Book Review:
Getting started with schemas:
Revealing the wonder-full world of children's play
By Nikolien van Wijk (2008), Auckland, New Zealand: NZ Playcentre Federation.

reviewed by Justine O’Hara-Gregan

Getting started with schemas
Revealing the wonder-full world of children's play

by Nikolien van Wijk

Hot off the Playcentre Publications’ press comes this colourful and engaging book about schemas. The author, Nikolien van Wijk, is a parent of three children, a member of Wilton Playcentre in Wellington and a part-time tutor at Victoria University.

It was at Wilton Playcentre that van Wijk was introduced to schema learning theory in 2000. She went on to become a key member of the research and dissemination team when Wilton Playcentre was selected as an early childhood Centre of Innovation from 2003–2006 (COI). It will come as no surprise that Wilton Playcentre's research focused on schema learning theory and that much of van Wijk's knowledge and understanding of this theory of learning came about as a result of the research project.

Getting Started with Schemas was written in response to the Playcentre Federation’s request for a text that playcentre parent educators would be able to use to inform their practice. It incorporates some of the material gathered during the COI project and the growing body of literature around schema learning theory. It also draws strongly on the voices of the parent educators at Wilton Playcentre.

van Wijk's intention was for the book to be read as if the author and reader were in a workshop having a conversation – as happened during the dissemination phase of the Centre of Innovation research project. She has achieved her goal in writing a very user-friendly text which is accessible to playcentre parent educators, early childhood students and other early childhood educators. This is very much a 'first taste' of schemas and schema learning theory but there is sufficient theory for the text to be informative for those who wish to go on and explore the topic in greater depth.

Chapter one responds to the question 'What are schemas and why do I need to know about them?' van Wijk draws on the work of Jean Piaget, Chris Athey and Tina Bruce to provide an overview of schema learning theory and a description of schemas. She describes schemas as repeating patterns in children's play, or a thread of thought which is demonstrated in children's play or art. van Wijk asserts that learning about schemas...
enables adults to meet children's minds. When adults recognise schemas they can better understand and articulate children's working theories and support and extend their learning over time thus providing continuity. The prime focus of the book is on action schemas (movement in the physical world) as these are the easiest to identify for those new to schema learning theory. Figurative or graphic schemas are introduced but discussed only briefly with the reader being directed to other literature sources for more in-depth discussion.

Chapter two is about schema spotting. 'What are we looking for and how do we start looking?' In this section, van Wijk discusses the way that some schemas are obvious whilst others are more subtle. The key (as with all good early childhood practice) is to pay deep and focused attention to children over time whilst looking for repeated patterns of behaviour in actions, art or mark making. Van Wijk draws on the work of Laevers and Csikzentmihalyi to explain the dispositional behaviours - involvement, flow and persistence - that children exploring schema may demonstrate. As demonstrated in the photographs and practical examples, children's schematic interests can be evident from a very young age and chapter two provides clear discussion and illustrations of some of the 'easier to spot' schemas. These include:

- transporting
- trajectories
- transforming
- enclosing and enveloping
- circularity and rotation
- ordering
- spatial relationships.

Each schema is discussed in terms of what adults may observe as well as suggestions for resources and activities that may be of interest to children with that particular schema. Van Wijk points out that some children may be exploring more than one schema at any one time and that some activities may be of interest to children with differing schematic interests. She also notes that whilst the name of a schema is useful, it is not as important as identifying the themes and ideas that are being explored and recurrent patterns of exploration and learning.

The third chapter focuses on how parents and educators can work with schemas and what these add to learning. Van Wijk discusses how "schema learning theory highlights the cognitive connections between seemingly disparate 'topics', and supports the educator to explicitly link those ideas for the child" (p. 52, 2008). There is a focus on concepts and ideas, rather than factual content and skills. Van Wijk uses Chris Athey's sequence of progressive learning - from sensori-motor to abstract thinking - as the basis for discussion of strategies that educators can use to nurture children's learning. Many of the strategies suggested will be familiar to early childhood educators, although they may not have been previously considered from the perspective of schema learning theory.

