



the arts and sciences of play

Some Alarming Facts about Play

- 40 million elementary school children will have no arts or music training in their schools this year. NPR2009. Fully 50% of children have no art training in 8th grade (NEA Report Card, 2008).
- Thousands of schools in the United States no longer have recess (Elkind, 2008). Researcher Anthony Pellegrini has documented how having recess helps kids learn. Turns out that the kids who miss recess the most are the poor kids who ironically need to learn the most to catch up to their more advantaged peers (NY Times, 2009).
- In last two decades children have lost an average of 8 hours of free play a week. The American Academy of Pediatrics call the decline of playtime a national crisis.
- According to the Mayo Clinic website this is the first generation that will live fewer years than their parents due to essential hypertension, diabetes, and poor conditioning. Children need to play physically and get off the tube.
- “Only 36% of children meet doctors’ recommendations for physical activity,” Robert Wood Johnson foundation report *Recess Rules*, 2007
- 79% of teachers in New York spend 20-30 minutes a day on test preparation –directly taking away time from play. *Alliance for Childhood Report 2009*

- Children ages 8-17 now spend an average of 8 hours a day in media-based activities-dramatically up from five years ago. *Kaiser Family Foundation 2010*
- The Partnership for 21st Century Skills, a collaborative of business leaders and CEOs and Daniel Pink are among many to suggest that *creative innovation* will be a critical skill for the next generation of skilled workers. The arts and play provide no better training ground.
- Scientific research from NIH, NSF and others is providing strong evidence about the importance of play and the arts – all this as these activities are being eradicated.
- The exclusive focus on science and math in school is like “practicing scales” instead of appreciating the meaning of what you study (NY Times 2008)
- Children are suffering from a “nature-deficit disorder” according to Richard Louv who wrote in 2005, "Last Child in the Woods: Saving our Children from Nature-Deficit Disorder." He said, “Unfettered time outside is fundamental to human development. It's wonderful for (kids') ability to learn, and it's wonderful for their stress level."
- Michael Thomson wrote the *Pressured Child* about how we are forcing kids to grow up too soon. And Madeline Levine wrote the *Price of Privilege* about how rich kids are pressured to succeed. Thomson wrote,
 - What is the price our children are paying for the loss of free play? There are six costs that we can see: 1) obesity; 2) high stress levels; 3) rapidly increasing diagnosis of ADHD, depression, and emotional fragility; 4) social incompetence; 5) excessive dependence on adults; and 6) the loss of a relationship with nature.
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- David Elkind (Tufts) wrote several books including *The Hurried Child* often considered the kickoff for identifying the problem of reduced playtime for young kids.
- Ken Ginsburg authored the American Academy of Pediatrics white paper on PLAY. “Play and unscheduled time that allow for peer interactions are impt components of social-emotional learning” (p. 183).

WHY PLAY IS NEEDED?

- Researchers at Carnegie Mellon University found that children who play board games like Chutes and Ladders can learn important things about how numbers work – even before they enter school. (Siegler & Ramani)
- Susan Levine and Janellen Huttenlocher at the University of Chicago show that play with puzzles helps kids learn about spatial relationships.
- Laura Schultz at MIT does studies on how children’s exploration is so crucial for them learning about the world.
- Elena Bedrova has data showing how important play is for children increasing their attention span and self-control
- Adele Diamond at UBC can speak to the importance of play for brain function.
- Jaak Panskeep (WA State Univ) works with animals and argues that play deprivation has serious consequences for animals’ adult life.
- Stuart Brown, M.D. wrote *PLAY: How it shapes the brain, opens the imagination, and invigorates the soul* . He talks about play in animals and brain changes.