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**Editorial**

**FIRST IN THIS EDITORIAL** I want to say a very big thank you to Chris Kilham who stepped in with less than a week’s notice to produce the editorial for AJEC1201 when I was called away. Thank you Chris—I really appreciate your support at a time when I was completely unable to manage anything to do with work. Secondly I want to say a huge thank you to the AJEC Committee who have worked really hard over the past years, and a particular thanks to Chris Kilham and Heather Conroy whose time on the AJEC Committee has expired. I have really appreciated working with you and I hope that we get to party as we meet up in various conferences around the traps! Welcome to Professor Susan Danby and Dr Berenice Nyland who have joined the AJEC Committee. You are joining a great group of people who work hard to make AJEC the well-respected journal that it is. In this issue we have a call for an Expression of Interest for another AJEC Committee member who resides outside of Australia. We have identified this position to help make sure that our journal really does reflect the issues in early childhood across Australasia. If you are living and working outside Australia in early childhood, do think seriously about joining us on the committee. And finally, last but absolutely not least, we acknowledge Pam Cahir, CEO of ECA as she moves towards her retirement. Pam, it has been a pleasure working with you and we wish you all the best in your retirement — long may you enjoy grandmotherhood and all the joys that it brings.

Now to this edition of AJEC. As you all know there is such a lot going on in the early childhood world at the moment as we deal with the EYLF and the National Quality Standards (NQS). More recently has seen the emergence of the National Professional Standards for Teachers and there is work currently underway to determine if, and how, these apply to early childhood. We have included an article looking at the music curriculum, looking at what constitutes good quality in this domain. Garvis talks about the engagement of Indigenous Australian families in early years programs. This research talked about the importance of cultural competency as well as an embracing and acceptance of individual families.

For many years I have argued that playgroups play a very important role in the lives of children and parents. Luckily I am not alone in this, and Hancock, Lawrence, Mitrou, Zarb, Berthelsen, Nicholson and Zubrick offer a paper on the association between playgroup participation, learning competence and social-emotional wellbeing for children aged four–five years in Australia. At last, some sound evidence. Thanks team. Outside School Hours Care is addressed by Simoncini and Lasen in their study of different models of OSHC adopted by seven schools in a regional city in Queensland. They argue that models of OSHC that provide coordinators with additional levels of support are more likely to deliver quality care to children, and that the role of area co-ordinator can facilitate this.

We have been working hard to support and encourage authors from outside of Australia and Chen and Agbenyega represent one of our success stories. They have worked hard to produce their article which addresses what it means to practice early childhood kindergarten partnerships differently, i.e. in a manner different from that of the hegemonic Australian culture. They explore parent-kindergarten relationships in Zhejiang, China. In contrast, Grace and Trudgett talk about the engagement of Indigenous Australian families in early years programs. This research talked about the importance of cultural competency as well as an embracing and acceptance of individual families.

Kritzer (from the USA) examines the knowledge of basic concepts demonstrated by six young deaf children with high/low levels of mathematical ability. Her results suggest that a foundation in basic concept knowledge and thinking skills may be critical to the development of early numeracy skills. In another article from the USA, Britsch addresses the role of teacher-produced photographs as a way of initiating content area learning in early childhood curricula. She talks about the use of teacher-taken photographs rather than commercial images and provides guidelines for the selection of photographs that facilitate content learning, second language development, and image reading. From a very different part of the world, Harcourt and Mazzoni present children’s insights into their experiential notions of quality in two early childhood classrooms in Italy. The children in this study offered their opinions about their prior-to-school experience, particularly about their teachers, and gave a clear and articulate indication of what constitutes good quality in this domain.

Garvis talks about the music curriculum, looking at the weekly planning of 76 early years teachers across kindergartens, preparatory classes and Year 1, Year 2
and Year 3 in Queensland and found that little time was devoted to the teaching of music apart from the scheduled 30-minute music lesson with a specialist teacher in some schools; and that, of the limited number of weekly plans that did feature music, most activities were teacher directed. Muir looked at the perceptions of parents of children attending early childhood classes in relation to mathematics education. She found that that although the parents were not necessarily familiar with contemporary numeracy classroom practices, they were able to describe and evaluate their children’s mathematical understandings. Looking at a different area of curriculum, Jorgensen looked at swimming, a largely unrecognised and under-analysed activity that builds capital that enhances transition from home to school. The paper is framed using and extending Bourdieu’s notion of capital. Another, often less addressed area of curriculum, is that of movement skills. Calicott reports on research linking children’s movement skills to learning difficulties in the early years. The aim of the project was to determine the prevalence and severity of retained reflexes, predominantly the Asymmetrical Tonic Neck Reflex (ATNR), and investigate the movement skill ability of pre-primary aged Australian Indigenous children in the Kimberley region of WA and identify potential adverse affects that retained primary reflexes may have on movement skill development and school readiness abilities. Agbenyega reports on a study that looked at how early childhood pre-service teachers in one Australian university perceived their theoretical competence and how they used this in their pedagogical decision making and adaptations in their professional placement. The purpose of this work is to help others working with pre-service teachers to improve early childhood pre-service teachers’ professional practice. McFarland-Piazza, Lord, Barrett and Downey also report on research undertaken with pre-service teachers. Their study explored how connections between families, communities and educators were facilitated in teacher education courses through the use of playgroups. They argued that playgroups provided authentic learning situations for students.

Stamopoulos addresses the issue of leadership in early childhood. She presents a model of leadership that connects to practice, builds professional capacity and capability and recognises the importance of relationship building and quality infrastructure. The model calls for robust constructions of leadership and improved professional identity that will reposition the profession so that it keeps pace with the critical needs of early childhood professionals.

Browne, Cashin and Graham present research on the transition of young children with behaviour and mental health disorders into school. They argue that a case management approach facilitates transition for these children and their parents. Sanagavarapu also discusses transition to school, in this case, children with food allergies who need constant vigilance, and come with concerns around their safety, and the daily management of their health and illnesses. Danby, Thompson, Theobald and Thorpe explore how young children initiate friendships when they start school. Having a friend was important to children and they explained to the researchers how they went about achieving this.

Enjoy this issue of AJEC and best wishes for your ongoing work. I hope that I can catch up with lots of AJEC readers at the ECA conference in Perth. Please come up and say hello and introduce yourself. I’d love to hear your ideas on making AJEC an effective tool, not only in communicating important early childhood research, but on how we can best professionalise early childhood.

Margaret Sims
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Introduction

The research this article reports on was set against increasing interest and practice by government and non-government organisations in Australia regarding the involvement of children and young people in decision-making processes. This emphasis on decision making has its origins in the ratification of the United Nations Convention on the Rights of the Child (UNCRC). The obligation set in Article 12 requires that children are recognised as having rights, and as such are entitled to be involved in the decisions and actions that affect them. Central to this is that children must have the opportunity to be involved in the decision-making structures that are inherently part of their daily routines. The consultation of children, therefore, is considered a means to ensure their participation in projects and decision-making tasks, with the emphasis on having the opportunity to express their views (Burfoot, 2003; Franklin & Sloper, 2008).

In early childhood settings, it was evident that practitioners were being encouraged by government resources and accreditation requirements to involve children in decision making within daily school and daycare routines with resources such as Caterpillar toothpaste—a child’s introduction to the decision making process (Office for Children and Youth, 2005); Involving children in decision making Fact Sheet, National Childcare Accreditation Council (NCAC, 2007a). However, in translating policy to practice it was unclear how practitioners viewed this decision-making emphasis and what they thought about the idea of increasing children’s participation and the associated practices of inclusion (Shemmings, 2000). In other words, the attitudes practitioners held toward involving children in decision making—and, by association, to children’s rights—required some investigation.

The research was developed as a preliminary exploration of practitioners’ views, with two main and related observations considered: First there was a paucity of information available on decision making relevant to children under the age of six years, with children in this age group considered too young to consult (Landsdown, 2004). Second, consultative practices had a tendency to remove children and young people from their everyday circumstances rather than involve them from within the institutions where they spend much of their time—school, childcare centres and so on (ibid). By focusing on children under the age of six...
within daycare, kindergarten and early childhood school settings, the role of childcare workers and teachers and the emphasis they place on decision making emerged as a critical factor to young children being involved. The research examined how practitioners working with children under the age of six in early childhood settings view decision making, and how this might relate to the children’s rights agenda.

Methodology

The methodology used for the research was a qualitative approach, with discussion groups and a semi-structured interview format. This approach was taken in response to the original literature review which yielded very little information for the development of a survey or comprehensive questionnaire. As a preliminary exploration of the topic, some descriptive data was required from which key discussion points and basic themes could be drawn. Approximately 108 practitioners in the childcare industry and early childhood teaching profession were reached in a series of focus groups and small forums. The data was analysed thematically. This, alongside a secondary study of literature based on the themes arising from the data, formed the basis of the findings.

Each discussion group was approached using a semi-structured interview format with open-ended questions to stimulate discussion. The discussions were initiated by presenting an overview of the project in the context of UNCRC and the children’s rights agenda, and the increasing interest by government organisations in childhood teaching profession were reached in a series of focus groups and small forums. The data was analysed thematically. This, alongside a secondary study of literature based on the themes arising from the data, formed the basis of the findings.

Each group discussion lasted anywhere between 20 and 90 minutes, depending on the particular forum.

Limitations of method

The recruitment of participants using a mix of professional network meetings and self-nominated staff discussion groups appeared to connect with practitioners who were already engaged with the idea of decision making as an important consideration for their work with young children. This was evident in both the forums and smaller discussion groups, as the most vocal tended to be those who believed in the discussion topic. The groups were conducted within early childhood settings which may not have offered practitioners a neutral environment to present their views. Hence, those practitioners who were perhaps not interested in notions of decision making or who did not believe it was important for their work may not be reflected in the research results.

No claim is made for the views presented here to be representative of the broader population of practitioners.

Research findings

This section presents the major themes found as a result of the data collection process. The term ‘practitioners’ is used here as a voice to emphasise the key points and issues arising from the study; it has not been quantified and does not indicate a true majority.

In this study, practitioners’ views on decision making were varied and complicated by competing discourses and tensions. Notions of decision making were ambiguous and therefore complex. While practitioners generally agreed that it was important for children to be involved in decision making and to make decisions, this was qualified by a number of limiting factors: the age and development level of the child/children and the individual child’s capacity, the context of school or care settings and their organisational purpose, the role of the practitioners as educators and carers, and whether the child/children were displaying appropriate social behaviour and were not putting their own or others’ health and safety at risk.

Definitional complexity

Defining and understanding the notion of decision making was problematic as not all practitioners considered it in the same way. Practitioners tended to refer to children being offered and making ‘choices’. Definitions ranged from simple choice to more complex interpretations which included providing adequate information and genuine options, and children being aware of the consequences of choice. For this age group, some practitioners viewed simple choice as an effective decision, while others (a notably smaller contingent) recognised the broader context for decision making and related notions of a child’s independence and autonomy as crucial factors. Some practitioners viewed simple choice as a precursor for children learning how to make a fully informed decision. This idea of decision making as a learned skill saw practitioners’ interpretations as compatible with the teaching role.

Practitioners tended to link their role as carers, workers or teachers with children making decisions, thus placing themselves as pivotal to the child’s ability to learn how to make decisions. Most talked about their practices in terms of what they did to create and support opportunities to make decisions, rather than
the child’s existing and autonomous capacity to do this. Further, practitioners gave inconsistent views on the developmental capacities of children under six. A child’s ability to make a decision was considered in relation to the child having the capacity to understand and reason with the available options and consequences.