On the subject of strategies there is also a very useful section on using schemas for positive guidance. Van Wijk states that whilst adults may understand that children are learning about ideas when exploring their schematic interests, sometimes these interests persist beyond adult tolerances. There are also instances where individual children's schemas are in conflict - for example one child wants to order and connect and another child wants to explore trajectory with the same equipment at the same time. Chapter three briefly explores how schemas can be used to distract and divert children and how the behaviours that schema interests can engender can be managed at home and in a playcentre setting.

Chapter four provides a clear discussion of how schema learning theory fits within the framework of Te Whāriki (Ministry of Education, 1996). The principles of Te Whāriki - empowerment (whakamana), holistic development (kotahitanga), family and community (whanau tangata) and relationships (nga hononga) are introduced and how they can be addressed through schema learning theory is well articulated. Also included is a chart from the final report of the Wilton Playcentre Centre of Innovation project which makes links between the strands of Te Whāriki, dispositional behaviours, Laevers' involvement signals and the behaviours of a child exploring their schema. Van Wijk states that:

... adult's responses to children's inner drives to explore schematic ideas contribute to our work within the five strands of Te Whāriki. The inverse is also true: working with the strands of Te Whāriki facilitates more ways that adults can extend children's thinking with schema's. (p. 98)

The final chapter explores questions about schema that were frequently asked in the Wilton Playcentre COI research dissemination workshops. Whilst some of the questions do not have research based responses, the questions themselves and resulting conjecture make for interesting reading. They may also prompt readers to develop their own theories or ideas for further investigation. One of the questions that appealed to me personally was 'Do adults have schemas?' and I am enjoying reflecting on the interests that I pursued as a child - the threads of which are still evident now - and wondering whether my own children's current schematic interests will persist into adulthood?

The liberal use of full-colour photographs, inclusion of parents' voices and practical examples help to maintain and excite reader interest. I personally experienced moments where I chuckled and 'recognised' schema that I have seen my own and other children exploring. Van Wijk has done an excellent job of linking schema and sociocultural theory to practice as well as making connections to Te Whāriki. Other useful additions are the 'Key Points' pages which summarise the ideas explored at the end of each chapter. The appendices also provide a rich source of additional information including references, a table of schemas in areas of play, learning and teaching story templates, children's books that link to schemas, messy play recipes and a section from Helen Willberg on schemas and music.

In summary, I concur with the words of Anne Meade written in the Foreword. "It is highly readable and a valuable addition to the growing literature on this particular theory of learning" (p. vi, 2008). Nikolien van Wijk is clear that schema learning theory is only one learning theory - but it is certainly a very useful one to add to our teaching and learning tool boxes.

References

This little book from the list of playcentre publications has some big messages. The author, Pennie Brownlee, has been a proud advocate for playcentre for many years and her recently revised *Magic places: the adults’ guide to young children’s creative art work* (2007) is rightly acknowledged as a classic. The pedagogy of respect that Brownlee demonstrates in relation to children’s creative art is expanded upon further in this latest writing which focuses on infant-parent partnerships.

Brownlee was first introduced to the work of Emmi Pikler by Maureen Perry in 2002. Since then the two women have travelled together twice to the Pikler Institute in Budapest and have developed and implemented *Baby'space* parent-infant classes in New Zealand. *Dance with me in the heart* is strongly influenced by Brownlee’s learning from the Pikler Institute in Hungary, but she also draws on a wide range of other perspectives – including the writings of Joseph Chilton Pearce - to give a holistic image of infants and toddlers and their development.

This is not a technical ‘how to’ book. Rather than a prescriptive approach to parenting or being with infants, Brownlee offers an alternative vision using the metaphor of parents and infants as dance partners. Her approach is based on trust, responsive and reciprocal relationships, and an image of the child as capable and competent from birth. Brownlee’s style of writing is both personal and accessible – as it should be in a book that is written for parents and caregivers. This is not to say however that her writing is without substance and ‘hard’ evidence. Brownlee’s approach draws on research into brain development, and research from the Pikler Institute, Hungary, and the Institute of Heart Math which researches the link between emotions, heart-brain communication and cognitive function.
Brownlee echoes these aspirations early on in her book, stating that a baby's three wishes are "to feel safe, to feel loved and to be respected" (p. 7). Throughout her writing there is also a clear acknowledgement of the spiritual dimension of infants' lives and a vision of infants as divine and miraculous beings. Too often the spiritual dimension of children's lives is skirted around in early childhood literature, so it is refreshing that Brownlee brings this to the fore.

