# Reggio Emilia Australia Information Exchange



# An Encounter between Babies and Material: Wonder as the genesis of learning

Instead of using these provocations for 'reflection', we hope that you will use them to assist in a process of 'diffraction' that generates uncertainty and new ways of thinking.

"Donna Haraway proposes diffraction as an alternative to the well-worn metaphor of reflection. As Haraway suggests, diffraction can serve as a useful counterpoint to reflection: both are optical phenomena, but whereas reflection is about mirroring and sameness, diffraction attends to patterns of difference" (Barad, 2007, p.29).

# Complexity Theory – Playdough VS Clay

"From the very beginning, curiosity and learning refuse simple and isolated things; they love to find the dimensions and relations of complex situations." (Reggio Emilia Department of Education, 1987, p. 19).

# **Exploring Gravity and Object Permanence**

What do you know about object permanence? What kinds of cognitive experiences can you plan for babies to interrupt their object permanence?

# **Exploring Soundscapes**

- Coexistence of sound with other senses
- Cause and effect
- Participation
- Potential
- Interaction
- Vibrations and reverberations
- Unveiling
- Same or different
- Auditory recognition

# Intelligent Materials

When ideas meet with hands, extraordinary things happen. Thoughts give shape to the materials and the materials remodel the thoughts and then the things we do grow along with our own growing. Salvador Allende Preschool



# An Encounter between Babies and Material: Wonder as the genesis of learning

## Image of the Competent Child

"one of the strong points has always been that of starting from a very open, explicit declaration of our image of the child, where image is understood as a strong and optimistic interpretation of the child. A child born with many resources and extraordinary potentials that have never ceased to amaze us, with an autonomous capacity for constructing thoughts, ideas, questions and attempts at answers" (Reggio Children, 2012, p.14).

## Planning for exploration of materials with babies

- Choose a material
- List the properties of that material
- Think about how you are going to present your material. What contexts will you create?
- Develop intentional teaching objectives eg. For the children to learn about the concept of rustling
- Observe the children
- Analyse or interpret how they are engaging with the material. Are they fascinated? Or not? What can you do as an educator to sustain their engagement?
- Reflect and relaunch the material

## **Technological Invitations**

"Luminous contexts invite us to move around in a complex system made up of relationships, references and reflections, where continuous connections, comparisons, transformations and reconsiderations are possible and desirable. All this would seem to be a good metaphor for knowledge building" (Reggio Children, 2018) What luminous contexts do you create for babies and toddlers?

#### **Time and Repetition**

Hurriedness leads to actions with little meaning and does not allow children to learn techniques over time. If we do not let children explore a material over a long period of time, how do they develop empathy for that material? If we do not let children explore a material over a long period of time, how do they ever experience the intense feeling of gratification or mastery, learning about its properties and affordances?

#### What do we mean by materials?

Out of all the possible materials that could be provided for babies, which ones are the most captivating? Which materials are the most capable of stimulating the cognitive, social and physical learning processes?



# An Encounter between Babies and Material: Wonder as the genesis of learning

# Observation Tool 1

Research/Prefiguration: Babies look longer at unexpected events than they do for an expected event.

Contexts. Observations. Evidence	Time looking at puppets	Interpretations and extending children's curiosities
What I would record here, is the context I set up for children and what I observed.	Eye contact for 2 mins	Alexander seemed engaged with the dragon puppet.
Context: Puppet Theatre Alexander watched the dragon puppet for an extended period of time before looking away.		
Rachel watched the dragon puppet for a little while, before looking away. Then she looked back, looked away and then looked back.	Eye contact for 5 secs, looked away for 2 secs, looked back for 5 secs	Rachel may have been a little fearful of the dragon puppet as she kept looking away and then looking back. Give Rachel the puppet to play with before using it in the puppet theatre again.

#### **Observation Tool 2**

Research/Prefiguration: Tissue paper, an intelligent material, activates relational nodes of learning

Contexts. Observations. Evidence	Interpretations and extending children's curiosities
<ul> <li>What I would record here, is the context I set up for children and what I observed.</li> <li>Context: Tissue Paper</li> <li>Rohan revisited the tissue paper this morning. He had become a bit of an expert at it and was confident in exploring this concept individually. As he played with the tissue, he noticed another child, Annalisa working. He watched her carefully and then Annalisa looked up at smiled at him. She copied his action and then looked him. He then ripped his tissue paper and looked at her.</li> </ul>	The tissue paper is connecting these children. The tissue paper, the material is activating relationships between children. I can see mimicry and connection.
Sahdi started the session sitting in my lap but watched Paula ripping the paper. She started to rip the paper and each time she ripped the paper, she looked up to see my reaction.	I realised that she was playing a game with me. She was connecting with me. (Watch other children to see if they do similar things)



# An Encounter between Babies and Material: Wonder as the genesis of learning

# In conclusion:

## Questions to critically reflect on:

- What relations do we see and support in children's sculptural explorations?
- How does construction with clay support the other expressive languages in children and vice versa?

## **References:**

Daniel, H. (2016). The competence of the VERY young child: exploring clay with children under 18 months of age. The Challenge.

Edwards, C., Gandini, L. & Forman. G. (Eds.) 1995. The Hundred Languages of Children: The Reggio Emilia experience in transformation, Praeger, Santa Barbara, California.

Edwards, C., Gandini, L. & Forman. G. (Eds.) 2012 The Hundred Languages of Children: The Reggio Emilia experience in transformation, Praeger, Santa Barbara, California.

Kolbe, U. (2001). Rapunzel's supermarket. NSW: Australia: Peppinot Press.

Pelo, A. (2007). The language of art. St Paul, MN. USA: Redleaf Press.

Salvador Allende Preschool Reggio Emilia. (Quoted using Kerrie O'Neill, personal notes).

# Citing Reference:

Reggio Emilia Australia Information Exchange, (2020). Quotes and provocations for 'An encounter between babies and materials: Wonder as the genesis of learning' Webinar. Australia, REAIE.

© Reggio Emilia Australia Information Exchange

