

Schema Learning Theory by Nikki

Greetings everyone, my name is Nikki and I recently joined the Mamaku room as Josie's co-teacher. My previous teaching position was at Daisies Early Education and Care centre in Wellington, where I was very fortunate to be teaching under the pedagogical guidance of Dr. Anne Meade – one of New Zealand's finest early childhood researchers. At Daisies I was able to explore schema-learning theory in-depth for the first time. As this theory helps to explain a lot of young children's behaviour I thought that I would give a brief overview in this newsletter.

Sometimes as infants and most often toddlers, children show a preference for certain types of play. It is when this type of play is repeated often that it can help adults to identify that the child is possibly exploring a learning schema. Sometimes the compulsive nature of this play can cause concern amongst parents.

However, when they learn about schema-learning theory this play makes a lot more sense.

So what are schemas?

Repeating patterns in children's play, (p1).

A thread of thought which is demonstrated by repeated actions and patterns in children's play or art, (p1).

Schema draw attention to patterns across children's play that would otherwise not be obvious or linked in any way. This helps to make children's learning visible and we can respond in ways that support their explorations, (p3). From *Getting Started with Schemas*. van Wijk, 2008.

Schema Spotting....

Schemas repeat. If a child is working on a schema it will be noticeable as it occurs again and again, in different places and with different resources.

While working on schemas children often seem fascinated; they are deeply engaged and very persistent. Schemas are sources of much learning and development in children. From my experience most of the schema explorations provide children with

valuable insights into the world of physics, spatial relationships and mathematics.

Common schema:

If a child is passionately interested in... (taken mostly from van Wijk)

Transporting

picking things up, moving them, and putting them down or dumping them. Perhaps using pram, bag, basket, truck or wheelbarrow. Usually has full hands.

Enclosing and Enveloping

Surrounds things. Likes getting inside a defined area, e.g. a block building, tyre or barrel. Gets into boxes. Covers completely, wraps up, Hides. Likes peek-a-boo. Likes putting things into other things, i.e. posting boxes.

Transforming

materials which change shape, colour, consistency. Nothing stays clean. Often includes a lot of sensory play.

Trajectory

horizontal, vertical and diagonal movement of things and of self. Things fly through the air, the child moves at a run.

Connecting and disconnecting

joining things together, ties things up or the opposite – takes things to pieces and/or scatters the parts.

Circularity and Rotation

things that turn loves wheels and/or balls. Exploring curved lines, love circles.

Ordering objects in space

putting things in lines either parallel or end-to-end. Often using objects or in art-works.

Schematic learning is not developmental – not all children will explore all schema. For some children schema explorations are quite difficult to identify, however from my experience most children will have a few schemas that they are exploring at any one time.

Some schematic explorations can last for years and even be the foundation for strong interests later in life.

Robyn and I both have a copy of the book "Getting started with schemas" by Nikolien van Wijk if anyone would like to learn more.



Education is not the filling of a pail, but the lighting of a fire.

William Butler Yeats