The question of a child’s capacity

Children’s capacity for decision making was very much determined by the practitioners’ perceptions of ‘social competence’ (Daniel, 1999). Discussions highlighted a competing view of how much autonomy a child should have. At one end there were practitioners who believed children were already individuals and should be treated as such; at the other end there were those who feared that the responsibilities of decision making could turn children into ‘mini-adults’—meaning that their childhood ought to be protected. In this view, decision making was considered strongly in terms of what is ‘age appropriate’.

The developing capacity of young children was considered to be impeded or enhanced by a child’s individual personality, their consummate experiences, and the influences of their home life and parental values. Whether parents raised their children as independent or not impacted on the way practitioners perceived their ability to involve children in decision making at school. Thus the bridge from home life to care/school life became an important factor in children’s participation. Here notions of permissiveness and discipline created significant tension with understandings of decision making. Practitioners highlighted the difficulty of a child having too much freedom to choose and make decisions versus keeping the child dependent and incapable of making their own decisions.

Mixed purpose in school and care settings

The purpose of involving children in decision making was unclear. The notion of young children making decisions themselves and young children being involved in a decision-making process was considered, for the most part, the same practice. Practitioners generally considered it important in the context of education and child development, socialisation, independence, and behaviour management purposes, rather than for the purposes of ensuring children’s rights.

The context of school and childcare settings, and their differing organisational purposes, impacted on the ways practitioners spoke about their role in working with children and how decision making might fit within that. Most practitioners talked about decision making in terms of education and socialisation. Practitioners held the view that it was their role to ensure that children were equipped with the necessary skills to negotiate and to cope effectively in their social environment. Thus social education was considered an important reason for involving children in decision making.

In light of this, it was mainly pre-primary and primary grade teachers who emphasised the importance of getting the child to make what they considered to be the ‘right’ decision. For example, certain ‘social’ or ‘community’ rules such as packing away, mastering appropriate relationship behaviour (sharing, no fighting, and so on) were considered non-negotiable. Behaviours that did not fit social conventions were met with predetermined disciplinary responses. Therefore discipline for the purposes of having compliant children seemed more important than a conscious involvement of children in decision-making processes.

Health and safety factors were also cited as limitations to participation in decision making. Most practitioners agreed that ensuring children maintained a healthy diet, cleaned their teeth, and kept physically safe (e.g. by not running across a road or climbing too high) cancelled out a young child’s exercising a decision. These limits were considered to be in the ‘best interests’ of the child. However, a minority of practitioners suggested that, if it was explained why particular boundaries were set, children could still be involved in making decisions about health and safety. These practitioners separated children making a decision and children being involved in the decision-making process.

Contextual impediments

How practitioners viewed children’s participation in decision making varied across the three research settings: long day care, kindergarten and pre-primary, grades one and two. Generally speaking, daycare workers and kindergarten teachers appeared more able to alter activities according to children’s needs and choices. It appeared that the time available to practitioners in a school-based environment to engage children in decision making was less as routines became more established and curriculum-driven.

The institutional or organisational setting practitioners worked in was an important factor in how flexible they could be in allowing children to make decisions. For some teachers, flexibility was impeded by variables such as curriculum requirements, the size of the school, and the number of children in their charge. Some childcare workers in particular talked about how their relationship with children in their care was compromised by administrative requirements, quality assurance and program reporting systems. However, it varied among practitioners as to how much of an impediment these factors were.

The practitioner–child relationship

As decision-making practice, the majority of childcare workers and kindergarten teachers talked about setting
up spaces for play where children could determine which activities they would like to participate in. While some saw this provision as sufficient opportunity for children to decide their interests, other practitioners emphasised the importance of their personal relationship with each child. The important factor was the bond created between practitioner and child that enabled the child’s interests to be known and suitable choices provided. The development of the practitioner–child relationship is important to enabling participatory decision-making processes and ensuring children are able to exercise some control over their lives. McGurk (1998, p. 9) suggests that providing infants or toddlers with the space to influence the course of behaviour in their primary relationships, and to have an impact on their immediate world, provides the foundation for ‘social, communicative, emotional and intellectual competence’. It is the relationship between child and parent/carer, and the sensitivity to the child’s interests that develops the child’s perception of their own ability to influence the world around them (ibid). This makes the development of a functional practitioner–child relationship a critical step towards ensuring that children have the right to participate in decisions that affect their daily lives.

Summary and discussion

School practices tend to overlook the ability of children to engage in autonomous reflection. Consequently, education institutions have largely neglected to harmonise their policies with the participatory principle (Johnny, 2006, p. 18).

A significant gap emerged between what was spoken about in terms of decision making and what actually happened in practice. The existence of a gap between understandings and practice raises some important issues. While some practitioners did reflect on the need for children to have some control over their lives, and believed that their current decision-making skills gave them this, the overall sense was that decision making was a developing skill they would eventually achieve for their future rather than their present benefit. Moreover, other than a small group of childcare workers who talked about structuring the daycare environment to encourage choices for children, the majority of practitioners did not talk about practices that influenced the structure and order of children’s daily activities. Most talked about decision making in terms of one-off programmed activities where the agenda and timing of the activity was pre-set. This sits apart from the purpose of the children’s rights agenda that children should have some involvement over the decisions that affect their lives.

The complexities surrounding the question ‘what is decision making?’ and the variant responses given suggests that the notion of children’s rights in such settings is at risk of becoming rhetorical, with the apparent absence of support and information available to assist practitioners. A similar trend was identified by Shemmnings (2000) in his research with social workers. He identified that professionals tended to adopt an ‘I agree with it in principle, but …’ position, and suggests, like Marsh and Fisher (1992), that professionals ‘may—deliberately or not—be paying a certain amount of “lip service”’ to such notions when translating them into practice. Practitioners in this study were quite vocal about the limitations imposed by the early childhood education and childcare environments they worked in.

The difficulty in translating decision making to practice can, in part, be because of competing historical, educational and sociological discourses about the construction of childhood. Children and their role in society has changed over the centuries from being viewed as ‘adults in the making’ to Rosseau’s argument about childhood being a source of innocence and a stage of life that should be valued (Johnny, 2006). It is relevant to suggest that threads of many of these ideologies remain in contemporary childhood constructions. Woodrow and Press (2007, p. 312) point out that a number of competing ‘discourses’ about childhood and ideas about ‘the nature of children and how children should be treated’ circulate at any given time and underpin policy development.

Educational policies tend to uphold protectionist approaches to children that sit at odds with the Convention’s intent. Johnny suggests it was the protectionist ideology from the late eighteenth century that ‘laid the groundwork for the implementation of mass education’ (2006, p. 20). Thus the institutionalisation of children in schools reinforced the notion of the ‘innocent and dependent child’. Critics of the Convention argue that children do not have the cognitive or emotional capacities for making rational choices (Johnny, 2006). In contrast, child liberationist theorists examine alternative understandings of childhood that seek to demonstrate that ‘children may have the ability to make thoughtful choices and thus should be given greater opportunities to influence the decision making process’ (Johnny 2006, pp. 17–18). Practitioners did not talk about including children in decisions that relate directly to such matters as organising timetables and/or the course of daily activities. This raises significant questions over the placement of the ‘voice’ of children in early educational environments. Johnny (2006, p. 17) suggests that if educational officials are not required to share power with children, then ‘the voices of children are often excluded from the decisions that take place in the school environment’.
Final reflections: A new dialogue

If we are to create an ethical education system that respects the rights of children it is time to reinvent our understanding of childhood and provide children with greater opportunities to participate in the decision making processes that take place in school (Johnny, 2006 p. 25).

If decision making is to be an authentic vehicle for children’s rights there needs to be a broader and more comprehensive dialogue on developing spaces in early education and childcare environments that are respectful of each child’s differences and rights to autonomy. Only a dialogue that embraces the potential of decision making but acknowledges the reality of the structures within which it has to operate provides the opportunity for a real and ethical practice.

Finally, the importance of the child/practitioner relationship is critical to this dialogue. Communication is pivotal in drawing the world of the practitioner and the worlds of young children closer and providing a stronger foundation for negotiating the complexities of decision making. Meaningful participation for children must consider how it becomes embedded as an integral part of our relationship with children (Sinclair, 2004). As Vicary et al. (2006) state:

Communicating with all children is a two way interaction. As adults working alongside children, we may think we have much to offer, but we should never underestimate how much the children have to offer (emphasis original).

Acknowledgements

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It’s not rocket science: The perspectives of Indigenous early childhood workers on supporting the engagement of Indigenous families in early childhood settings

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THIS PAPER PRESENTS THE findings from semi-structured interviews with six Indigenous Australian early childhood workers who were asked about how Indigenous families might be better supported to engage with early childhood education and care services. The workers identified three key barriers to family participation: transport difficulties, family embarrassment or ‘shame’, and community division. Facilitation of family engagement was argued to require an acceptance of individual families as well as the embracing of culture and the wider Indigenous community. In addition, the interviewees stressed the importance of ongoing and appropriate training and support for Indigenous early childhood professionals. This paper contributes to the growing body of research to inform practice in early childhood settings that serve families with complex support needs, and highlights the importance of cultural knowledge and respect.

Background

In recent years within Australia there has been a move away from models of privatisation and corporate childcare, and a return to government-led discussion on the provision of early childhood services based on a philosophy of social inclusion and an understanding of the importance of quality in service provision (Brennan, 2009). Equity of access to early childhood services for all Australian children has been a particular focus. In June 2008, then deputy prime minister Julia Gillard, in a joint statement with Maxine McKew (former parliamentary secretary for early childhood education and child care), announced an Australian Government initiative to invest in early childhood services with the goal of achieving universal access for four-year-old Australian children by the year 2013 (Gillard & McKew, 2008). The government positioning of participation in early childhood education settings as an issue of social inclusion has brought policy into closer alignment with research. A social inclusion approach acknowledges the potential benefits of participation in a quality early childhood setting, both in terms of child developmental outcomes (NICHD ECCRN, 2002; Sylva, Melhuish, Sammons, Siraj-Blatchford & Taggart, 2008; Wake et al., 2008) and beyond to families and whole communities. Vinson (2007), for example, argues for correlations between community social cohesion and rates of preschool attendance. Social inclusion through child and family engagement with early childhood services is an important part of building strong communities for children. It is argued that engagement with early childhood services has the potential to begin to negate the effects of neighbourhood disadvantage and enhance a sense of social connectedness and belonging (McDonald & the ARACY collaborative team, 2007; National Health and Hospitals Reform Commission, 2008; Yuksel & Turner, 2008). Early childhood services have been utilised as important components of programs that aim to increase the resilience of vulnerable families. They support families by providing respite, information, social networks and models of adult–child interaction (French, 2001; Press, Fagan & Bernd, 2006; Scott, London & Hurst, 2005). Within this context, it is concerning that the children and families who could perhaps benefit most from early childhood services, those from disadvantaged families and communities, are reported to be the least likely to engage with them (Census of Child Care Services, 2008; Mance, 2005).

