Development of Enhanced Curriculum through Student-based Research

Coral Campbell   Gaye Williams

Deakin University
cjlc@deakin.edu.au, gaye.williams@deakin.edu.au

The introduction of the new "Early Years Learning Framework" (DEEWR, 2009 has shifted, the focus in Early Childhood Centres (ECC) from incidental learning through play, to planning curriculum with play as the vehicle to achieve learning. Our Teaching and Learning Grant Project was intended to identify instances of educator practice that fit with the new framework, and video practitioners' sessions to select vignettes to use as part of an Early Childhood Science Education Unit. The method of identifying and collecting such illustrations is examined here for its feasibility as a research design to collect data to explore a range of educator practices that fit with the new framework. The data collection method was found useful for these purposes.

Introduction

Around the world the early childhood profession is experiencing cataclysmic changes as we recognise the importance of the early years of life, and experiment with ways of supporting young children and their families. (Sims 2010)

There is an increasing awareness of the importance of early childhood education in the development of children's positive social behaviour. In a recent research study in England, *The Effective Provision of Pre-school Education Project (EPPE),* the findings confirmed results of earlier work showing associations between the quality of early childhood education and positive social behaviour. "[P]ositive effects of high quality pre-school provision on children's intellectual and social behavioural development up to entry in primary school [have been demonstrated]." (Sylva, Melhuish, Sammons, Siraj-Blatchford, Taggart & Elliot, 2003). Anderson, Shinn, Fulilove, Schrimshaw, Fielding, Normand and Carande-Kulis (2003) have shown that children are better prepared for school and more successful in literacy and numeracy at school when their pre-school experiences provide opportunities for developing literacy and numeracy concepts. Providing an attractive and interesting environment is not sufficient to stimulate deep learning and sustained engagement (DEEWR A, 2009). The quality of the child's experience is enhanced when early childhood educators understand literacy and numeracy concepts and look for opportunities to foster these understandings in children during play (Cullen, 2007). "Effective pedagogy is both 'teaching' and the provision of instructive learning and play environments and routines" (Siraj-Blatchford, 2004). "[T]he goal is to enrich children's learning experiences through purposeful actions by educators in collaboration with children and families" (Goodfellow, 2009, p.2).

The authors are interested in the Early Years Learning Framework EYLF) for different reasons. Williams saw the synergy between her current research on

developing resilience in young children and opportunities within the new framework to provide resilience-building learning situations (Williams, 2009), and Campbell was interested in how practitioners would address the requirement to 'teach' in the curriculum areas. As an early childhood science lecturer, Campbell was examining early childhood educator's practice for the purpose of informing her teaching practice (Campbell & Jobling, 2010). Interestingly, in discussing this further prior to implementing this Teaching and Learning Project, the authors found that they had quite different understanding of the term 'intentional teaching'. 'Intentional teaching' is the terminology used in the EYLF in discussing the required change in educator practice to include discipline-based learning in numeracy and literacy into pre-schools.

The research question that focuses this paper is: "Will the method used to identify vignettes of educator practice for early childhood education units be appropriate for identifying a broad spectrum of educator practices that scaffold children's discipline-based learning play experiences? Will the same design support a research project intended to examine educator's practices for the purpose of identifying key elements of the practices of each, and similarities and differences between the practices of different educators?

Importance of this Research Focus

The Melbourne Declaration for Young Australians (p. 8) states:

Successful Learners … are creative, innovative and resourceful, and are able to solve problems in ways that draw upon a range of learning areas and disciplines. http://www.acara.edu.au/curriculum.html#2

This declaration has focuses the Australian Curriculum at all levels of schooling. It is important that our early childhood pre-service teachers are aware of differences in the ways learning can be supported. Possessing these understandings will assist them to make choices that give children opportunities to be creative and innovative during the process of learning.

The national and state early childhood curriculum documents advocate a planned curriculum and intentional teaching. The national Early Years Learning Framework (DEEWR, 2009) promotes learning through play and intentional teaching.

Intentional teaching is deliberate, purposeful and thoughtful. Educators who engage in intentional teaching recognise that learning occurs in social contexts and that interactions and conversations are vitally important for learning. They actively promote children's learning through worthwhile and challenging experiences and interactions that foster high-level thinking skills. (DEEWR, 2009, p.14)

These descriptions of intentional teaching include opportunity to provide play experiences that enable creative and innovative activity.

Theoretical Framing: Intentional Teaching Spectrum

We formulated an 'Intentional Teaching Spectrum' for the purpose of locating along it early childhood educator practice that differed in the opportunities that practice provided for creative and innovative children's activity. At the right hand end is located creative and innovative activity associated with child-created Zones of

Proximal Development stimulated by cultural artefacts (Vygotsky, 1933/1966). To the left of this, at various points along the spectrum are located early childhood educator practices associated with the role of Vygotsky's (1978) expert other. Such activities have been described by Vygotsky:

- Demonstrated a task was possible"
- "Provided instructions about how to undertake the task"
- "Showed how to solve the task"
- "Started the task and left the child to finish it"
- "Provided hints and other ideas", and/or
- "Asked leading questions" (van der Veer & Valsiner, 1994, p. 337)

And also by Bruner (1986) as he watched the activity of an expert tutor whilst reflecting on the nature of Vygotsky's expert other:

- " Bruner interrogated the activity of an expert tutor as he considered the role of Vygotsky's Expert Other. He described the activity of that tutor as follows:
- "Controlled the focus of attention"
- "Demonstrated the task to be possible"
- "Segmented [the] task to control the size and complexity of task",
- "Set up the task so the child could recognise the solution and perform it later (even though he could neither use nor understand at time)" (Bruner, 1986, p.75).