Brownlee clearly links her image of the divine child with Pikler's pedagogy of respect and gives practical illustrations as to how this translates into the parent-infant 'dance'. There is a significant amount of discussion around the importance of care moments and how babies can be active partners within these: "When a baby can anticipate what will happen, he can participate in it when it happens" (p. 22). The importance of touch and giving full attention are also highlighted as critical in developing "heart coherence" (p. 9) and filling up babies' "emotional tanks" (p. 29) so that they are optimally supported to develop a body of learning.

'Dance with me in the Heart' has a significant focus on the relationship between movement, brain development and learning: "All babies learn to move and move to learn, the two are one and the same ... the learning dance requires that babies move" (p. 31). Brownlee voices strong opinions on restricting a baby's movement and active exploration. She contends that babies are often 'contained' in devices for adult convenience e.g. highchairs, swings, activity saucers ... Babies are also 'contained' by adults when they are placed into positions (e.g. sitting) that they cannot achieve by themselves when adults rush babies to meet milestones in their physical development. In our fast-paced world it is reassuring to be reminded that "sooner does not equal smarter" and that "Nature does things properly and doesn't take short cuts. There are no competitions for getting born first, rolling over first, crawling first, or for getting your teeth first" (p. 48).

The approach that Brownlee advocates to parents who want to dance in partnership with their babies is to allow time and space for the baby's development to unfold naturally. The only tummy time that Brownlee recommends is "the age-old practice of putting your baby onto your tummy" (p. 35). There is a good overview of the progression of physical development of typically developing children and clear messages that - given optimal opportunities to explore and move their bodies - babies will not only develop physically but will also develop other positive learning dispositions such as perseverance and problem solving.

On the subject of problem solving Brownlee also has definite recommendations about the type of toys and equipment that will be of most benefit to the developing infant. Again the message is that time and space to play and develop at their own pace is what infants require. Very young infants need the opportunity to explore their own fingers and thus the chance to develop fine motor dexterity in preparation for the time when they will pick objects up and explore them. In the Appendix Brownlee provides a brief discussion and photographs of toys that will support brain development - there is not a plastic activity centre in sight!

In the final sections, Brownlee addresses some of the practical issues that are relevant to parents as their infants grow and develop. These include baby 'classes' and how to assess whether or not these are beneficial for babies. She also discusses how to support babies as they develop their social skills in interacting with other children out in the wider world. Specifically how to deal with issues such as sharing and biting and how to keep all children safe and supported by using language that acknowledges children's feelings and is respectful and descriptive.

Brownlee's pedagogy of respect of the child as capable and competent is also applied to sleep, food and toileting. These are all areas that can cause parents to wish that there was a 'magic' answer and to resort to the 'old' stories of being "baby battlers" (p. 13). Brownlee responds again with the notion of approaching these issues with an attitude of partnership and of inviting the child to participate. She recommends using a 'palms up' gesture as a physical signal to the child that they are being invited rather than demanded to co-operate. Having used this successfully with my own children I highly recommend it as a very useful 'dance step' to add to your partnership dance routine.

Brownlee briefly addresses some of the societal and political influences that are impacting on the support that parents get to develop partnerships with their babies. She is unequivocal that the best caregivers for children in their early years are their own parents and suggests that we should be looking more critically at the government policies that affect small children. If parents cannot be there as the caregiver for the early years of their child's life, Brownlee suggests that respectful relationships are the most important consideration when finding child care.

Given that 'Dance with me in the Heart' is focused on infant-parent partnerships it would be easy for early childhood practitioners to assume that it is not directly relevant to them. However, this book reinforces how important it is for early childhood professionals to support parents on their parenting journey. Early childhood professionals can use the information to model for parents ways of being with their infants and thereby expose parents to new 'stories' in relation to their infant's care and education.

