



## Cyprus Pedagogical Institute Play Seminar, February 2019

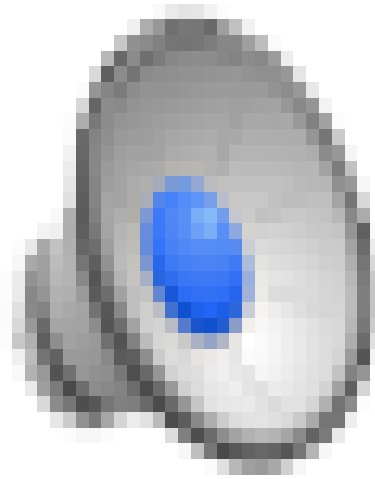
How does play-based learning help children to become powerful learners and able citizens?



Dr. David Whitebread  
University of Cambridge



Play: why do we do it?



# Structure of the Talk

1. The importance of play: the evidence
2. The 5 types of play
3. How play supports learning and development
4. Implications for policy & practice

# 1. The importance of play

- Play is characterised as:
  - a type of activity which is essentially unimportant, trivial and lacking in any serious purpose
  - something that children do because they are immature, and as something they will grow out of as they become adults
- On the contrary, play:
  - Is one of the highest achievements of the human species
  - Enables the development of language, the arts, culture, science, mathematics and technology
  - Supports self-regulation and other key developmental mechanism

# The importance of play in early development



**Dr David Whitebread**  
University of Cambridge

With Marisol Basilio, Martina Kvaljka and Mohini Verma

Report on the value of children's play with a series of policy recommendations

# Play & Learning: the evidence

Considerable body of research providing circumstantial or correlational evidence, of a general relationship between children's play and aspects of their development

Includes work in:

- Evolutionary psychology
- Developmental psychology
- Anthropology
- Educational studies

# Evolutionary psychology

*Bruner (1972) Nature & Uses of Immaturity*

- phylogenetic progression of play: physical (mammals) / object (primates) / symbolic (humans)
- proposed mechanisms: representational abilities, 'flexibility of thought'

*Pellegrini (2009) play:*

- allows focus on 'means' rather than 'ends'
- exploratory and iterative behaviour patterns

# Anthropology

*Peter Gray (2009 & 2012)*

- children's unconstrained play in hunter-gatherer societies
- relationship between loss of play opportunities and increase in child psychopathology

## Developmental psychology

Play associated with:

*Tamis-LeMonda & Bornstein (1989):* early cognitive ability

*Bornstein (2006):* emotional well-being

*Christie & Roskos (2006):* early language development





# Educational studies

Play-based curricula associated with improved:

*Diamond, Barnett, Thomas & Munro (2007):* executive function

*Marcon (2002):* long-term academic, motivational and well-being outcomes by the end of primary school

*Sylva, Melhuish, Sammons, Siraj-Blatchford & Taggart (2004):* academic and social development

*Darling-Hammond & Snyder (1992):* reading , maths and social / emotional adjustment in school.



## 2. The Five Types of Play

### Physical Play

*Exercise play:*  
strength and endurance,  
whole body co-ordination

*Rough and tumble:*  
emotional attachment,  
emotional and social skills

*Fine motor practice:*  
hand-eye co-ordination

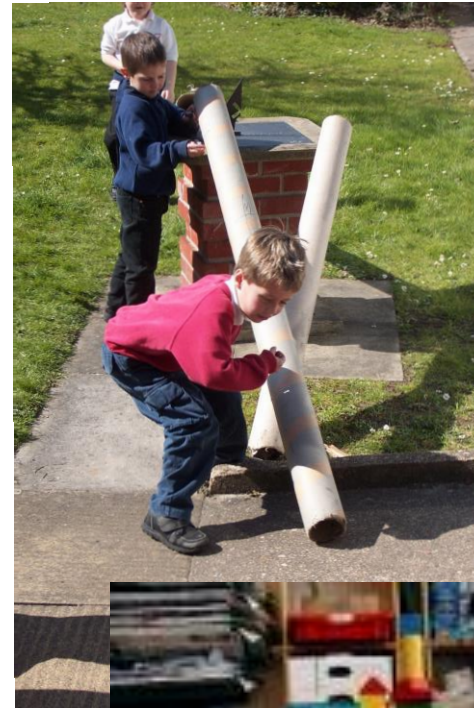


# Play with Objects

*Sensory play, sorting, building and making*

Thinking, reasoning, problem-solving and Creativity

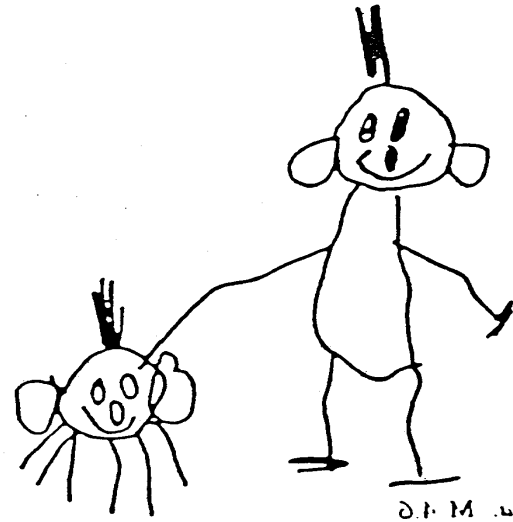
‘Private speech’ and self-regulation



# Symbolic Play

*Language, Visual media, Music*

Early language development,  
communication skills, literacy,  
numeracy, artistic creativity