The authors of this paper were part of a team that recently completed a large research project investigating...
the barriers and facilitators to participation in early childhood services from the perspectives of parents, children and early childhood workers in disadvantaged communities throughout New South Wales. This paper gives focus to the perspectives of the Indigenous early childhood workers who participated in this research. It is important to note that the authors are in no way wishing to equate being Indigenous with living in disadvantaged circumstances; however, the research described here was conducted within disadvantaged communities only. These workers were asked to discuss their views on how early childhood services might be better able to facilitate the participation of Indigenous families living in disadvantaged areas, not only in terms of initial contact and enrolment but also in terms of ongoing child and family engagement with the service. Discussions of meaningful family participation must include notions of ongoing engagement (Cortis, Katz & Patulny, 2009). It is in the engagement, not in the enrolment, that social inclusion occurs.

The importance of exploring engagement (in contrast to enrolment only) for Indigenous families is supported by the figures released by the Steering Committee for the Review of Government Services Provision (SCRGSP) (2009) which distinguished between enrolment rates and attendance rates. They report that the rate of enrolment for Indigenous children in preschools is high. Nationally, the representation of Indigenous children enrolled in preschools (4.9%) is very similar to their representation in the community (4.5%). The profound differences between Indigenous and non-Indigenous children come when examining the SCRGSP (2009) figures related to attendance. The national figures indicate high levels of non-attendance by Indigenous children (34.5%) when compared to non-Indigenous children (16.2%). In other words, the most significant barriers for Indigenous families do not seem to be so much around initial enrolment, but around ongoing participation.

The challenges to engagement for Indigenous families

The research literature points to potential barriers to participation for all Indigenous families, regardless of whether or not they also experience disadvantage. Collectively, this growing body of research emphasises the importance of understanding the potential incongruence between the culture of an early childhood education setting and the cultures of Indigenous groups. A range of issues has emerged within the existing research literature, reflecting three main themes: undermining of family, undermining of culture, and general racism. Each of these themes will be briefly discussed in turn.

Undermining of family

The literature points to families’ concerns about the undermining of family, particularly related to fear of being observed and leaving themselves vulnerable to having their children removed. This fear is founded on both historical context and current practices. We know that Aboriginal children are still six times more likely to be removed from their homes than are non-Aboriginal children (SNAICC, 2002). Concerns have also been raised about whether or not early childhood settings will show appropriate respect for Indigenous kinship networks. Kinship is about the connections between people and the roles individuals play. For example, only certain family members have the right to ‘growl’ at children (Fasoli & Ford, 2001). In some Indigenous cultures older children are required to take responsibility for the care and protection of their younger kin, and so dividing children according to age or preventing a child from caring for or protecting a younger child is to undermine that child’s familial responsibility (Butterworth & Candy, 1998; Fasoli & Ford, 2001).

Undermining of culture

The potential undermining of culture has also been highlighted within the literature. Indigenous families may see early childhood settings as ‘purveyors of the dominant macro-culture’ (DeGioia, Hayden & Hadley, 2003, p. 11). A lack of understanding and respect for Indigenous cultures may result in parents being judged unfairly because of their ways of communicating with each other, and some cultural practices such as sleeping with their babies (Andrews, 2008). Non-Indigenous early childhood practitioners might not understand Indigenous ways of knowing and may not value ‘multi-literacies’ in the form of passing down knowledge through songs, poems, stories, dance and music (Butterworth & Candy, 1998; DEST, 2001; Power, 2004; Townsend-Cross, 2004). Cultural practices associated with childhood may also be undermined and seen as unacceptable. For example, in some Indigenous cultures children are given personal freedoms, such as being able to make decisions about when to eat and sleep (Butterworth & Candy, 1998; Townsend-Cross, 2004). Children are also taught that all possessions are shared, and may feel confused when they are required to ask before using someone else’s things (DEST, 2001).

In addition, the literature points to examples of misguided and highly offensive attempts by early childhood workers to teach what they understand as Aboriginal culture. It is important that non-Indigenous professionals understand that Aboriginal culture differs from one Nation to the next, and local Elders must be consulted to ensure that teaching is appropriate. For example, it was offensive to one local Aboriginal community that children in a long day care centre were
taught to do dot paintings as part of their education on Aboriginal culture. Dot paintings were not a practice of the local Aboriginal community (SDN Children’s Services, 2005).

Racism
Indigenous families may resist participation in early childhood settings because they want to protect themselves and their children from experiencing racism (Cassady, Fleet, Hughes & Kitson-Charleston, 2005). MacNaughton and Davis (2001) found that a significant number of non-Indigenous children had either no knowledge of Indigenous people and their cultures, or saw Indigenous people as primitive and belonging to the past. MacNaughton and Davis (2001) also found that only a very small percentage of non-Indigenous early childhood workers challenged colonial understandings of Indigenous culture. Low expectations of Aboriginal children may come about as the result of stereotyping and racism (Dockett & Perry, 2007).

It is argued that central to the breaking down of these barriers is the presence of Indigenous leadership and/or staff within early childhood centres, extensive community consultation, and the involvement of families in the delivery of programs (Biddle, 2007; Butterworth & Candy, 1998; Cassady et al., 2005; Flaxman, Muir & Oprea, 2009; Pocock, 2002; Scott, 2008; Windisch, Jenvey & Drysdale, 2003). There is also evidence to support that participation by Indigenous families is facilitated by the delivery of early childhood programs within an holistic, integrated service model (Sims et al., 2008).

The research presented in this paper includes the voices of six Indigenous early childhood workers. It explores their perspectives on the engagement of Indigenous families in disadvantaged communities, as well as their own experiences as early childhood workers.

This research is guided by Bronfenbrenner’s Social Ecology model (1979), in which children are viewed as nestled within contextual layers, beginning with their immediate families and the face-to-face settings they are involved in, and expanding to include community and cultural influences. This research is built upon the premise that the barriers and facilitators to child attendance and family engagement with early childhood settings can be understood only in light of the contextual variables and interconnected relationships that influence/are influenced by family decision making. The participating Indigenous early childhood workers were asked for their perspectives on what these contextual variables might be and how they might impact on family engagement. Based on the research described above, it was anticipated that cultural context would be a key element identified by the workers as influential in family engagement; however, the research also sought to understand the role of other variables, such as the community service context and other factors associated with living in a disadvantaged community.

Method
Recruitment strategies and participants
This study targeted seven disadvantaged communities in NSW (Mt Druitt, Wollongong, Nowra, Bathurst, Taree, Broken Hill and Tweed Heads). These areas were selected in consultation with the research Steering Committee provided by the Department of Human Services. Suburbs were selected based on the following criteria: (1) there were no other Department of Human Services research projects being conducted in that suburb at the same time; (2) the researchers had contacts within the area that may have been able to provide some assistance with recruitment; (3) the suburbs represented a spread of suburban, rural and remote locations; (4) there were early childhood services within the area; and (5) the area was identified as disadvantaged, as measured by a score of less than 5 on the Vinson rating scale (Vinson, 2007).

Formal early childhood education settings within these communities (preschools and long day care centres, both mainstream and Aboriginal centres) were contacted via telephone by a member of the research team. Centres were asked to assist the team in recruiting families to the study, and also to indicate whether or not there were staff members who would be interested in being interviewed for the research. In total, 101 families and 40 early childhood workers were recruited to the larger study. Three Indigenous early childhood workers were recruited to the study in this way. Because the number was low, a secondary recruitment strategy was employed. An invitation to participate was extended to all Indigenous students enrolled in an early childhood course at Macquarie University, who were currently working within an early childhood service in one of the seven target areas. An additional three workers were recruited to the study in this way.

All six participating Indigenous early childhood workers were female and were employed full time within early childhood settings in NSW, both rural and suburban. Three of the participants were directors of Aboriginal preschools. One participant was an early childhood teacher employed in a mainstream setting. The remaining two participants were training to be early childhood teachers. Of these, one was employed in an Aboriginal preschool, and the other employed in a mainstream long day care centre. The average length of time employed in the early childhood education sector was nine years.
Measures

Workers completed a short questionnaire to gather demographic data. All were presented with the option of participating in individual interviews or in focus groups, depending on what was most comfortable for them. It is understood that individual interviews and focus groups are different methods of data collection, and that group dynamics within focus groups play an important role in influencing the direction of the conversation and the experiences that are shared (Morgan, 1997). However, it was decided that flexibility in our methods was important if we were to seek the participation of workers who may not be familiar or entirely comfortable with engaging in the research process. Three of the Indigenous workers chose to participate together in a focus group, and three were interviewed individually. The focus group and interviews lasted for approximately one hour each.

Semi-structured questions guided the interviews and focus group. The questions reflected an ecological approach: workers were asked for their perspectives on the individual characteristics, life circumstances and the cultural and community contexts of the Indigenous families they work with, and how these factors may influence family engagement with early childhood settings. In addition, workers were asked to reflect on their own experiences in delivering early childhood services, and how they might be better supported to meet the needs of families and children.

Analysis

The focus group data was analysed in the same way as the interview data. The focus group participants lived in different communities, worked in different centres, and had different roles within their centres. Because their experiences were quite diverse, the focus group ended up taking the form of individual participants sharing their own experiences with the group. While narratives were clearly influenced by the group setting, in that participants compared their own experiences and centres with those of the others in the group, it was straightforward to distinguish three individual stories within the focus group transcript.

All interviews were fully transcribed and coding conducted with the support of NVivo9 software. Both authors of this paper were involved in the qualitative data analysis. This was appropriate because of the different perspectives the researchers brought to the study. The first author is familiar with research in the early childhood field, while the second, an Indigenous academic, was able to view the data in the light of cultural context. The two-stage process of ‘constant comparative analysis’ (Glaser & Strauss, 1967) was employed. First, all worker interview transcripts and field notes were analysed independently by both researchers. The researchers then met to discuss each individual interview before moving on to the second phase of ‘constant comparative analysis’, comparing and contrasting themes across all worker interviews to identify the overarching themes.

It is relatively common in research with Aboriginal participants for Indigenous researchers to be involved in recruitment and data collection, serving as an Indigenous face for the study to the Indigenous community and ensuring culturally appropriate recruitment and collection strategies. This practice is very important to accessing Indigenous communities. However, the involvement of Indigenous researchers beyond recruitment and data collection to analysis and dissemination is an important lesson of the research presented in this paper. The collaborative analysis process, bringing together two different knowledges (early childhood and Indigenous), resulted in a rich discussion of our different interpretations of the data, and influenced the determination of main themes and the ways the data should be presented.

Results

Indigenous early childhood workers identified both barriers and facilitators to the engagement of Indigenous families in early childhood settings. These are discussed in turn.

Barriers to family engagement

The early childhood workers identified three primary barriers to participation by the Indigenous families they work with: transport, shame, and community division.

Transport

The importance of supporting families in transporting their children to preschool was a prominent theme in the worker interviews. All six participating workers discussed this issue at length. To quote Libby¹:

Our first thing is to just get them here in the first place because we want the kids to have a good education.

Four of the participating workers emphasised the importance of the bus for transporting children to preschool, and said attendance numbers approximately halved when the bus was not running. As significant as the bus was to preschool attendance, it had also come at a great cost to these centres. Workers argued that additional government funding should be supplied so that the expense of the bus did not diminish the funds available for other resources necessary for a quality service.

