, 4) social rejection, and 5) school failure and dropout. Type 2 diabetes, previously considered an adult disease, has increased dramatically in overweight children and adolescents (Marcus and Baron 2013).

In 2000, the U.S. Centers for Disease Control (CDC) and others predicted this might be the first generation of children that will not outlive their parents (Gollust, Niederdeppe and Barry 2013). Physical educators and play advocates across the country realize the value and purpose that physical activity can have in the life of a child. There has never been a more urgent need to value physical activity and to inform the public of the benefits that it can provide (Stegelin, Anderson, Kemper, Wagner and Evans 2014). The CDC assumes a preventive stance on this issue and advocates for physical activity, balanced nutrition and more active lifestyles. Certainly physically active play supports this preventive strategy. According to Marcus and Baron (2013), if one parent is obese, there is a 50% chance that a child will be obese; when both parents are obese, a child has an 80% chance of being obese. With 25% of American children being obese and 61% of adults being overweight, it is difficult to overstate the dimensions of this problem. These data also reinforce the notion that obesity prevention and remediation need to be targeted at parents and caregivers as well as the children themselves (Grossklaus and Marvicsin 2014; Stegelin, Anderson, Kemper, Wagner and Evans 2014).

The physical benefits of active play include large muscle skills as children reach, grasp, crawl, run, climb, skip and balance, and develop hand-eye coordination as the child handles objects in play. There is no substitute for active physical play and activity in order for these developmental milestones to occur. Students in every grade level at schools across the country are struggling with prolonged sedentary routines in classrooms. Prominent neuroscientists and specialists on brain research state that when children sit for more than 20 to 30 minutes at a time, over 80% of the blood in the body pools in the hips. It is essential for learning that children have oxygenated blood flowing to the brain (Blaydes 2000). Green, Riley and Hargrove (2012) discuss the critical need for schools and parents to identify and implement strategies that encourage physical activity and diminish childhood obesity.

At the elementary school level, both organized sports and physical education can provide play opportunities. In fact, supporters of sports as a form of play suggest that sports also contain many of the elements used to describe play (Frost, Wortham and Reifel 2001). Advocates of organized sports for school-age children also embrace the notion of sheer enjoyment and pleasure for these children and not just the satisfaction of winning at a game. The issue of recess is being studied, and results indicate that children need recess because of the socialization opportunities and the respite from attention to classroom tasks. Providing a break allows them to give maximum attention to their work (Pellegrini and Bjorklund 1996) and counters sedentary lifestyles and patterns of obesity. Physically active children have greater chances of being healthy for a lifetime; overweight children are much more likely to become overweight adults unless they adopt and maintain healthier patterns of eating and exercise (Marcus and Baron 2013, Sanders 2002). Advocates for play and physical activity can also cite the 300,000 people who die annually due to obesity-related causes and the cost of nearly \$100 billion per year to the U.S. society (Marcus and Baron 2013).

Play and Cognitive, Social-Emotional and Mental Health. Many recent studies reinforce the value of play on children's and adults' cognitive, social-emotional and mental health development. Landmark research by Piaget and Inhelder (1969) and Piaget (1962) indicated emotional development and a positive self-concept are fostered through positive play experiences that allow children to feel successful and capable. Stimulating play environments facilitate progress to higher levels of thought throughout childhood, and self-esteem grows and is nurtured through successful social interactions with peers and adults in play situations. Positive measures of self-esteem and self-worth contribute to students' success in school at both the academic and social levels. Research on multiage play settings indicates that

older children who are shy and less socially assertive emerge as leaders and nurturers of their younger peers (Morrison 2001). Gray (2008) elaborates the value of play for age-mixed groups of children that include cognitive, social and emotional benefits. Active physical play and kinesthetic learning contribute to a sense of overall well-being for the student.

Executive functioning addresses cognitive management and contributes to the development of a large group of skills that may give us more insight into what children know than traditional test scores. Forms of play such as pretend play and imaginary play contribute to the development of this part of the brain function. Children who are encouraged and allowed to play in an open and creative way take on diverse roles, predict and imagine the outcomes of certain behaviors, provoke thinking and conversation with their peers, and strengthen their ability to problem solve. The carryover to learning can be manifested in higher test scores, e.g. reading and math, and can contribute to perspective taking, critical thinking, enhanced language and communication skills, self-control and becoming a self-directed learner. Research conducted by Whitebread, Coltman, Jameson and Lander (2009) reinforces the important relationships among play, cognition and self-regulation or self-control and self-direction. One important goal of the emerging 4K Initiative in the U.S. is to support the development of self-regulation by young children. Ahern et al (2011) and Guddemi, M., Fite, K., and Selva, G., (2013) discuss the research-based evidence on the benefits of play that go beyond physical fitness and bridge into cognitive development, social skills and self-regulation.

