

Promoting Your Child's Learning Through **PLAY**

Helping children **LIVE** their lives

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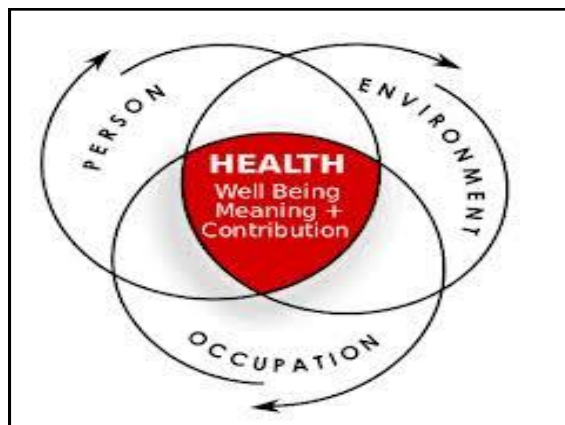
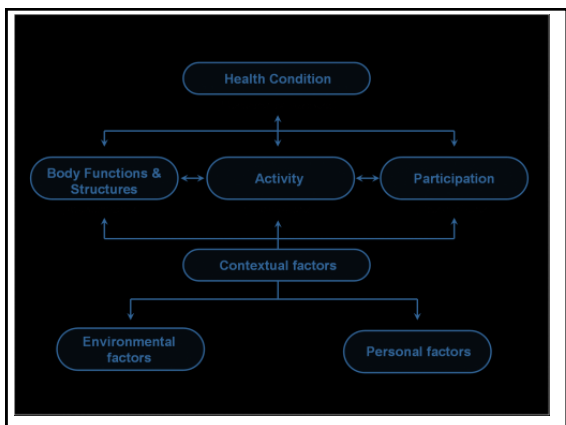
Objectives

- Wat does OT mean?
- Paradigm shift
 - Neuroplasticity
 - Early intervention
- Definition of play
- Children who don't play
- How to stimulate play
- As a summary

What does OT mean?

What does OT mean?

- Teaches you skills for the job of living
- Enables health & well-being through use of occupation & participation (WFOT, 2013)
- If we want to help children LIVE their lives, we need to start working on OCCUPATIONS
 - ICF model
 - PEO model



What does OT mean?

- Children define PLAY as an OCCUPATION
- When observing children, PLAY takes most of their time
- If you ask parents, no one would be happy if their child wasn't able to play

What does OT mean?

- PARTICIPATION means PLAYING
- From a theoretical OT point of view, when helping children, PLAY is crucial
- Hence, OT's must help children with special needs learn how to PLAY
- From a practical point of view, little OT time is spent on playing as a 'goal'

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**PARADIGM
SHIFT**

What does OT mean?

- Why so hard to change our view?
 - Too many other problems
 - No time for "playing"
 - OT are 'just playing'...
 - Financial aspect

PARADIGM shift

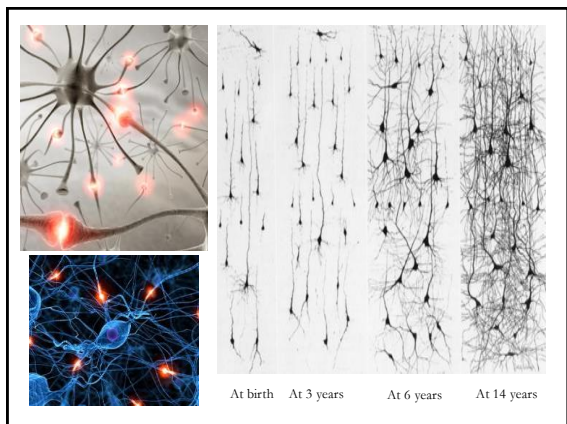
It's time to change the lens

Neuro plasticity

- Ability of human brain to physically rearrange itself in response to outside stimulus
- Neurogenesis
- Old paradigm
- Three growth spurts followed by pruning
 - Infancy
 - Preteen or teen years and
 - Early 20's

Neuro plasticity

- Every one gets 2° & 3rd chance to learn skills
- Pruning
 - If you don't use it, you DO loose it
 - Example: constrained induced therapy with stroke patients
- The same method can be used to force children to learn new skills