While the bus was viewed as an asset by most of the participating workers, one had a different view. Kath

¹ Please note that all names used in this paper are pseudonyms.
acknowledged that there are often significant transport difficulties for families, but felt the bus was not the best solution. She argued that providing a bus was encouraging dependency by the families, and that a better solution was to work with families to develop a car pooling and a ‘walking bus’ roster. She found these strategies to be equally effective in breaking down the transport barriers for families.

We want to empower our people, we don’t want them to be dependent all the time. (Kath)

Shame

Workers were concerned that families might not have attended because they were ashamed that they could not provide all their child’s needs, such as food for lunch.

It’s the shame factor. Parents don’t want to engage because they don’t want to be shamed. (Skye)

This kind of embarrassment and shame is reflective of the dominant culture in which there is sometimes an implicit message that parents should be able to provide all things for their children. One worker argued that early childhood centres should reflect the culture that is most valued by Indigenous people, one in which the view is that the whole community raises a child. If a child doesn’t bring their own lunch, instead of being ashamed and parents being made to feel they are not meeting their responsibilities, those around the child should take responsibility to ensure that the child has lunch.

Kath lived in a small rural community and was able to visit the families of young children in her area to ask why they weren’t coming to preschool: ‘We can always assume but unless we go back and ask we don’t really know.’ She found there was also shame for the families in not having appropriate clothing and shoes for their child to wear. Kath was able to raise money to provide all families with a ‘starting preschool pack’ that included a lunchbox, a hat and a t-shirt. Children were not required to wear shoes at her preschool, despite regulations.

The workers also spoke about the shame some parents experienced as the result of low literacy levels. The participating centres were actively trying to break down this barrier with a range of strategies, including:

■ using pictures in the newsletters, and passing on any important news verbally
■ providing regular times when parents were welcome to drop in for assistance with the completion of forms
■ talking through simple picture books with parents before sending them home with the child so that parents could tell the child the story.

Community division

The participating workers pointed out that families may be reluctant to engage with a service if they felt the families who attend are primarily from a different Indigenous group. For example, one director explained that she is from the Indigenous group in the south of the town and most of the children at the preschool were from the south. Families from the northern Indigenous group did not use this service.

Workers also spoke of a divide in some Indigenous communities between people from ‘the mish’ (the mission)2 and those referred to by the early childhood workers as ‘uptown blacks’3. The concern was raised that some Indigenous families might not want to use services that were seen as catering to families on ‘the mish’ because they did not want their own family to be identified with this group. In addition, the early childhood workers described a form of racism in which some Indigenous families did not believe that Indigenous services provided the same quality as mainstream services.

A lot of people don’t put them into the centre because they think it’s just an Indigenous preschool so it can’t be very good. (Hannah)

Facilitating family engagement

The workers stressed the importance of building relationships with families and the local Indigenous community in a way that acknowledges their strengths.

Embracing families

The workers were concerned that many families did not understand the importance of early childhood education. They described a pattern in which, six months after enrolment, once the initial enthusiasm for participation had diminished, child attendance would become erratic and families stopped attending events or engaging with the service at all. The workers felt they needed to be proactive in helping parents to see the importance of early childhood services to the child’s development, social skills and school readiness.

They stressed the importance of building relationships, and of non-Indigenous workers, as well as Indigenous, taking the time to get to know families and build relationships with them. One worker described a program at her centre in which workers would stay back after preschool to hold cooking and nutrition classes for parents. The parents would be taught how to make nutritious meals and would then take the food home to share for dinner with their families.

2 Missions were established by religious organisations in the nineteenth century as a vehicle to accommodate and evangelise Indigenous Australians. Some missions still have Indigenous people residing on them today, however modern day missions place more focus on housing and significantly less on religious affiliation.

3 A term that neither author of this paper would normally use as it may be viewed to have racist connotations.
The workers who stood out as having the strongest connection with families and the most engaged parents were those who showed a very clear strengths-based approach. Jenny said:

… there are strengths in every family ... a lot of people underestimate people from disadvantaged backgrounds ... unless you really have a relationship with this family then you never know what they have to offer.

A strengths-based approach was particularly evident in the language of two of the participating workers. The language used is important because it is likely that families hear the underlying messages of respect in strengths-based narratives. This message in the language and attitudes of workers is potentially an important facilitator of family engagement:

Aren’t we just asking for basic human dignity and respect? ... I think communication is really the answer, getting to know your families ... It comes back to the interpersonal skills of the staff ... Everybody thinks it’s rocket science, everybody thinks there’s this magic answer, but I just look at people and I’m bewildered sometimes ... I don’t think I’ve come from another planet, you know, so I’m just asking for basic human rights. (Kath)

Embracing culture and community

The participating workers felt the engagement of Indigenous families was facilitated by the acknowledgement of important cultural celebrations throughout the year, and not just during NAIDOC Week. Their message to other centres was that they should display local Indigenous artwork, fly the Aboriginal flag (and at half-mast if someone in the local community dies), include Indigenous books, stories, music and dance. Ensuring that Indigenous voices, perspectives and knowledges have a place in centres throughout all the weeks of the year was seen as essential to developing and nurturing relationships.

Close links with the local Indigenous community should be fostered. Relationships between local community Elders and centres, particularly mainstream centres, can take a very long time to develop, and centres may experience resistance from community leaders. However, patient, respectful and persistent communication that works towards building trust was thought to be likely to yield productive collaborations.

Supporting Indigenous early childhood workers to engage with Indigenous families

The issue of money was raised frequently by the Indigenous workers. Directors described doing everything they could to keep fees low for families while having to keep up with increasing wages and insurance rates. The workers were concerned that so many of their resources went into working with the families and helping children get to and from the centre that there was not enough time or money left to invest in the quality of their services ‘so that Aboriginal children can change numeracy and literacy outcomes’ (Gwen).

Professional development

The early childhood workers were concerned that, because they worked with families with complex problems, their role often resembled one of a case worker:

It’s not just about child care, it’s about case-management ... that’s part and parcel of the job! (Susan)

As a group they felt they needed more training in how to assist families with complex needs, particularly as this relates to:

■ supporting families and children with significant health issues
■ supporting families and children who experience domestic violence
■ working with children who have experienced significant trauma, such as removal from the family home or the sudden death of a parent
■ understanding the health and welfare service available to families within the community.

Workers called for mechanisms to be put in place that connected them to other services within the community so that they could gain easy access to information and support and know where to refer families who needed support beyond what they felt able to give.

Creating a culturally safe environment for workers

The participating Indigenous early childhood workers discussed their experiences of working in mainstream centres, listing forms of discrimination in the workplace. For example, they felt that racism was evident in being asked to perform mundane tasks below their qualification level, such as being singled out to do the cleaning. One spoke of constantly being referred to by the other staff as ‘whatsername’. The workers felt they were treated differently from the

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5 NAIDOC is the commonly used acronym for the National Aboriginal Islander Day Observance Committee. NAIDOC Week is when the community, schools and organisations organise a series of events to celebrate Indigenous Australian culture and people. It occurs from the first Sunday in July through to the following Sunday each year.
non-Indigenous staff members, and this motivated a couple of the participants to seek employment only in Aboriginal early childhood centres. The participants pointed to the need for mentors to link with Indigenous pre-service teachers. They felt the Indigenous workers were particularly vulnerable to responding to perceived racism or difficulties by leaving the profession because they are often ‘very shy and question their own skills’.

**Discussion and conclusion**

The successful engagement of Indigenous families within early childhood settings is an important and challenging issue. The research reported here reflects the perspectives and experiences of a small group of Indigenous early childhood workers. It should be noted that their views on the barriers and facilitators for families did not necessarily match the perspectives of the Indigenous families who participated in the larger research project (see Trudgett & Grace, 2011). For example, the families did not give emphasis to transport to and from early childhood centres. The worker emphasis was strongly on making sure the children attended and on balancing limited resources to provide a quality service. It is important that research considers the views of all stakeholders, including parents, early childhood workers and children, if we are to address barriers to service engagement.

There is a tendency for discussion on the issue of Indigenous preschool engagement to see the employment of Indigenous staff and the provision of transport to and from the service as the ‘magic bullets’ to overcoming these challenges. This research acknowledges the importance of pragmatic assistance for families as well as the importance of trained Indigenous staff; however, it also points to the potential weaknesses within these strategies. For example, having a bus to transport children may increase the likelihood that children will attend, but it requires a significant investment of resources that may compromise other aspects of the service, and potentially fuel parent dependency and the relinquishing of responsibility. This is not to say that a bus is not a good idea, just that the implications of adopting this strategy should be considered, along with other strategies such as coordinating parent car-pools or ‘walking buses’ where this is possible (strategies which are likely to facilitate parent engagement with the service). The employment of Indigenous staff is also acknowledged as a key element in engaging Indigenous families; however, this is not always possible, and an understanding of this strategy as best practice should not excuse non-Indigenous workers from seeking to build relationships and engage with Indigenous families and community members. It should be noted that even the Indigenous workers employed in Aboriginal services described challenges with building trusting relationships with families who were not kin and with Indigenous leaders within their local communities. The assumption that Indigenous workers will easily and automatically connect with families and communities is not a safe one. The building of trusting relationships may take considerable investment, and it is the responsibility of all early childhood staff.

The complexity of the lives of many families described by these workers meant that, when workers did have positive relationships with families, they were called on to support them in ways that were often outside their expertise. Ongoing professional development for workers, particularly those in disadvantaged areas, is essential so that they are equipped to support families in an appropriate way and to re-direct families to the best sources of support. A comprehensive review of the funding available to centres (and the complexity of application for funding processes) is central to the successful implementation of professional development, and indeed the quality of service provision as a whole.

There is a growing body of research to support an integrated service model for families and children with complex needs, Indigenous or non-Indigenous (Edgar, 2003; King & Meyer, 2006; Marsh, Ryan, Choi & Testa, 2006; Nicholson & Biebel, 2002; Pannell, 2005; Pocock, 2002). The workers who participated in the research reported in this paper were concerned that they were being asked to play ‘case manager’ roles for families, without the expertise to provide this kind of service. A model of integrated service provision bringing together health, early childhood and social welfare services would potentially be of great value in addressing their concerns.

The integration of health, welfare and education services, while ideal, is not straightforward in Australia, especially because of the sometimes conflicting policies, goals, indicators of achievement and funding mechanisms that exist across government departments and across service sectors (Nichols & Juvansuu, 2008). Nonetheless, an integrated service model has been applied in the delivery of Multifunctional Aboriginal Children’s Services (MACS) (Sims et al., 2008). Recently, the importance of the integrated service model to the delivery of services within disadvantaged communities was reinforced by reforms to the Council of Australian Governments (COAG) agenda. The Government has made funds available to support the establishment of integrated child and family services in areas with high Indigenous populations. This initiative will further open the way for research that examines the key components of successful integrated service delivery leading to positive outcomes for children, families and professionals.
In recent years the professional development of early childhood staff has been guided by the principles, practices and learning outcomes outlined in the Early Years Learning Framework (EYLF) (DEEWR, 2009). The EYLF is designed as a guide once children are enrolled and attending formal early childhood services. The research described in this paper would suggest that the EYLF would be further enhanced by discussion on (i) the facilitators of and barriers to child enrolment and family engagement in the first place; (ii) supporting children and families with complex high-support needs; and (iii) models of cross-sector collaboration and integrated practice.

