“Education is not always playful, but play is always educational.”

– Barbara Chase
65% of students today will grow up to work in jobs that don’t yet exist...
Top Skills for 2020

1. Complex Problem Solving
2. Critical Thinking
3. Creativity
4. Communication
5. Collaboration
6. Emotional Intelligence
7. Judgment/Decision Making
8. Service Orientation

Source: The Future of Jobs - World Economic Forum
Play is Critical
We’ve Always Played
Other Animals Play Too!
What is Play?

➢ Voluntary
➢ Focused on means rather than ends
➢ Outside the ordinary
➢ Dictated by rules
➢ Fun
# Varieties of play in development

<table>
<thead>
<tr>
<th>Type of Play</th>
<th>Description</th>
<th>Developmental Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensorimotor and Object Play</td>
<td>Basic play with objects</td>
<td>Infancy</td>
</tr>
<tr>
<td>Physical and Locomotor Play</td>
<td>Unprompted, movement-based play</td>
<td>Infancy, Early childhood</td>
</tr>
<tr>
<td>Symbolic Play</td>
<td>Play in which something is used to represent something else</td>
<td>Infancy, Early childhood</td>
</tr>
<tr>
<td>Construction Play</td>
<td>Building-centered play</td>
<td>Early childhood</td>
</tr>
<tr>
<td>Exploratory Play</td>
<td>Investigation of objects to learn about them</td>
<td>Early childhood, Middle childhood</td>
</tr>
<tr>
<td>Rough-and-Tumble Play</td>
<td>Play “fighting”</td>
<td>Middle childhood</td>
</tr>
</tbody>
</table>

**Developmental key:** Infancy (0-2 years)  Early childhood (3-6 years)  Middle childhood (6-9 years)

*Based on Lillard (2015)*
Adapted from Weisberg, Kittredge, Hirsh-Pasek, Golinkoff & Klahr, 2015
Guided Play
Taking shape:
Guided play facilitates preschoolers’ geometric knowledge

Free play
Guided play
Didactic Instruction

Percentage of shapes accepted during the sorting task

Fisher, Hirsh-Pasek, Newcombe, and Golinkoff (2013)
Guided Play

Supports Key Domains and Skills:
• Math
• Science
• Literacy
• Executive Functions
• Curiosity and Perseverance
Free Play
Free Play

Supports Key Domains and Skills:

• Creativity
• Social-Emotional Skills
• Executive Functions
• Health and Well-Being
What did you observe in the play video?

Guided or free play?
Skills?
Behavior of the child?
Behavior of the parent?
What may have enhanced the experience?
A Developmental Perspective on the Role of Play in Early Childhood Development
Play is the primary avenue of learning and learning is the primary purpose of play.

Birth – 2 years

Play IS Learning
Play supports learning key skills and behaviors

2 – 6 years

Play SUPPORTS Learning
Play extends and reinforces learning

6 – 12 years

Play EXTENDS Learning
Play can instill life-long passions and drive innovation

12 years +

Play INSPIRES Learning
The Importance of Parents and Caregivers
Parents and Caregivers Can Play a Critical Role

1. Creating contexts that support both free play and guided play
   - Developmentally appropriate toys, materials, and contexts
   - Safe places to play
   - Experiences that are engaging to your unique child/children
   - Variety

2. Recognizing the benefits of play

3. Supporting and addressing the whole child

4. Providing developmentally appropriate guidance to support key learning objectives

5. Playing WITH your child

6. Play for your own health and development
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6. Play for yourself!
Time for Play at Home, Schools, and Out-of-School Care
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A Whole Child Approach to Learning Through Play

Newborn/Infant

Toddler

3-5 years old

6-8 years old

9-12 years old

NOTE: charts are illustrative only of relative focus – not based on standardized measures
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One Step at a Time: The Effects of an Early Literacy Text Messaging Program for Parents of Preschoolers

Benjamin N. York
ParentPowered Technologies

Susanna Loeb and Christopher Doss
Stanford Graduate School of Education

Abstract. Large systematic differences in young children’s home learning experiences have long-term economic consequences. Many parenting programs place significant demands on parents’ time and mandate parents with information. This study evaluates the effects of READY4K!, an eight-month-long text-messaging intervention for parents of preschoolers, that targets the behavioral barriers to engaged parenting. We find that READY4K! increased parental involvement at home and school by 0.15 to 0.29 standard deviations, leading to child gains in early literacy of about 0.11 standard deviations. The results point to the salience of behavioral barriers to parenting and the potential for low-cost interventions to reduce these barriers.

An Example From Research:

Text-Based Parenting and Play Tips
Play Tips and Lesson Guides

- Helping parents understand the importance of play
- Providing prompts and ideas to initiate, extend, and enhance the play experiences
- Suggesting alternate ways to engage with the toys or experiences
- Highlighting the specific skills supported through the play process
Speedometry: A vehicle for promoting interest and engagement through integrated STEM instruction

Gale M. Sinatra, Ananya Mukhopadhyay, Taylor N. Allbright, Julie A. Marsh, and Morgan S. Pollock

Rossier School of Education, University of Southern California, Los Angeles, California, USA

ABSTRACT
The curriculum, Hot Wheels Speedometry (Mattel, El Segundo, CA, USA), was designed to align with the Next Generation Science Standards for science and the Common Core State Standards for mathematics. Our objective was to develop, implement, and evaluate the impact of this integrated science, technology, engineering, and mathematics (STEM) curriculum on students’ knowledge, interest, and engagement. The authors conducted the study in a district where students were predominantly from communities underrepresented in STEM fields. The findings indicate that student individual interest developed. Furthermore, students demonstrated affective, behavioral, and cognitive engagement along their progression of interest development. The study shows promise for the development of interest and engagement in underrepresented groups through the use of an integrated STEM curriculum.

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Parents and Caregivers Can Play Too!
What is your favorite way to play?

What makes it “play”?

How does it impact your physical, cognitive, and/or social-emotional health and development?
RECAP

Play is CRUCIAL for building necessary 21st Century skills and managing stress.

Play is the OPTIMAL manner through which children will be prepared for the future.
RECAP

Guided play
– range of learning outcomes

Free play
– range of social-emotional and EF skills
The role of play changes across development. But it's critical throughout all stages.
There are many ways that parents and caregivers can support early childhood development through play.
Play is not separate from learning

Play is not a luxury

The power of play should not be underestimated
“We are built for play and built through play.”

Q & A

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Jack and Jace

Jody Sherman LeVos, PhD
Jody.ShermanLeVos@Mattel.com