Neuro plasticity

- Exercises increases number of dendritic branches Greenough
- Forced exercises increases stress hormones causing neural pruning
- Physical activity during learning increases retention
- Poverty penetrates the brain

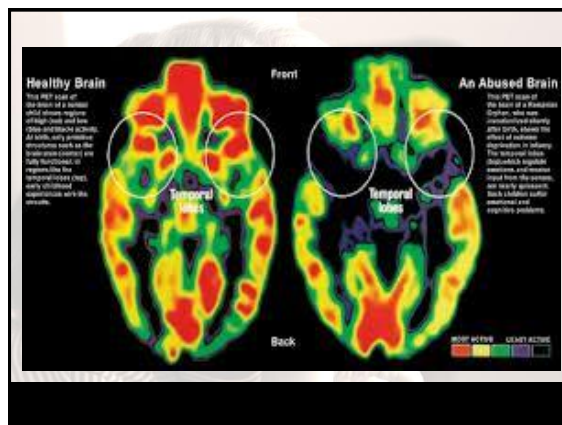
Neuro plasticity

- Key principles for a BRAIN BASED curriculum

- 1° Positive emotions -> social brain
- 2° Secure feeling -> BONDING
- 3° Sensory motor type activities
- 4° Repetition, repetition, repetition.....

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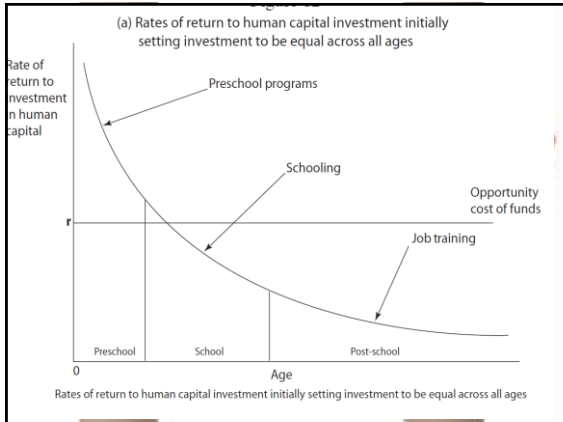
Let's PLAY



- The sooner the better
- Nuori oppinut vanhan tehnyt

Early intervention

- Early advantages cumulate => so do early disadvantages
- Redirecting additional funds toward the early years, before the start of traditional schooling, is a **sound investment** in the productivity and safety of our society
- **R.O.I.** ranging from 3,4\$-17,74 (Heckman, 2008)
 - 4% estimated rate of return on an individual basis
 - 12% estimated rate of return for the "community"
 - % are higher than ie 'job training' and 'formal schooling for disadvantaged children'

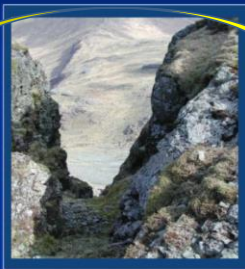


As a conclusion

- It's not **WHAT** you learn that matters, it is **HOW** you learn
- We learn better in **MEANINGFUL** and **PLAYFUL** environments
- **BEST PRACTICE**: "Providing early childhood settings in which 1) child-initiated, 2) child-directed, 3) OT supported play serves as the primary context"

A Huge GAP

What we know in science...



What we do

It's time to **BRIDGE** the GAP

Learning to **PLAY**
playing to **LEARN**

Play is Learning

- Playing is fun
- Important way to nurture development
- Happens in every day moments with your child
- Is not always an organized activity/ dedicated period of "quality time"
- Can happen anytime you are with your child

What do children learn through play?



Take this short quiz and find out!

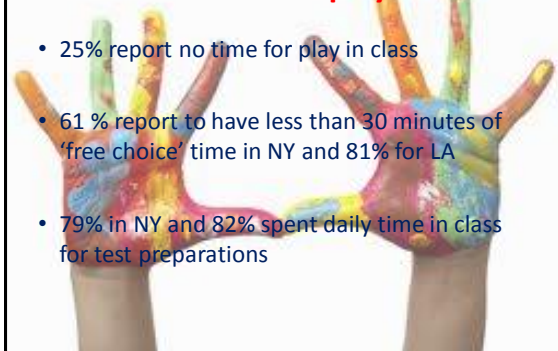
True or False

Is play, in all its forms, but especially open-ended child-initiated play, now a minor activity in most schools and kindergardens?