In our view it was one of the workers, Kath, who captured the key message of this research best of all when she said ‘Aren’t we just talking about basic human rights and respect?’ A strengths-based approach that seeks to understand the challenges facing each family, while also looking to build on their strengths in an attitude of acceptance and non-judgement, is essential. Another layer essential to effective communication is the building of understanding amongst non-Indigenous early childhood workers of the socio-historical and cultural context of Indigenous people. This cultural knowledge will serve them not only in building relationships with families but also in their support of Indigenous early childhood staff.

References


Standpoints on quality: 
Listening to children in Verona, Italy

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EARLY CHILDHOOD RESEARCH and policy, globally, are focusing increasingly on issues of ‘quality’ in early childhood education. However, much of the focus to date has been on adult notions of quality, with little attention being devoted to children’s accounts. Conducted in the context of early childhood education in Verona, Italy, this study offers children’s views of quality in two early childhood classrooms. Informed by the participation mandates of the United Nations Convention on the Rights of the Child (UN, 1989) and a sociological conceptualisation of child competences (Mayall, 2002; Smith, 2007), the research methodology draws on the mosaic approach (Clark & Moss, 2001) whereby children’s photography, mapping and conversations were used to represent indices of the quality of their early childhood settings. The data in this study was generated with the understanding that young children are competent to articulate their ideas by using a range of symbolic literacies. The children formed opinions about their prior-to-school experience, particularly about their teachers, and gave a clear and articulate indication of what constitutes good quality. The findings point to the importance young children place on their relationships with their teachers, and the moral, ethical and social justice implications. In conclusion, the study calls for those engaged with children, particularly teachers, to take affirmative action on children’s contributions to our understanding of quality.

Backcloth to the study

This project was conceptualised to respond and add to Harcourt’s (2007, 2009a, 2009b) study of children’s standpoints on quality. Conducted in Singapore, the previous work invited 25 children to express their views on their experience of two prior-to-school settings. The researchers in the current study were interested in examining the methodologies, methods and findings of Harcourt’s study in order to inform a similar study conducted in a different country, with groups of children with very different life experiences. It was proposed that the current study would also make a contribution to the growing body of respected literature that reports children’s active participation in research (e.g. Clark, 2010, Clark & Moss, 2001; Einarsdottir, Dockett & Perry, 2009; Dockett & Perry, 2007; Harcourt, 2009a; 2009b). Following an encounter at a research conference in Norway, an opportunity was presented to undertake the study in Verona, a provincial city in the north-east of Italy.

The study reported here drew upon a construction of young children as primary informants, working alongside adult researchers seeking to recognise, legitimate and activate their potential as research partners (Harcourt & Conroy, 2009). The United Nations Conventions on the Rights of the Child (UNCRC) (UN, 1989) provides an impetus to consider the potential for including children’s views on matters that concern them. This document, in turn, has examined the possibility of a new sociology of childhood (Mayall, 2002), or childhood studies (Smith, 2007), where children are considered to be competent contributors of opinions. Rinaldi (2001) argues that listening to children predicated an authentic relationship between adults and children in the context of early childhood education. As researchers, we acknowledged the human rights of children to participate in relevant social processes, including research enterprises. We have attempted to demonstrate our commitment to involving children in research, not just as ‘an option which is the gift of adults, but a legal imperative which is the right of the child’ (Lundy, 2007, p. 931).

Lundy urges a focus on the Article 12 of the UNCRC (UN, 1989) which provides children with an assurance of these rights. However, the United Nations Committee on the Rights of the Child, which monitors
compliance with the UNCRC mandates, has identified gaps between the commitment by some international states and the reality of practice. For example, while Italy ratified the UNCRC in May 1991, the Committee has subsequently noted (in its second periodic report) that children’s rights recognised in theory in Italy may not always be rights recognised in practice (UN, 2003). Queries raised by the Committee include mention of the inadequate access to education by nomadic children, and general xenophobic attitudes toward them. Italian delegations have also been queried on the situation for immigrant children and the disproportionate number of children with disabilities attending regular schools.

It must be noted that, by ratifying the UNCRC (UN, 1989), a country undertakes legal, moral and ethical obligations to accord children their rights. With a commitment to involve children in decision making and policy, a community, should it view the child as a competent and capable contributor, can provide the structure and procedures that enable their participation. It is this commitment that shapes the community’s ideas about children. As the conceptual backdrop to this study, we have attempted to address some of the issues raised by the Committee, as discussed above, and thereby adhere to the spirit of Article 12.

Starting from this premise, the research framework was based on some key assumptions. First, young children in Italy have the right to expect a role in decision making, irrespective of their age, ethnicity, locale or developmental competence. Second, young children are capable of making powerful and persuasive contributions to our knowledge about the quality of their prior-to-school settings and suggesting appropriate strategies for improving their experiences. Third, cultural relevance, life experience and traditional Euro-Western methods of engaging adult and child researchers in measuring quality may make for an uneasy alliance, and thus an acknowledgment of the potential lack of synergy was noted. Finally, locating the study in an inner city area with a high immigrant population as well as a predominantly Italian-born urban community, added weight to the veracity of the research.

Methodology of the study

Underpinning this project was a conceptualisation strategy that ensured the methodology was informed by a sensitive community specific approach. The study sought to provide for the active participation of young children with a range of life experiences, within a research partnership that celebrated diversity. A review of the literature established that the measurement of quality in prior-to-school settings, generally, has been limited to structural-driven (e.g. Harms & Clifford, 1980; Phillips & Howes, 1987) and process-driven (e.g. Cryer, 1999, Love 1997) tools that present indices of quality as seen from the adult perspective or the observed experience of children. Even if some authors, such as Italians Bondioli and Ferrari (2004; 2007), stress the importance of measuring quality using formative evaluation (developing changes in early childhood and in teacher’s strategies), the adult perspective is predominant. Largely unexamined in the literature is the measurement of quality by young children, based on their experiences in prior-to-school settings. The research corollary, therefore, was that an empirical investigation of these standpoints was both timely and conceptually sound. The current study took account of young children’s competences in communicating their views, and how these skills could then be used in a meaningful way.

Research design

This study adopted a qualitative method to support the generation of lived experience narratives that then informed shared understandings of aspects of the question/s being examined (Wegner, 1998). An ethnographic position was taken in order to establish relationships with the children, using Wiltz and Kien’s (2001) suggested participant observation continuum, from passive observation to an active participant role. Erikson (1979), in discussing ethnographic approaches, proposed that a continuum could lead eventually to full engagement. The continuum approach was relevant to this study, in order to establish an accepted and active presence in the (prior-to-school) classrooms and to avoid the children’s unnecessary discomfort and distrust. The study began with gaining consent from the prior-to-school settings and the informed consent (Harcourt & Conroy, 2005; 2009; 2011) of the children.

Clark and Moss (2001) developed a mosaic approach, which provided this study with a starting point. Clark (2005) described the mosaic approach as a ‘strength-based framework’ (p. 29) for the inclusion of young children in research. Traditional data collection methods can be complemented with participatory tools such as photography, drawings, conversations, mapping, art, and storytelling. The approach acknowledges that children use different ‘languages’ to communicate their ideas and opinions, and that it is participatory in nature.

The participants

Wiersma and Jurs (2009) referred to ‘purposeful sampling’ (p. 284) or seeking specific features when recruiting research participants. Working in the Italian context meant that agreement to participate primarily lay with the headmasters/principals of the prior-to-school settings. The research team had some specific requirements when identifying potential sites, which responded to the concerns raised by the United Nations
Committee on the Rights of the Child in Italy (UN, 2003). There had been a decision to attempt to include the voices of children who may have traditionally found themselves marginalised. Therefore, settings were sought that:

- had a high proportion of immigrant children
- were accessed by children with disabilities
- were accessed by zingari/sinti/rom (nomadic) children.

The Italian co-researcher had an established relationship with several settings in Verona, and the outlying rural areas, so the research partnership was able to access settings that enabled the potential participation of a diverse group of children.

Recruitment of individuals was reliant on the protocols the research partnership deemed ethically sound. The research team was influenced by its previous work undertaken with young children (e.g. Harcourt, 2007, 2009a, 2009b), by the UN CRC (UN, 1989) and by other available literature that provided guidelines for such research (e.g. Farrell, 2005). The team then invited the participation of approximately 40 children aged three to five years in Service C (inner city municipality-funded service) which was visited three half-days a week, and 21 children aged three to five years in Service D (urban state-owned service) which was visited two half-days a week. The data collection took place over approximately four months, from February to May 2010.

**Generating data with children**

Qualitative data was collected in a four-phased approach (Harcourt, 2007; 2011). **Phase one** involved a combination of traditional and non-traditional data-collection methods, building on the mosaic approach (Clark and Moss, 2001). The traditional tool of anecdotal observation was used by the researchers, initially as non-participant observers, and later, as the children (and teachers) became at ease with their presence, as participant observers. These observations were used through all phases of the study and also used to support data analysis. Initial (phase one) observations were used to establish data collection methods, the children’s level of comfort with tools such as digital recording devices, and how the children wished to inform the project’s direction. Subsequent observations were used to provide data for the oral/drawn texts, photographs and mapping generated by the children as we progressed through the project. Informed consent (Harcourt & Conroy, 2005; 2009; 2011) took place in phase one, as did discussion about the term ‘qualità (quality)’. The children decided (in the Italian context) this meant ‘importante (important)’, whereas the children in the Singapore study (Harcourt 2007; 2009a; 2009b) referred to quality as meaning ‘good’. Phase two involved discussion groups of four or five children in each service, who expressed an interest in working with the adult researchers on any given occasion. In order to align the study’s participants with those of the Singapore study, the five-year-old children became the primary informants. These discussion groups used conversations and drawings as the primary tools for ideas. Phase three involved more in-depth discussion groups with children who self-identified as being highly engaged with the topic of quality. In these sessions, rich conversations (Corsaro, 2005) ensued. Phase four saw the introduction of combining mapping and photography in order to expand the research languages offered to the children for expressing their ideas and opinions. This phase involved four children from Service C and seven children from Service D in extended discussions.

**Data analysis**

The approach to analysis of the data drew on historical ethnographic accounts (Lubeck, 1985; Paley, 1986; 1995) in order to examine how the research participants constructed understandings about aspects of quality they considered important (Robbins, 2003). The analysis comprised examination, discussion and re-examination of the texts (oral and written) and other artefacts (e.g. drawings, photographs, mapping) generated by the children, rather than any predetermined specific categories or assumptions (Spindler & Hammond, 2000). Opportunities were therefore sought for recurring themes to emerge and be validated by the participants (Silverman, 2001). This analytical approach searched for themes/issues/concerns that the children themselves determined as important matters to be addressed in the measurement of quality and the subsequent direction of the research itself. A deliberate attempt was made to elicit the children’s contribution to the analytical process and to accept those contributions as genuine and valid research offerings. This theoretical stance placed the children as ‘sophisticated judges’ (Purdy 1992, p. 164) of their own experiences.

**The findings: The elements of an ‘important’ school**

At the start of the project, the adult researchers discussed the possibility of the children in the Italian study offering the same or different indices of quality as those offered by the children in Singapore (see Harcourt, 2007; 2009a; 2009b). The context of this study was quite removed from that of the previous study in terms of the demographical, historical and geographical locale. While the Singaporean children were of Chinese ethnicity, and from middle-class backgrounds, the children in the current study were from quite diverse...
socio-economic and socio-cultural backgrounds. These included first-generation Sri Lankan, Moroccan, Ghanan, Tunisian, Burundian, Brazilian, Kosovan, Bulgarian, French, Senegalese, Ivory Coast, Santa Domingan, and Guinea Bissaian as well as Italian-born children. Further, there were children with a range of disabilities including Down syndrome, autism, paraplegia, and severe learning problems. These children were from upper, middle and lower socio-economic families, some of whom were fleeing war, famine, religious persecution and family breakdowns, and were receiving support from the Italian social services.

