HOW TO SUPPORT CHILDREN'S PLAY

AND CREATE A CONTEXT FOR STEM LEARNING





The play experience is essential for the development of self as they 'playout' what is real in their world in a pretend way.

True play programs the brain for problem solving so that it is built for school (instruction) where the brain is used differently.

Relatively few neurons are associated with sensory input, but the vast majority of neurons are associated with connections & problem solving.

Research shows that brains of children who engaged in more true play, were significantly larger than those of children who engaged in less.

It is playful activity, not stimulation or instruction that makes a difference in brain development.

OVERVIEW OF WHY CHILDREN NEED TO PLAY

ONE ASPECT OF PLAY: IT PROMOTES DEVELOPMENT

Virtually every theory of child development hypothesizes that play is related to healthy cognitive and social development (e.g., Piaget, 1962). When children play, they refine motor skills, explore the physical properties of objects, learn cause and effect, and engage in means – ends problem solving.



THE BENEFITS OF PLAY IN BRAIN DEVELOPMENT

Research shows that brains of children who engaged in more true play, were significantly larger than those of children who engaged in less.

It is in play that the brain is built, and it is in school (instruction) that the brain is used

It is playful activity, not stimulation or instruction that makes a difference in brain development





Only in freedom



can children truly play





and learn

IN PLAY, THE TRUE SELF IS EXPRESSED

The experience of playing out what is real in the child's world is essential for the development of self.

Children are free to express their most inner wishes, fantasies, emotions, and interests in a safe environment with no consequences. They can 'play out' what is real in their world in a pretend way.

True play is emotionally expressive. Play can move a child to feel emotions from previous occurring events, decreasing stress and increasing processing

This experience is essential for the development of self

"We must express that which is in us, or we will get sick" - Freud



CHILDREN MUST BE FREE TO PLAY

Relatively few neurons are associated with sensory input, but the vast majority of neurons are associated with connections & problem solving.

Play must be spontaneous

Play can't be taught or commanded

Our job is to create conditions that give rise to play

First condition is a child must be FREE to play



ONE WAY TO UNDERSTAND PLAY: IT IS NOT OUTCOME-BASED

Play is a creative and exploratory activity, not stimulation or instruction. That is why it makes a difference in brain development.

Play vs. Work:

The focus, engagement and fun of **play** is the **activity**

The focus, engagement and fun of work is the outcome

Play is defined as:

Not for Real

Expressive and Exploratory

Not Work

Our job is to orchestrate a world, so outcomes are avoidable for children



IMPLICATIONS FOR PRACTICE

• Identify a time that you require (or have required) a child to work?

EMERGENT PLAY

AN IMPORTANT MOMENT IN A CHILD'S DEVELOPMENT







- Emergent play should be recognized as an integral part of a child's development.
- Emergent play can last for five minutes, fifteen minutes, one hour, it doesn't matter how long.
- When children venture into emergent play, they must have highly intentional environments to engage with.
- Curriculum should be layered with deep opportunities for play schemas.

IMPLICATIONS FOR PRACTICE

 Recall a moment of emergent or true play. What were the circumstances and what role did you fill in making that play possible.

WHAT CHILDREN NEED IN ORDER TO PLAY

THE EDUCATOR'S ROLE



WHAT CHILDREN NEED TO PLAY: EMOTIONAL SAFETY

Feeling emotionally safe leads to play. The understanding that "emotion drives cognition" informs the early childhood educator's work with the tender minds of young children. Creating a haven where children can trust, predict, and experience security builds solid emotional foundation. Then they play and so they learn.



MEANINGFUL PLAY SHOULD PRESERVE EMOTIONAL CONNECTIONS AND OFFER INVESTIGATIONS

- Adult interaction is necessary for proper neurologic development among young children.
- Throughout the day, routines that join children and adults supports their interactions to create channels for strong neurological development.
- This type of connection ensures that time away from play is well spent in engaging relationships.