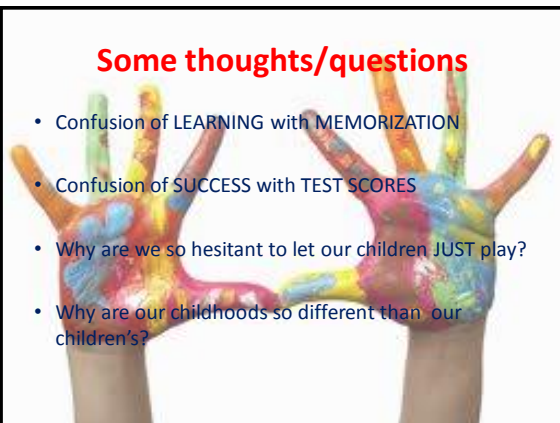
True: children play less

- 25% report no time for play in class
- 61% report to have less than 30 minutes of 'free choice' time in NY and 81% for LA
- 79% in NY and 82% spent daily time in class for test preparations



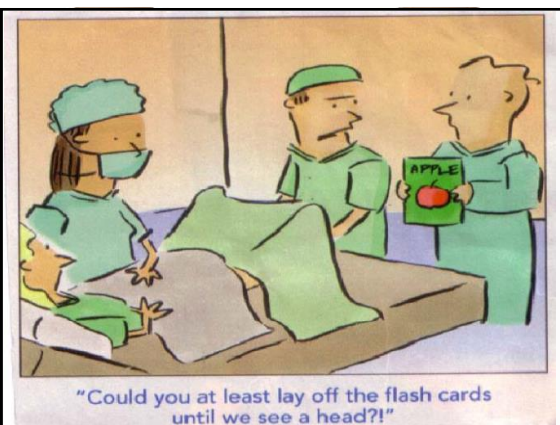
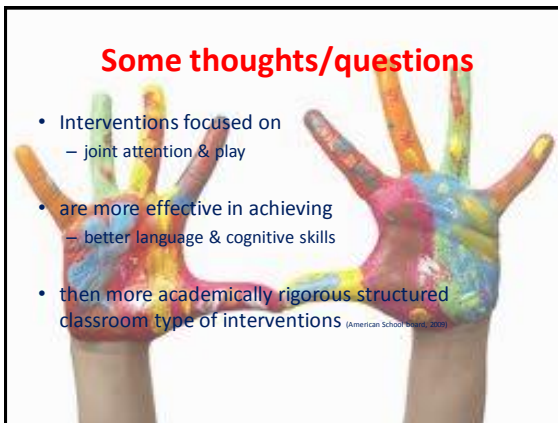
Some thoughts/questions

- Confusion of LEARNING with MEMORIZATION
- Confusion of SUCCESS with TEST SCORES
- Why are we so hesitant to let our children JUST play?
- Why are our childhoods so different than our children's?



Some thoughts/questions

- Interventions focused on
 - joint attention & play
- are more effective in achieving
 - better language & cognitive skills
- then more academically rigorous structured classroom type of interventions (American School Board, 2009)



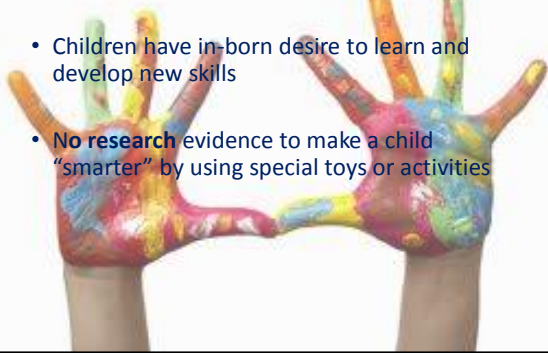
True or False

Flashcards, educational computer games, and "brain development" videos accelerate young children's learning