As the study progressed, it became clear that the children in Italy were reporting the same key indices of quality as those reported by the Singaporean children. Again the teacher emerged as the primary benchmark for the measurement of quality of the children’s experience in their prior-to-school settings; the children's relationships with the teachers were of critical importance. However, in addition to identifying the teacher as a primary conduit for quality, the Italian children were also able to offer suggestions for alternative strategies for teacher practice, thereby improving the quality of their lived experiences.

Figure 1. Giovanni

I drew M. She is a good teacher because she only shouts a few times.

The children reported two lines of thought in regard to the teacher. First, the children’s views centred on the development of respectful relationships between the teachers and children, which included teachers being kind and not shouting at the children; that is, how the children should be treated by the teacher. The second viewpoint focused on the principles of social justice, particularly in relation to the inconsistent approach by different teachers when responding to the inappropriate behaviours of individual children. These themes were recurrent across the data collection and were frequently referred to by the majority of children. They were reaffirmed during the ongoing analytical discussions of the data by the adult researchers and the children.

Respectful relationships: The kind teacher and the teacher who shouts

A summary of this theme would indicate that there are two aspects to the relationship between teachers and children. First, children seek a kind teacher who does not shout, because shouting distresses children and they often feel sad.

Figure 2. Alessia

This is the teacher and me. We are holding hands and sometimes we embrace. The teacher says ‘thank you’ to me. This is what I would like the teacher to do.

Anais: When the teacher shouts at me I feel sad and also I will start to cry.

Second, the children reported that shouting at children is not a deterrent for repeated inappropriate behaviours, and therefore teachers should employ alternative strategies.

Figure 3. Zeno

The teacher shouts at A because the teacher just can’t resist. She thinks that he has to be put in time out while the child is laughing because he knows that after time out is finished he will go and play. So, the child doesn’t learn anything.

Sabrina: The children that don’t feel good when the teacher shouts learn that they shouldn’t do bad things. But the children who do feel good when the teacher shouts learn to be even worse.
In further discussion with the children about teachers who shout, the adult researchers asked: ‘What could we tell teachers about this to help them?’

Anais: I think you have to tell them they should not shout. They could say the same things in a light voice.

Sabrina: Even when they are angry they could speak with a little voice.

Goodnews: Tell them they could just say, ‘You have not done the right thing’ when a child does something wrong.

Luca: Tell them, talk firmly to him (E). Do not shout, but talk firmly.

As we talked more about this issue, the adult researchers asked: ‘Can you suggest another way of dealing with this problem?’

Riccardo: Yes. They should not go to time out but the teacher could sit and speak with them. They have to speak in Italian or dialect but not English. They should say, ‘Now, you are not to do this anymore’ in a voice that is a little bit loud and a little bit soft.

Author/author: Why is this an important way?

Riccardo: Because the teacher should not make the children cry and a loud voice makes children cry.

Zeno: When children do something wrong, you should not become REALLY angry because the children will be sad and maybe even cry. If the children are sad and cry it is the fault of the teacher.

The principles of social justice

A summary of this theme would indicate that the children have clearly identified issues about how teachers manage behaviours in their classroom; they view some teacher’s actions as unjust, both to the child/ren who are ‘misbehaving’ as well as to those who see themselves as ‘good children’. The mismanagement of inappropriate behaviours has caused some confusion for the children.

Flavia: I want to say to my teachers that I do a lot of work and I am good.

Author: Do your teachers tell you you are good sometimes?

Flavia: No! They only tell E she is good.

Author: How does that make you feel?

Flavia: Sad!! And I would like them to tell me I am a good child. And I want them to say to me you are a big girl (grande) and beautiful.

Narcisa: When A spits, one teacher gave him time out. The next time he spat, the other teacher gave him drawing to do.

What could we tell teachers about this problem to help them?

Anais: It is good for A that you give him sweets but it is something that makes the other children feel sad because they didn’t get one.

Zeno: Getting sweets doesn’t make you learn anything.

Jeffrey: The teacher tells me I am a naughty child when she is angry. The other children have made her angry and then she says to me I am the naughty child.

As we talked more about the issue of reward and punishment, the adult researchers wondered with the children: ‘Can you suggest another way of dealing with this problem?’

William: There are a lot of children who are very noisy and naughty and the teacher should shout more. That way, the children will become better. They have to teach us to be good. There are too many naughty children.

Riccardo: Sometimes they do not nice things. They put children in time out and that’s not good. You see, when the mother comes and they know the child has been in time out, then there will be more trouble. They need to do nice things with children.

Aiman: The teacher has to teach me [to be a good child]. She has to help me, punish me, so that I stop being a bad child and that I don’t hurt the other children anymore.
The significance of the children’s standpoint

Two aspects of quality were identified by the children: interpersonal relationships and notions of social justice. These aspects pointed to respectful relationships between the children and the teacher. There were many ‘emotionally interesting’ (Giudici, Rinaldi & Krechevsky, 2001, p. 102) standpoints in the children’s representations, requiring reflection. We found that the children’s views, reflections and suggestions about their own and others’ relationships with their teachers were profound.

The eminent Italian academic Rinaldi (2003), Australian researchers Dockett and Perry (2003), and Singapore’s Yeo and Clarke (2005) have referred to the importance of sensitive relationships between young children and their teachers. The children in this study acknowledged the authoritative position the teacher holds, with the responsibility of ensuring the children stay within acceptable boundaries of behaviour. These boundaries may well provide the children with a sense of security and positive emotional feelings. In addition, the children clearly looked to the teacher to take an appropriate authoritative role in classroom life. They drew the line at children being shouted at or intimidated by loud voices or having your arm squeezed hard; they believed that shouting (sgridare) as a means of guiding young children’s behaviour is inappropriate and should not be a regular occurrence. Their idea of the right kind of teacher was one who supports the children’s developing social competence by providing clear boundaries and using a consistent approach to guiding behaviour; being firm when necessary but also offering words of acknowledgement (e.g. They could say, ‘Thank you’), by being benevolent (e.g. … she could say something kind as well) and giving non-verbal acknowledgement (e.g. A good teacher smiles at you). Children recognised that there is a learning opportunity for all concerned when challenging behaviours arise. However, approaching these incidents with a strictly ‘reward and punishment’ authoritative and inconsistent manner is not, they said, fair, just or equitable.

The

The UNCRC (UN, 1989) mandates that young children have the right to be treated with dignity and respect. Practitioners who value children’s emotional wellbeing, in relationships with both adults and other children, can offer young children the potential to thrive in a safe and secure social and intellectual environment. The children see threatening teacher behaviours, such as those identified by them, as undermining their abilities to function with a semblance of security. While the notions of positive interactions between teachers and children will not be news to early childhood professionals, to hear directly from young children that interactions and relationships are less than optimal indicates that there is still work to do in this area. It would seem that the

Conclusions

The teacher has arguably been considered as central to an examination of young children’s rights and responsibilities in relation to quality. The children in this study have repeatedly focused on the way they are treated by the teacher, highlighting both positive and negative aspects. It has been established that teacher sensitivity is required to develop relationships based on mutual respect and equity.

The social justice implications are compelling. Both the current study in Italy and those of Harcourt (2007) and Yeo and Clarke (2005) in Singapore have reported young children’s considerable apprehension of being ‘punished’ by their teachers. While this may not be unique to Italy or Singapore, it points to an issue that is both relevant to, and has been raised in, these particular contexts. It is broadly accepted that the social or interactional context as well as the physical environment is important in supporting young children’s learning. Practitioners can be reminded that what the adult says and does in relation to the child can have a significant impact on the child as a learner. Interactions and relationships between adults and children are relevant irrespective of the children’s age. Expectations for classroom interactions can be negotiated and agreed upon, particularly between the teachers and the children. Some educators may need to focus on developing skills around building, refining, and supporting young children’s social competence, rather than resorting to punitive strategies such as reported by these children.

The study has also considered methodological approaches to research with young children. It is important to reflect on how children and childhood are being viewed in this research. The image of the child can be identified through choice of topic and the nature and design of the methodology as well as the active engagement of the participants (Robinson & Kellet, 2004). This study included young children in conversations about quality in early childhood settings. Malaguzzi (1998) argues that ‘things about children and for children are only learned from children’ (p. 51). While some may not agree with Malaguzzi, this study established that a great deal can be learned about quality by engaging with the views of young children who encounter early childhood services as part of their everyday lives, alongside the views and opinions established in the research literature and policy documents.
Relevance to early childhood educational practice (and beyond)

It has been proposed in this study that a high-quality early childhood setting is one where the rights and responsibilities of young children are respected and supported. This notion has been evident in the views offered by the young children attending the settings in Verona, Italy. The implications for the early childhood community in Italy, and beyond, can be summarised as:

- Teachers are key players in promoting the rights and responsibilities of children in early childhood settings in relation to quality.
- There are social justice issues for teachers in Italy in terms of the establishment of sensitive relationships with children.

An important aim of research with children is to transform their home and educational settings so as to achieve a more positive environment for their growth (Mortari, 2009). This research project offered the possibility to both listen to children’s voices and to improve their prior-to-school settings. Indeed, this research has enabled the adult researchers to present the study at national and international conferences and through publications, and by sharing the children’s opinions with their teachers and community members. In particular, the dialogue between the researchers and the Italian teachers about the children’s experience permitted the teachers to recognise some important misunderstandings about the way they guide the children’s behaviour. The children’s perspective showed the teachers a different viewpoint of ‘adult conduct’, which enabled them to both reflect upon their educative strategies and to make some immediate changes in their practices.

Moving forward

Moss (2001) reminded us that defining quality should be seen as a dynamic and continuous process, involving regular review and never reaching a final objective statement. The indicators of quality these young children have proposed are based on their own experiences of early childhood education in Verona, Italy. Gathering young children’s accounts of life in their prior-to-school settings and, in particular how they see quality, needs to be an ongoing process. The conversation around quality will continue to be refined and reviewed, but should never exclude the voices of those most affected. This study has established young children as articulate research partners. They have raised issues that have the potential to be extremely uncomfortable for adults, particularly around teachers’ demeanour towards young children. The onus is now on the early childhood community in Italy and beyond, and those who govern the sector, to respond to the views of this particular group of informants.