# Musical play

(Zachariou & Whitebread, 2015)



- Evidence of significant cognitive, emotional and social self-regulation during musical play

# Pretence

*Objects, Roles, Stories*



Narrative skills, social and groupwork skills, self-regulation of emotions and behaviour



# Games with Rules



*Physical, Board & card games, Computer games*

Understanding rules, social skills, discussion skills



# 3. How play supports learning and development

## A. Play mechanisms

- Reduces stress
  - Risky play, stress reduction, resilience & mental health (*Sandseter, et al, 2015; Whitebread, 2017*)
- Provides cognitive & social challenges
  - private speech and abstract, flexible thinking; language and social interaction (*Vygotsky, 1967, 1978; Bruner, 1972, 1983; Christie & Roskos, 2006*)
- Supports self-regulation
  - Developing mental strategies, learning how to learn (*Hyson, Copple & Jones, 2007; Ponitz, McClelland, Matthews and Morrison, 2009; Whitebread, 2010; Barker et al, 2014*)
- Provides meaningful subjective experience
  - Flow (*Csikszentmihalyi & Nakamura, 1979; Howard & McInnes, 2009*)



## B. Adult participation in children's play

- **Social pretend play (Whitebread & O'Sullivan, 2012):** enhancement of complex social pretend play through adult involvement: increased socially-shared regulation
- **Guided play (Golinkoff et al, 2008) involves:**
  - A planned play environment, enriched with objects and toys which provide experiential learning opportunities
  - Teachers co-playing, asking open-ended questions, suggesting ways to explore materials
- **Adult modelling (Nielson & Christie, 2008)**
  - Study with 2-3 yr old children
  - Adult acted out a sequence of pretence activities with dolls
  - Subsequent children's play with dolls involved many more imaginary acts, both copies of adult acts and novel

# Guided play

## Playful Writing: the Movie

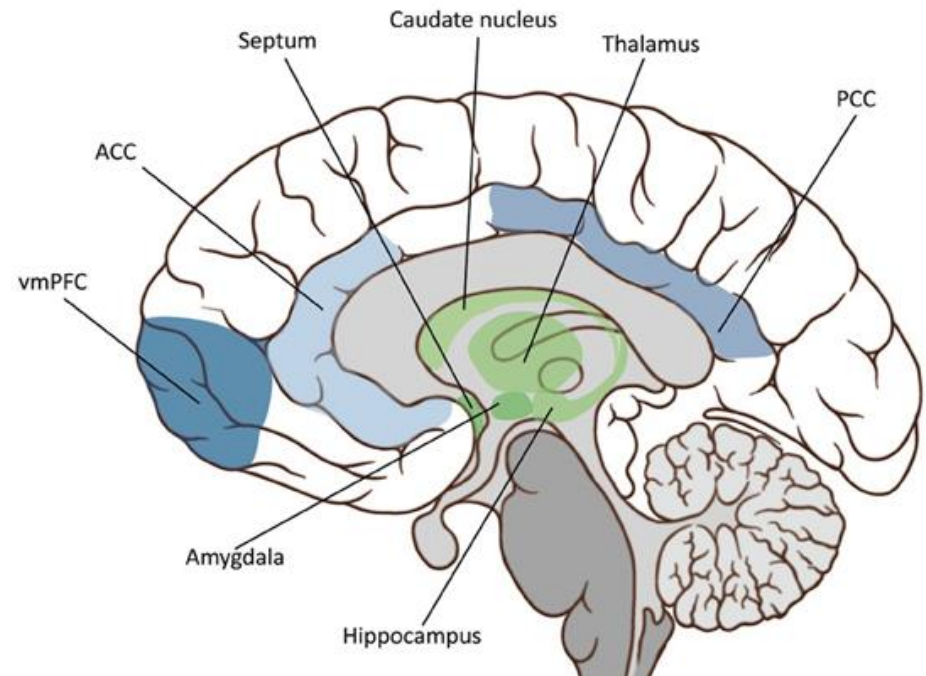


# C. The characteristics of play

Liu, C., et al. (2017). *Neuroscientific evidence on the connection between characteristics of playful experiences and learning*. The LEGO Foundation, DK.

## Five characteristics of play (Hirsh-Pasek et al., 2015)

- Joyful
- Meaningful
- Actively Engaging
  - Iterative
- Socially interactive



## 4. Implications for policy & practice

Young children are likely to develop as powerful learners who are emotionally well-adjusted where:

- they have a balanced range of play opportunities across the 5 types of play, and across the curriculum
- they play alone, with other children and with adults
- some of their play is 'free' or initiated by themselves and some is guided by an adult co-player
- they are introduced to new ideas and skills through playful activities
- this approach is supported in the home and the school



Thank you for listening!





**PLAY IN EDUCATION DEVELOPMENT AND LEARNING**

More information about the research centre  
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