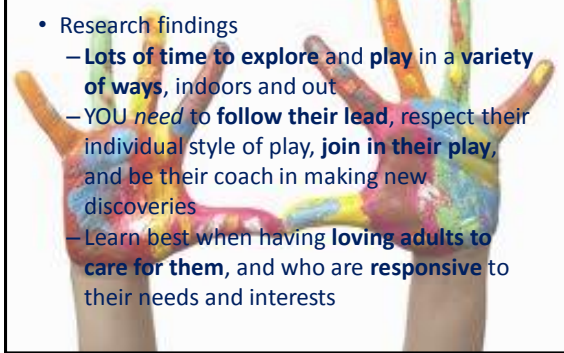
False: flashcards don't make smarter

- Children have in-born desire to learn and develop new skills
- **No research** evidence to make a child "smarter" by using special toys or activities



False: flashcards don't make smarter

- Research findings
 - **Lots of time to explore** and **play** in a **variety of ways**, indoors and out
 - **YOU need to follow their lead**, respect their individual style of play, **join in their play**, and be their coach in making new discoveries
 - Learn best when having **loving adults to care for them**, and who are **responsive** to their needs and interests



True or False

Parents offer their children toys based on their child's gender



True: Toys/Gender are connected

- Parents react
 - + to children in gender-traditional play
 - to children engaged in non-traditional play for gender
- Reflection of dominant cultural beliefs
- "Girly" toys require more sophisticated form of play (pretend play)
- What if children like to play with non gender traditional play? Should we stimulate this or not?



True or False

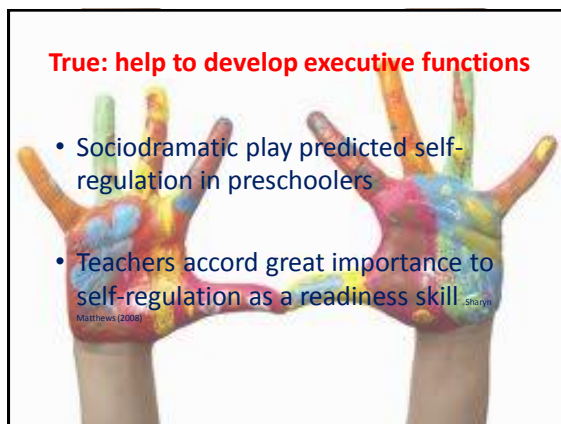
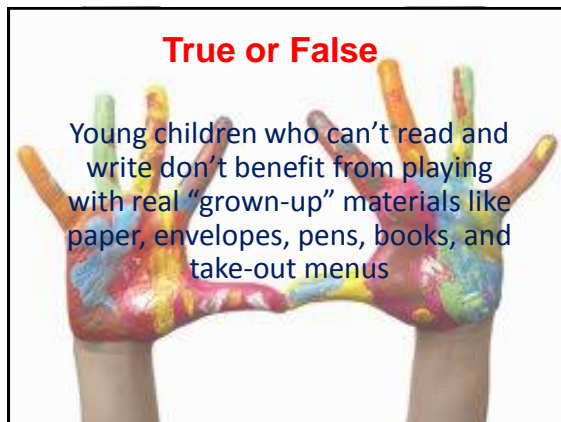
The amount of outdoor play does not vary among child care settings

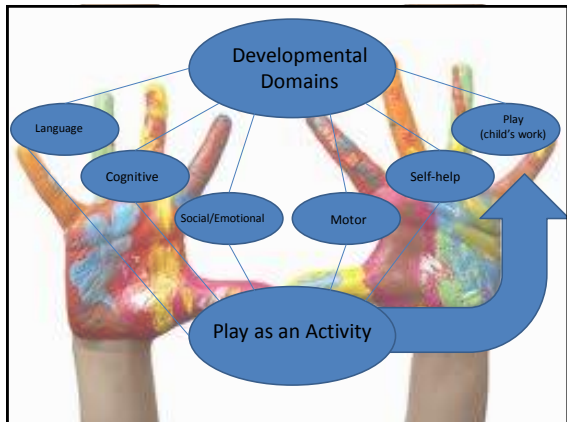


False: outdoor play does vary

- Amount of outdoor play offered to children varies by child care setting
- Outdoor play helps to develop physical skills
- Slides, sandboxes and other play equipment promote social skills:
 - peer play
 - friendship-building
 - language
 - conflict resolution
 - negotiation skills