References


Background

Parental attitudes and perceptions of mathematics have been found to influence not only student learning outcomes, but student self-efficacy as well (Anthony & Walshaw, 2007). Parents may well be the single biggest factor in their children’s educational success (Merttens, 2005), with research showing that students’ learning is maximised when strong educational partnerships between school, community and home are developed (Groves, Mousley & Forgasz, 2006; Vincent, Stephens & Steinle, 2005). It seems, however, that many parents are more actively involved in their children’s language learning than in mathematics (Cannon & Ginsburg, 2008). There is widespread agreement that children benefit from being read to at a very early age (e.g. Winch, Johnston, Holliday, Ljungdahl & March, 2002), and programs that focus on ‘home readers’ are commonplace throughout Australian schools. It is more difficult, however, to find examples of ongoing numeracy programs that specifically target children’s early development in this area. This may be attributable to numeracy (or at least mathematics)2 having a negative reputation in society (Gordon, 1992), but may also be because parents have often been given little guidance from teachers on how they can help their child with mathematics (Anthony & Walshaw, 2007). This is compounded as students move through grades, with parents often lacking the content knowledge, confidence and skills to help their children (Peressini, 1998; Sheldon & Epstein, 2005). Parental involvement has often been limited to parents’ monitoring and assisting with homework, with a focus on ‘drill and practice’ exercises and learning ‘tables’ by rote (Goos & Jolly, 2004), rather than homework that is purposeful and engaging and promotes family interactions and discussion (Anthony & Walshaw, 2007). There is also evidence to suggest that teachers view language and literacy as more important topics to be taught in early childhood and that a focus on these subjects leaves little time for numeracy (Lee & Ginsburg, 2009).

This paper describes a project aimed at engaging parents in numeracy-related activities with their child at home on a regular, ongoing basis. Parents were initially surveyed in order to determine their knowledge and perceptions of how their child was taught numeracy and then invited to provide regular feedback on the child’s activities at home.

This paper describes a project conducted with the parents of children in early childhood classes from two different district high schools1. The project investigated the perceptions held by these parents in relation to mathematics education, and used an intervention program designed to encourage them to engage in numeracy activities with their child. Preliminary results indicated that, although the parents were not necessarily familiar with contemporary numeracy classroom practices, they were able to describe and evaluate their children’s mathematical understandings. The findings add to the limited research available on the ways parents can support their child’s mathematical education at home through encouraging home–school community partnerships.

1 District high schools in this context refers to rural schools with classes ranging from Kindergarten–Year 10.
2 The term ‘numeracy’ was used in order to maintain consistency with the curriculum at the time. Essentially, the activities were mathematical in nature, with the aim being to develop children’s numeracy.
Specifically the research questions were:

- What knowledge and perceptions of numeracy education are held by a selected number of parents?
- What are the features of a program designed to encourage parents to participate in numeracy activities with their children at home?
- In what ways did parents engage with the program and what was the nature of feedback received?

This study is important because, as Goos and Jolly (2004) found, there has been little research on the nature of effective partnerships between school and home and the kind of numeracy learning they might support. Cai (2003) also highlighted the need to examine parental roles, especially with early childhood and elementary school children. This paper adds to the limited research in this area through providing details of an intervention program that focused on actively involving parents in their child’s numeracy learning.

**Literature review**

**Parental involvement**

Although Muir (2009) found that parents were generally willing to be involved in supporting their child’s numeracy learning at home, it is understandable that some can be quite hesitant in participating in their children’s mathematical education and unsure how to best help their children (Civil, 2006). According to Peressini (1998), however, parents have their own expertise and unique knowledge about their children and, as Pritchard (2004) found, often have many ideas about how to assist their children at home.

On the other hand, however, many parents are not familiar with the mathematics content their children encounter in maths classes, thereby limiting the ways they can be involved. There is a commonly held perception by parents about the difference between how mathematics is taught today and how it was learned by them (e.g. Civil, 2006; Marshall & Swan, 2010) and, as Muir (2009) and Pritchard (2004) found, many parents felt uninformed about the mathematics curriculum and the teaching methods used in their child’s school. There is evidence to suggest, however, that parents are keen to encourage and support their children in their mathematics education (including those from low SES and culturally diverse backgrounds), when they are supported by the school through the use of programs such as the one described here.

**Home activities that contribute to mathematical understanding**

According to Anthony and Walshaw (2007), a number of researchers have found that mathematical activities made available in the home are conducive to students’ cognitive and affective development. Although limited, there is evidence in the literature to suggest that some schools are running programs to promote numeracy at home. Goos (2004), for example, collected information on numeracy partnerships involving schools throughout Australia, and, while there was evidence of 606 examples of such programs, there was little information on the nature of home or community numeracy events and how they could become numeracy opportunities for children. An example of an ongoing program was reported by Goos and Jolly (2004), involving a school’s practice of offering individualised ‘take-home packs’ of mathematics activities to parents who requested additional materials to use with their children, and Sheldon and Epstein (2005) found that a number of involvement activities were effective, including evening workshops and provision of teacher-designed interactive homework and mathematics materials for families and students to use at home. More recently, Reinfeld, Lountain and Mellowship (2008) documented a South Australian practice in which a ‘Maths Monster’ visited children’s homes to encourage them to engage with the mathematics in the world around them. It seems, however, that these examples are isolated and have not become common practice in the same way that home readers, for example, have become established.

According to Merttens (2005), it is equally important to have a home-maths program, whereby children take home weekly or fortnightly maths activities which are shared and discussed with their parents. Such activities have the capacity to capitalise on the unique knowledge parents already have about their children (Peressini, 1998), and to bridge the gap between school and home practices. These considerations were taken into account when designing the intervention program discussed in this paper, with the expectation of written feedback being a key component of the communication process.

**Methodology**

An earlier study (Muir, 2009) documented the results of a pilot project conducted with the parents of a Year 1/2 class in a rural district high school. This paper adds to that research through extending the study to parents, students and teachers of three different early childhood classes in total, from two district high schools in a small Australian state, with children ranging in age from four to eight years. The teachers who participated were deemed to use contemporary mathematical practices in their classroom; in this context that meant a preference for hands-on activities and games, a focus on teaching for conceptual understanding and developing mental computation, and limited reliance on worksheets, drill and practice routines. The aims of the study were to investigate parents’ perceptions of mathematics and current teaching practices and to document their involvement in a numeracy at home intervention program.
Using a similar methodological approach to Muir’s (2009), preliminary data about parents’ attitudes and beliefs towards mathematics, how mathematics is taught in schools, and how parents engaged in mathematical experiences with their children were collected through a questionnaire. The questionnaire contained 22 rating scale items and five open-ended questions, and was sent home with each child in each of the classes. The items specifically related to their perceptions of numeracy education will be discussed in this paper. Parents also had the option of participating in a follow-up semi-structured interview, of which three were conducted.

The intervention program involved a number of interactive activities designed to support the mathematical experiences in the classroom. Every Monday each child would receive their ‘numeracy bag’ containing their activity instructions, necessary materials and guidelines for parents, along with a short rationale that explained the purpose behind the activity. Figure 1 shows an example of one of the activities as it was presented to parents. The expectation was that the child would engage in the activity two or three times in the week with their parents and/or other family members, return the activity on Friday, and receive a new activity the following Monday. Each activity bag contained a feedback sheet (see Appendix A) which required parents to provide data about the child’s level of engagement with the activity and the mathematical understandings that were revealed. The interviews were conducted approximately eight weeks into the program. A semi-structured interview was also conducted with the class teachers.

Results and discussion

As previously mentioned, findings from the literature indicated that parents generally felt uninformed about the numeracy teaching practices employed in today’s classroom. The survey administered to parents sought to determine whether or not this was true for their group, along with seeking additional information about their perceptions of particular mathematical practices. A total of 34 surveys were returned from the 46 that were distributed. As reporting on all 22 statements is beyond this paper, and in order to focus on answering the first research question, Table 1 contains a selection of the most relevant statements from the questionnaire and the parents’ corresponding levels of agreement or otherwise (SA – Strongly Agree; A – Agree; N – Neutral; D – Disagree; SD – Strongly Disagree).

<table>
<thead>
<tr>
<th>Counting Collections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimate how many are in this collection of objects.</td>
</tr>
<tr>
<td>How many different ways can you count this collection?</td>
</tr>
<tr>
<td>Which way was the quickest?</td>
</tr>
</tbody>
</table>

Purpose of activity:
This activity emphasises the importance of moving from counting by ones to counting by groups. This is more efficient when dealing with larger collections. Links can then be made with multiplication—e.g., we have 3 groups of 5—how many altogether? When counting the total, children can be encouraged to ‘skip count’ to reach the total (e.g., 5, 10, 15).
Table 1. Parents’ responses to the belief items in the questionnaire

<table>
<thead>
<tr>
<th>Statement</th>
<th>SA/A responses (%)</th>
<th>SD/D responses (%)</th>
<th>N responses (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am satisfied with the way I was taught mathematics in school</td>
<td>47%</td>
<td>32%</td>
<td>21%</td>
</tr>
<tr>
<td>Maths is about learning the correct procedures to solve problems</td>
<td>91%</td>
<td>3%</td>
<td>6%</td>
</tr>
<tr>
<td>There is a ‘correct’ way to do any maths problem</td>
<td>47%</td>
<td>29%</td>
<td>24%</td>
</tr>
<tr>
<td>Mental computation means knowing your tables</td>
<td>47%</td>
<td>15%</td>
<td>38%</td>
</tr>
<tr>
<td>I have a good understanding of how my child is taught numeracy in school</td>
<td>32%</td>
<td>32%</td>
<td>36%</td>
</tr>
<tr>
<td>I think the way maths is taught in classrooms today is effective</td>
<td>32%</td>
<td>3%</td>
<td>65%</td>
</tr>
<tr>
<td>I know what types of mathematical skills and understandings my child has</td>
<td>68%</td>
<td>6%</td>
<td>26%</td>
</tr>
<tr>
<td>Games and activities are a good way to learn mathematics</td>
<td>97%</td>
<td>0%</td>
<td>3%</td>
</tr>
<tr>
<td>Worksheets and textbooks are a good way to learn mathematics</td>
<td>85%</td>
<td>9%</td>
<td>6%</td>
</tr>
<tr>
<td>Telling children the answer is a good way of helping develop their mathematical understanding</td>
<td>15%</td>
<td>41%</td>
<td>44%</td>
</tr>
<tr>
<td>I regularly engage in numeracy-related activities with my child</td>
<td>79%</td>
<td>18%</td>
<td>3%</td>
</tr>
</tbody>
</table>

In terms of gauging parents’ perceptions of what mathematics involves, the first four items are particularly relevant. Parents did not respond overwhelmingly negatively to expressing satisfaction with their own mathematics education, which could indicate that they are satisfied with their level of mathematics understanding. The high level of agreement with the statements that ‘Maths is about learning the correct procedures to solve problems’ (91%) and ‘Worksheets and textbooks are a good way to learn mathematics’ (85%) indicates a ‘traditional’ view of mathematics (Van de Walle, Karp & Bay-Williams, 2010), and probably one that reflects their own educational experiences as most of the parents had young children and would not necessarily have experienced those practices in their children’s classrooms.

As Table 1 shows, only 32 per cent of parents indicated they had a good understanding of how their child was taught mathematics. In response to a question asking them explicitly to comment on this, many simply answered ‘no’ or indicated that:

- No I don’t. We get reports but do not really know how the grade has been reached.
- No as they do it all back to front to when I was taught and it was confusing when they showed me so I have showed them the way I was taught.
- It is all taught different to the way I was taught at school and I don’t understand any of it.

Interestingly, one parent commented that there was ‘more of a focus on reading and writing’, which supports the argument that literacy is often perceived as more important than numeracy (Lee & Ginsburg, 2009). The high level of neutral responses received to the statement ‘I think the way maths is taught in today’s classrooms is effective’ (65%) also provides evidence for parents’ lack of knowledge of contemporary teaching practices, in that it would appear they lacked enough information to either agree or disagree. Parents also had the opportunity to compare maths teaching today with how they were taught. Many chose to leave this section blank, but the following comments illustrate the types of answers received:

- Stronger emphasis on times tables when I was at school; very repetitive.
- Teaching maths today seems much more interactive, stimulating and realistic than I can recall from my own childhood.
- I know it is different from discussing strategies with my eight-year-old.