There is overlap between the descriptions of Vygotsky and Bruner yet each also includes descriptions not given by the other. These descriptions will be extremely useful for interrogating the practice of early childhood educators, and identifying the types of responses from children they elicit. This is the nature of the research we intend undertaking. To do so, we need to collect data that includes illustrations of early childhood educator practice that are located along the Intentional Teaching Spectrum. The question associated with the present paper is: "Does the inclusion of Early Childhood Education pre-service teachers in the design process facilitate the identifying of intentional teaching episodes across the intentional teaching spectrum?"

These methods are now described.

Method for Collecting Vignettes of Intentional Teaching

Subjects
1. Masters of Teaching Early childhood pre-service teachers
2. Four purposefully selected Early Childhood practitioners
3. Kindergarten children in session of each practitioner

Contexts
1. Early Childhood Pre-service Teachers in practicum and online learning settings
2. Practitioners and children in usual kindergarten sessions

Research Phases
By employing the developing expertise of Master of Teaching pre-service teachers undertaking early childhood science education, the following methods for collecting vignettes of intentional teaching were devised:

Phase 1: Early childhood pre-service teachers' online postings: Pre-service teachers observed and illustrated (in a university on-line environment) three instances

of 'intentional teaching' demonstrated by the practitioner in the centre where they undertook their practicum.

Phase 2: Lecturers (authors) identify potential intentional teaching episodes online: Student postings were viewed by the authors and four early childhood practitioners' postings were selected. The basis for selection was to include a broad range of 'intentional teaching' episodes.

Phase 3: Video of Sessions of the Four Practicum Supervisor Practitioners identified through postings describing their practice (as perceived by pre-service teachers (Phases 1, 2)) were located and invited to have their sessions videoed.

Phase 4: Post-session video-stimulated interviews with practitioners: intended to identify practitioner's teaching philosophies, and elicit discussion of a practitioner-selected video excerpts to determine strategies underpinning 'intentional teaching" episodes captured.

Data

Two illustrative extracts from pre-service teachers' on-line posts illustrate differences in intentional teaching approaches.

> Practitioner 1: "As part of an exploration of time, my supervising teacher had put out various time-related artifacts, including an oil-timer. Children were staring at the timer for long periods of time. Various conversations emerged. "Look, the baby bubbles are going slow" I wondered why that might be and he answered, "These big ones are heavier than the little ones. So the heavier they are the faster it goes." One reason this learning episode stood out was because the object and the children's reactions to it, suggested a number of different directions to go in."

This post illustrates a teacher providing a cultural artifact that captured children's interest and lead to discussion associated with making meaning of what they saw. child wanted to take it. It was a very open strategy used by the teacher to stimulate children's thinking and learning.

> Practitioner 2**:** "Two children had undergone operations during the holidays so the director set up a hospital corner to help connect their experience to a learning area. I was impressed by the children's use and knowledge of the instruments. Some children asked about symptoms and typed them into the keyboard. They got out notebooks to write out prescriptions. They kept injecting each other. The teacher asked what injections were for and supplied the children with the answer except for the child who said her injection had put her to sleep. They looked at a book on anesthetics and functions of the brain. Children were fascinated".

This excerpt differs to the first because the children had some prior knowledge of the artifacts presented, and that the teacher responded to specific instances by following through with selecting further items of interest.

Sessions of these two educators have been videoed already:

Practitioners' Visits – brief summation

Site One – Practitioner One at this site was Reggio Emilia trained. There was a high level of interaction and intentional teaching – making use of most opportunities. A range of teaching approaches across the intentional teaching spectrum were employed. Student autonomy was promoted. In her discussion of video excerpts, the

early childhood educator clearly articulate her teaching philosophy and was able to discuss aspects of the video with clarity, and a knowledge of her intended purposes.

Site Two – Practitioner 2 had set up a teacher-guided activity to ensure children gained from a recent visit to a 'traffic centre'. She was instructing children as they wrote their names (letter formation, pen grip, what to draw) on the pictures they produced. She offered to write a sentence on each drawing. During the rest of session observed, she had little interaction with children (individually or in small group settings) and controlled the discussion (adding information to it) when children came together as a whole group. During the video excerpts, the practitioner articulated her philosophy, which was related more to the development of relationships than to the nature of the learning intended.

Conclusion

In answering the research question: "Does the inclusion of Early Childhood Education pre-service teachers in the design process facilitate the identifying of intentional teaching episodes across the spectrum?" Yes! We found these pre-service teachers' perceptions of teaching practice in general fitted well with the observed (and videoed) practitioner practices. The pre-service practitioner episodes selected led to us identifying educators whose practice included 'intentional teaching' episodes located across the intentional teaching spectrum. What was particularly interesting was the range of intentional teaching episodes included in the practice of one of these practitioners. We are considering what probes to use to elicit more information about the types of thinking undertaken (in sessions) by teachers who may not have previously articulated detailed descriptions of the practice and the reasons for it.

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