References


"Almost anything that we might want our children to learn – physical skills, language development, social relationships, maths and science concepts and many positive learning dispositions – can be learned in the block area." (p. 5)

It is through statements like this that Maureen Woodhams' passion for block play comes through unmistakably in this practically oriented book. With a degree in algebra and a long time involvement in the playcentre community, Inspired to build has given Woodhams the opportunity to merge her love of number and pattern with her interest in children's learning and development.

Inspired to build is aimed at parents and educators providing learning experiences for groups of children in an early childhood education setting. The content is practical with the intention of giving readers information on how to set up a block area in their setting and use it successfully with children. Alternatively, if you already have an established block area, this book may help you to reassess and reinvigorate the way block play is provided and supported in your centre.

Chapter 4 focuses on 'Setting up the block area' and contains information on the importance of the provision of space, flow and lines of sight. Woodhams suggests that, when planning your centre layout, to first place the block area and shelves and then position other areas of play. She also makes recommendations around storage and shelving for blocks including how to ensure that these are safe and secure in the event of an earthquake or adventurous shelf-climbing children. Suitable floor surfaces
and the need for display spaces are also discussed. Woodhams also makes the point strongly that 'time' is a critical factor in successfully providing for block play.

Multi-unit wooden block sets are part of the basic equipment of many early childhood centres in New Zealand. Maureen Woodhams gives a clear explanation of the dimensions of multi-unit blocks and also the correct names for each type - so much more useful than talking to children about 'short blocks, long blocks and curved blocks.' She also gives instructions on how to care for the blocks so that they will be available for generations to come.

A useful tip for those living with infants is to keep a small bucket to put 'mouthed' blocks in. These can then be washed in a weak tea-tree or bleach solution and air dried before being returned to the shelves.

Whilst the chapter on multi-unit blocks on its own offers a wealth of possibilities, Chapter 3 has further useful suggestions for additional resources which can extend and enrich block play, for example other block and construction sets, collage materials, animals and vehicles. She does, however, distinguish quite clearly between the flexibility of multi-unit or 'free' wooden blocks and other manipulative materials, for example 'Duplo', which are more limited in the ways in which they can be put together. 'Branded' equipment is definitely seen as an adjunct to, rather than a replacement for the more traditional wooden blocks.

Chapter 7 also offers further ideas for extending block play. There are some good reminders here for more experienced educators and, for those beginning on the journey to successful block play, some further provocations.

Woodhams offers suggestions to extend your horizons, displays, equipment and ideas. I particularly liked the sociocultural perspective that was reflected in her suggestions - encouraging children to make connections to the wider world and having artefacts and building materials in the block area that reflected the cultural traditions of the children who attend the centre.

Chapter 5 focuses on the stages of block play which are viewed as cumulative (children developing skills and then continuing to use them) as opposed to progressive (children move through a progression of skills - previously learnt skills are no longer specifically used). The first two stages of block play discussed are instantly recognisable to those who spend time with infants and toddlers - holding/carrying/assembling and repetition - stacks, towers and rows. Woodhams discusses the many learning opportunities possible in the block area for infants, toddlers and young children.

Whilst recognizing that children learn and develop in a holistic way she identifies physical development and dexterity; social skills and awareness of others; development of mathematical concepts; science concepts; imagination and creativity/ judgement as areas in which block play can have positive benefits for children. Critical to all of these is the role of the adult.

For Woodhams, adult presence is a key factor in supporting block play and the roles of the adult are many and varied, such as resource provider, facilitator of mixed age play, safety officer, observer and documenter. There are some particularly useful tips in regards to positive behaviour guidance in the block area including how to respond to or pre-empt 'wilful damage.' Given that 'crashing' is such a crucial element of block play for many younger children this section is both realistic and practical.

For a physically small book Inspired to build: Unlocking the potential of block play contains a good mix of practical information and inspiration. The colour photographs used throughout enhance and clarify the points being made. I would recommend this book for beginning and experienced educators alike. It has certainly inspired me to look at the block area in my own centre with 'new eyes'.