Another important area of research is the connection between play, early literacy, and reading experiences and skills. Such noted researchers as Lesley Mandel Morrow and Dorothy Strickland have studied the link between early literacy and play-based experiences extensively. Together, these two early literacy specialists are documenting the profound effect of hands-on, socially engaging early literacy experiences on the reading and literacy readiness and outcomes of young children in preschool and kindergarten settings (Morrow 2002,1997; Strickland and Morrow 1990). Children who explore the use of puppets, manipulatives, painting, poetry, chants and songs within the context of storybook sharing gain pre-reading skills such as phonemic awareness and concepts of print in a more developmentally appropriate manner.

With the growing emphasis on STEMA (science, technology, engineering, math and arts), the role of play is also important. Inquiry-based approaches are advocated in teaching science and math concepts to students

from preschool through high school, and these approaches encourage social development through cooperative learning, creative thinking, expression of new ideas in multiple ways, and the ability to re-imagine and re-invent (Gross 2012). In both science and math - at all levels of education - the exploration of materials through real-world and problem-solving experiences helps students to make connections and to see important relationships (Oers 2010). Researchers Clements and Sarama (2005) focused on math play and the importance of teachers engaging students in integrated learning experiences that make natural connections to mathematics. Play, at all ages, makes that possible. Play requires students to interact socially, work together to solve problems and to be creative in their thinking. Creativity and role-playing are also believed to facilitate problem solving and math learning, as reported by Priovolou (2012).

**Adults' Roles in Play in Education.** The roles of adults in how to include play in informal and formal education reflects a diversity of ideology and approaches over the years (Weisberg, D.S., Hirsh-Pasek, K., and Golinkoff, R.M., 2013). Trawick-Smith (2012) best describes the approaches as a continuum of involvement: "Trust-in-Play" approach, "Facilitate-Play" approach" and "Enhance-Learning-Outcomes-Through-Play" also referred to as "Guided Play." The "Trust-in-Play" approach is often enacted by educators who believe play without adult involvement leads to positive child development. Adult interactions in this approach are limited mostly to preparing the environment and then observing children play. The "Facilitate-Play" approach also is based on the idea that social and intellectual development can occur during play but can be enhanced through adult interventions. The third approach, "Enhance-Learning-Outcomes-Through-Play" assumes that teacher interactions are best at promoting measurable academic outcomes by having intentional interactions with children during play. As one moves from the first to the third approach, the role of the teacher becomes increasingly more visible and intentional. Preliminary empirical evidence indicates that what may benefit children best are teachers who are able to assess their needs and use the full options of adult-child interactions when supporting and promoting play in education. This requires educators to be excellent observers of children's play, strong interpreters of the play and dependable responders to what children need throughout their education (Trawick-Smith 2012, Cheng 2010).

#### **What Education Organizations Say about Play**

- The Association for Childhood Education International (ACEI) recognizes the need for children of all ages to play and affirms the essential role of play in children's lives. ACEI believes that as today's children continue to experience pressure to succeed in all areas, the necessity for play becomes even more critical. ACEI supports all adults who respect, understand and advocate legitimizing play as an essential pathway to learning for all populations of children. When working with children, adults should use their knowledge about play to guide their practice. (ACEI "Play: Essential for All Children" position statement)
- Play is an important vehicle for developing self-regulation as well as promoting language, cognition and social competence. ... Children of all ages love to play, and it gives them opportunities to explore the world, interact with others, express and control emotions, develop their symbolic and problem-solving abilities, and practice emerging skills. Research shows the links between play and foundational capacities such as memory, self-regulation, oral language abilities, social skills and success in school. (NAEYC 2009 Developmentally Appropriate Practice position statement)

## Next Steps — Self Assessment for Schools, Teachers and Parents.

- For parents and community members, contact school board members and school leadership to voice your support of play and playful learning throughout the school day. Take an active role as a play advocate in your school's parent-teacher organization. Volunteer to help support the play events or experiences. Encourage your children to play in different ways at home, both indoors and outdoors. Seek a balance between physically active play and technology-based play; set limits on sedentary activities in your home. Engage your children in family-focused extracurricular activities that are physically active and engage everyone in a playful activity.
- For school districts and individual pre-K, elementary, middle school and high school communities, develop play programs and policies outlining the multiple ways in which play is planned and incorporated into children's days. Create zones within the school setting that encourage various kinds of play and physical activity. Give teachers latitude to develop daily schedules and classroom routines that require students to get up and move about. Engage students actively in the learning process via group activities, role-playing, handson strategies that encourage creative ways to solve problems, and multiple recess and play periods each day. Study the utilization of the school playground. Does it stay vacant throughout much of the day? Do teachers have the option to take more than one recess period each day? Are parents involved in developing new policies for the school, contributing to play environments, and volunteering in classroom and school activities that promote play and physical activity?

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