Presentation Notes

"Drawing Thought: young children's representational approaches to meaning making in science"

Facilitated by Rachael Hedger for REAIE

Quotes

With early childhood education taking a multi-disciplinary approach, children's learning doesn't sit in these siloed subject areas. Art and science combine to show the breadth of children's knowledge, understanding and creative endeavours (Author).

I'm focussing on uncovering the imaginative way in which children use symbols to demonstrate 'produced meanings' and how this can be undertaken by applying a semiotic approach to how we observe and analyse all elements that children bring to the process of drawing (Author).

When a young child draws an image which they identify to be a picture of their mother, to someone else it may not be recognisable as the child's mother, but the child has made an imaginative leap to transform it to a representation within their own mind. "They have leapt in at the symbolic deep end without an awareness of semiotics" (Hope, 2008, p. 52).

"During cross-channel communication, children effortlessly weave between many forms of symbolising, and select what and how they want to represent something . they choose the system which is most effective for a particular form of communication at a particular time" (Wright, 2007, p. 39).

"The symbols of young children's art-making reflect developing universal cognitive structures rather than the symbols reflecting an inborn universal language" (Wilson, 1976, p. 5).

The play-experiments and use of narrative provided an entry point into learning, connecting the children to the scientific phenomenon and enabling them to demonstrate their understanding (Author).

The children were capable of representing movement in a variety of imaginative ways. This fostered their creativity and critical thinking as they evaluated their choice of symbolic representation and how they would choose to represent air as force and movement within their drawings (Author).

"You can draw dots, lines or little arrows, or dashes. Anything that you can show the movement. It might be like little spots, or wiggly lines, or little dots, or little love hearts" (Child A, Session 5).

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Reflective questions

- How do you define meaning-making, and do you see it as a valuable learning opportunity for children's science exploration?
- What are your thoughts on focussing on the process of drawing as a learning tool in science?
- Have you recently considered the opportunities that you provide for children to draw, and how this can support them to make sense of the world?
- Have you considered that the materials offered to children when drawing may impact on their experience, how long they spend on the task, and how much detail they include?
- Where are the opportunities for children to draw within your everyday program of teaching and learning?

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