WHAT CHILDREN NEED IN ORDER TO PLAY: FREEDOM

- Children's play can be weighted down in the expectations, scheduling, and outcome-based curriculum that saturates early childhood programs. This creates an environment that binds children into activities that aren't of their making.
- We consider that children need freedom from the heaviness of:
 - pain, hunger, and tiredness
 - screens and intrusive scheduling,
 - instruction,
 - being entertained (this is seen when adults remove themselves from children's play, they engage in more play rather than demanding more involvement?
 - having to work instead of play.



When a child:

feels responsible for preserving proximity and closeness

needs to hold on to their attachment person (clinging, clutching, following, conforming, imitating, etc)

strives to belong, fit in, be good

works for attention (positive and negative), recognition, approval

has to be good, be pretty, be kind, etc.



IMPLICATIONS FOR PRACTICE

 Think about the children in your care and the conditions that you are providing. Which of the above list do you provide the most freedom from? Which of the above do you provide the least freedom from? How can you improve this? WHAT
CHILDREN
NEED IN
ORDER TO
PLAY: REST



OUR ROLE IN PROVIDING REST

- Rest, in this context, means that children are emotionally connected to their caregiver and therefore able to relax from the stress of not knowing and not connecting. When this "rest" occurs, they can focus their energy on play.
- •In order for rest to occur caregivers:
 - accept the work of building the relationship,
 - assume the role of responsibility and leadership in a child's life,
 - provide more proximity and closeness than the child requests, and
 - fulfill a child's need for emotional connection.

REST, PLAY & CURRICULUM



- There must be an established secure attachment between the child and their caregiver to lay the foundation for opportunities to venture out into play.
- Providing curriculum that recognizes the child's agenda, desires, and planning allows them to begin the journey to a sense of self.
- Therefore, deepening play schemas without leading play is a careful balance between observation, extension of interests, and focusing on the individual that is a challenge to accomplish.
- Thoughts on situational performance:
 - The human brain is wired so that one is expected to perform, the brain will not process emotions and feeling, there is shutting down of sorts
 - This is designed by nature appropriately however can have negative effects on children if asked to 'perform' too often
 - There needs to be a balance of time spent in situational performance vs time spent in free play and safe relationships

INTRINSIC AND EXTRINSIC LEARNING

Finding a path to prepare children for academics

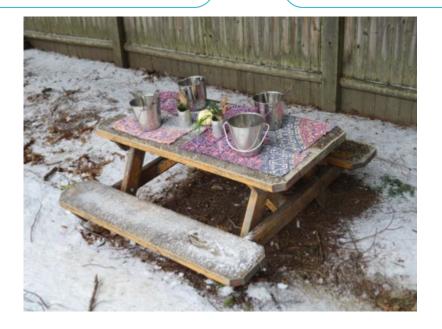


INTRINSIC LEARNING

A journey into the world through child-led discovery

Intrinsic learning comes from within, it is child-lead, interest-based, and exploratory.

Extrinsic learning is delivered to the child from a curriculum or lesson that is prescribed. This type of learning is led by the educator, based on prescribed goals and objectives, and typically generalized for age/grade.



THE ROLE OF PLAY IN INTRINSIC LEARNING

- The National Science Foundation (2001) suggests that active learning involves a process of exploring the natural or material world and triggers questions leading to discoveries to reach a new level of understanding.
- Through active exploration children seek information and insight about their questions and interests in things that matter to them. They construct meaning and resolutions about their area of curiosity rather than being focused on the right answer or outcome.
- Intentionally designed play environments provide children with time, materials, and opportunities to exercise the core of their daily experiences; their sense of curiosity, their questions, ideas, and observations and discoveries.

ACTIVE EXPLORATION CONTRIBUTES TO INTRINSIC LEARNING

- During outdoor play, curious children may tinker with materials and ideas when they first begin to determine how to crack ice, splash in a puddle, or make a den or a shelter.
- Tinkering with ideas supports children exploring, experimenting, engaging with materials in ways that offer new options and ultimately learning through trial and error.
- When children are given the time, space, and materials to combine, assemble, take apart, and create with; they become immersed in experimentation and discovery that increases their desire to further explore.

EVERY TIME WE TEACH A
CHILD TO DO SOMETHING,
WE KEEP THE CHILD FROM
INVENTING IT.