Implications for OT Practice

- Need for use of assessment in play
 - Observe and quantify play activities
 - Use developmental sequence to determine which activities the child knows well & which activities are just beginning to emerge in the child's play

Implications for OT Practice

- Need for interventions in play: provide contexts for
 - Increasing child's knowledge about objects, people, events
 - Hearing language to describe what the child is learning and attending to
 - Engaging in caregiver-child joint attention

Children who don't play

Let's put them "ON PLAY"

The image shows two hands with colorful paint. In the center, there is a small inset image of a hand touching a screen with various play-related icons (a play button, a smartphone, a tablet, and a pause button).

Autism Spectrum Disorder

- Delays in developing pretend play (McDonough et al., 1997)
- Less frequent spontaneous play (Libby et al., 1998)
- High frequency of repetitive play
- Limited imitation skills, interaction and joint attention skills

Autism Spectrum Disorder

- Problems with meaning, generalization, imagination and sensory processing limiting their capability of play
- Communication difficulties and difficulty accepting direction from an adult
- Problems with flexibility diminishes the opportunities to play with peers

Down Syndrome

- Less exploratory behavior in solitary play than typically developing children
- Tendency to elaborate on the same play themes repeatedly
- Significant correlation between symbolic play and mental age (Cunningham et al., 1985)

Down Syndrome

- Play is less sophisticated
- Play is more functional
- Play requires more structure
- No different than other children, just slower
- Mental age is predominant in predicting level of play

Visual impairments

- Explore surrounding/objects less often
- Frequently engage in solitary play (repetitive/stereotyped)
- Exhibit less spontaneous play
- Do not or only rarely imitate routine activities of caregiver
- Play less frequently with peers (towards adults)

Visual impairments

- Exhibit clear delay in development of symbolic & role play
- Overprotection or fear of danger might result in limited attempts to engage in play
- Tend to ask more questions (-> effort to further their understanding of the environment)
- Obstacles interpreting nonverbal communication

Cerebral Palsy



Use of assistive devices and virtual reality





FEELINGS OF PERMISSIVENESS



TRY NOT TO HURRY



DO NOT ATTEMPT TO DIRECT A CHILD'S ACTION



<http://theycallmemummy.com>

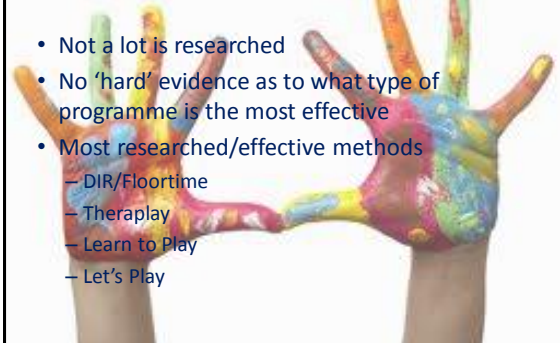
DEEP RESPECT FOR THE CHILD'S ABILITY



PLACE NECESSARY LIMITS

Specific play therapy treatments

- Not a lot is researched
- No 'hard' evidence as to what type of programme is the most effective
- Most researched/effective methods
 - DIR/Floortime
 - Theraplay
 - Learn to Play
 - Let's Play





Well I think it's fine, building jumbo planes
Or taking a ride on a cosmic train.
Switch on summer from a slot machine.
Get what you want to if you want, 'cause you can get anything.
I know we've come a long way,
We're changing day to day,
But tell me, where do the children play?
Well you roll on roads over fresh green grass.
For your lorryloads pumping petrols.
And you make them long, and you make them tough.
But they just go on and on, and it seems you can't get off.
Oh, I know we've come a long way,
We're changing day to day,
But tell me, where do the children play?
When you crack the sky, scrapers fill the air.
Will you keep on building higher
'til there's no more room up there?
Will you make us laugh, will you make us cry?
Will you tell us when to live, will you tell us when to die?
I know we've come a long way,
We're changing day to day,
But tell me, where do the children play?

Car Stevens: Where do the children play

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