These comments indicate that some parents, at least, are aware of teaching emphases and approaches that differ from the way they were taught. It was also encouraging to see that 79 per cent of parents reported...
being regularly engaged in numeracy-related activities with their child and that 97 per cent agreed that games and activities were a good way to learn mathematics. When asked to name specific activities, responses included playing computer games, board games such as Monopoly and Snakes and Ladders, and card games such as UNO®. Other responses included involving children in shopping experiences, counting, cooking and dividing up food. The following is illustrative of the types of responses received:

Using time—such as how many hours to bed, how many days in a week, how much does A & B cost in a supermarket?

Working out people’s ages, using a calculator.

In summary, the responses showed that parents generally held a mixed view of mathematics and how it is taught. There was strong agreement that games, for example, were a good way of learning mathematics, yet they also agreed that worksheets and textbooks were an effective way of learning. Overall, the survey results indicated that parents were not well-informed about contemporary mathematics teaching and it was therefore hoped that engaging in the numeracy at-home program would lead to an increased understanding of this.

Parental engagement with the program

The intervention program involved taking home a different activity each week, one designed to develop or consolidate children’s mathematical understandings. Some features of the program that made it purposeful and relevant included the careful selection of activities built on classroom experiences, the potential for the activities to be repeated or revisited, the inclusion of a rationale which explained the purpose of the activity, and the expectation that parents would complete a feedback sheet commenting on their child’s engagement with, and understanding of, the activity. The return rate for the weekly sheets was high and, although not all sections were always completed, most parents recorded their level of agreement with the suitability of the activity. Anecdotal comments revealed that parents were often able to identify and describe some of the mathematical behaviours they observed. For example, with reference to an activity where children had to form pairs of cards that equalled 10, one parent wrote:

Trevor understood that he had to add up; he counted on his fingers at first, but towards the end could name the pairs without adding.

Another activity required children to place counters in designated ways on a 10-frame. One of the parents provided the following feedback:

She placed the counters in a ‘logical’ way and could easily tell me how many counters she needed to make 10.

Many of the activities used games to focus on mental computation strategies such as doubling. Feedback from these activities included comments such as:

Chelsea could see that doubling a number is the same as timesing [sic] by two.

Other activities involved the use of the 1–100 chart, which proved useful for some children to ‘start to understand odd and even’ (Mrs Jones) and:

Simon was able to put the chart together easily—understanding place value and sequences; starting to understand addition and subtraction using the chart; probably needs to do this activity again.

Parents also commented on how their child improved after doing the activity a number of times:

She became better every night we did the activity. [Trent] understood he had to add up; counted on fingers at the beginning, then remembered towards the end the pairs without adding [after completing a Make 10 activity].

Other parental comments also gave the class teachers further insight to their students’ mathematical understandings, and parents became a rich source of information for guiding the choice of future activities, as the following feedback indicates:

I found Jack understands numbers very well. He showed me that he works them out in his head first. He used questions well to find out the problems in the activity [‘Guess my number’ using 1–100 chart]. Jack and I thought it was a bit easy. He would like to try something a bit more challenging.

Comments such as these indicate that parents can be effective contributors to their child’s mathematical development and provide important information for the teacher to capitalise on. Provision of written rationales for each activity may have facilitated this, along with the expectation that parents record particular mathematical behaviours they observe.

Feedback received from the interview participants indicated that they viewed the project positively and would like to see it continued. All interviewees indicated that it gave them a better understanding of classroom practices, with one comment being, ‘… even though it looked like you were just playing a game you could see the benefit of the numeracy and the maths skills that were in it’. Suggestions for improvement included trying to ‘cater for each student’s level’, as some parents felt that at times the activities were too easy or too challenging for their children. Feedback from one teacher, however, indicated that a greater range was required, rather than grading activities.

1 Pseudonyms are used for names.
Whether they will become more active advocates for mathematics teaching and learning, Civil (2001) asks issues and more exposed to sound approaches to become more informed about mathematics education activities undertaken in the classroom. As parents and the purpose behind many of the mathematical understanding of contemporary mathematical practices their teacher. According to anecdotal and interview child’s development that could be capitalised on by a positive way, providing additional insights into their mathematical education and were able to do this in room and still monitor it to make sure everything is returned—like they do with their home readers.

Conclusions and implications

Just as children share their mathematical understandings with other children and teachers, they also need to share them with their parents (Ministry of Education, 2008), and teachers need to provide opportunities for parents to contribute to their child’s education. In the past, this has more likely occurred in the area of literacy, and the project reported in this paper illustrates how similar engagement can be achieved through an at-home numeracy program. The program’s success was attributable to making the purpose of the activities explicit, provision of an explanation of the mathematics involved in the tasks, and the expectation that parents would provide written feedback on their child’s engagement with, and understanding of, the particular activity. This communication was vital in strengthening the links between home and school, and helped to ensure the activities were suitable and relevant to the individual child.

The results obtained from the feedback sheets indicated that, as Sheldon and Epstein (2005) found, parents were willing to participate in their child’s mathematical education and were able to do this in a positive way, providing additional insights into their child’s development that could be capitalised on by their teacher. According to anecdotal and interview data, the program provided parents with an increased understanding of contemporary mathematical practices and the purpose behind many of the mathematical activities undertaken in the classroom. As parents become more informed about mathematics education issues and more exposed to sound approaches to mathematics teaching and learning, Civil (2001) asks whether they will become more active advocates for a quality mathematics education for all children. In the project reported in this paper, parents were informed through creating the opportunity for them to engage in numeracy-related activities with their children at home. It is hoped that the documentation of such programs will help teachers and educators to recognise the importance of parental influences and the difference they can make to their child’s education.

References


Appendix A

Numeracy at home feedback sheet

Name of activity:
Child’s name:
Date:

How many times did you and/or child complete the activity? ……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………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Introduction

Children’s development is situated within the context of family, culture and community, rather than in isolation (Bronfenbrenner & Evans, 2000). In order to fully understand and respond to children in early childhood settings, educators must be aware of these contexts and facilitate community and family involvement in the setting (Dockett & Perry, 2008). Quality early childhood services focus on building collaborative partnerships between educators and families in order to benefit the child (DEEWR, 2009). However, pre-service teachers may have few opportunities to practise building connections with families and communities. In addition to practicum placements in schools and early childhood settings, practical experiences within teacher education courses should exist to ensure that pre-service teachers are aware of the importance of making these connections.

One way relationships can be encouraged is through community playgroups, which not only provide opportunities for professional learning but also positive outcomes for families (Barbour & Bersani, 1991; Jackson, 2006; Lewis, 2007). Playgroups involve children and their families coming together to socialise for a set period. Playgroups have been used by a number of university teacher education programs to facilitate the practical learning of pre-service teachers (Lewis, 2007). The purpose of this study was to explore how connections between families, communities and educators can be facilitated in teacher education courses through the use of playgroups. We also examined the barriers that can exist to building relationships, as well as the perceived benefits of relationships to families and pre-service teachers.

The role of community-based playgroups in building relationships between pre-service teachers, families and the community

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THE PURPOSE OF THIS STUDY was to explore how connections between families, communities and educators can be facilitated in teacher education courses through the use of playgroups. Barriers to building relationships, as well as the perceived benefits of these relationships to families and pre-service teachers, were also explored. Participants were involved in weekly university-based community playgroups. Focus group interviews were conducted and the constant comparative method was used to analyse interview transcripts. Themes of ‘Constraints’ and ‘Enablers’ emerged from pre-service teachers’ transcripts, indicating that they were initially uncomfortable with community and family involvement but eventually made connections as to why this was important. The theme of ‘positive relationship building’ emerged from parents’ transcripts, indicating that they saw building relationships with families and communities as an important role of early childhood educators. Implications for the importance of authentic learning situations for fostering these relationships in teacher education courses are discussed.
Because the family is the most powerful influence on the development of a child, collaborative relationships between staff and families can bring benefits to all involved (Caplan, Hall, Lubin & Fleming, 1997; Christian, 2006; Gonzalez-Mena & Widermeyer-Eyer, 2004). The importance of relationships between early childhood educators and families is recognised in its inclusion as an essential component of government-mandated quality assurance systems (Briggs & Potter, 1999; NCAC, 2005) and the recent national Early Years Learning Framework (DEEWR, 2009). Additionally, the New South Wales Institute of Teachers Professional Teaching Standards state that teachers should be ‘actively engaged members of their profession and the wider community’ by communicating and engaging with families and making connections with the community (NSW Institute of Teachers, 2005, p. 17).

Despite being recognised as important, working with families is an area where early childhood educators receive little preparation (Nieto, 2004). Pre-service teachers are not typically provided with learning opportunities, beyond practicum placements, for building parent–teacher relationships (Christian, 2006). In one study, early childhood educators reported not feeling adequately prepared in their work with families and needed more information on and practice with understanding family dynamics and interacting with families (Bennet, Katz & Beneke, 2006). Another study found pre-service teachers felt that interacting with parents was one of the most challenging aspects of teaching (McFarland & Lord, 2008).

In addition to building relationships with families, establishing community connections is important not only for educators working in the field, but also for pre-service teachers attending teacher education programs (NAEYC, 1993). Exposure to the idea of ‘community’ for future educators should begin in the initial years of teacher preparation so that, by the time educators enter the workforce, they have an idea of why, when and how to facilitate links to the community.

Establishing genuine connections that are long-lasting and meaningful between universities and the community is beneficial to both universities and members of the community (Bartlett, 1995; Reardon, 1999). One way university–community relationships can be created is through the use of playgroups, which can provide opportunities for student professional learning, as well as positive outcomes for families (Jackson, 2006). The pre-service teachers in this study were able to explore the value of developing a sense of belonging to a community by not only interacting with individual children in weekly playgroups, but also with their parents/carers and siblings.

The aim of this study was to examine how the relationships between community, families and educators could be facilitated in teacher education courses through the use of playgroups. In addition, barriers to building relationships, as well as the perceived benefits of these relationships to parents and pre-service teachers, were examined.

**Method**

**Participants**

After gaining approval from the university ethics committee, participants were recruited. They included pre-service teachers and parents from the local community. Pre-service teachers in their first year were enrolled in an early childhood/primary teacher education course at a regional university in New South Wales, Australia. Seven pre-service teachers (two males and five females) out of the larger cohort of 40 agreed to participate in the focus group. Pre-service teachers were invited to participate in the research, via verbal announcement during class time, and the seven interested participants completed consent forms to take part in the focus groups. Participation in this study was not required as part of the child development subject pre-service teachers were enrolled in. Also participating in the study were six parents from the community who attended weekly playgroups, and 27 parents who were recruited, through flyers, to participate in play sessions. Some flyers were distributed at two primary schools in a regional New South Wales town, others left at the university where the study took place. The flyers were aimed at families who had children up to five years old. Parents phoned or emailed a research assistant if interested in participating. There were 40 children enrolled in the play sessions, ranging in age from four weeks to five years. As playgroups were run on two mornings of the week to allow for manageable group sizes, parents were organised into either the Wednesday or Thursday sessions. Some of the parents who expressed interest in attending had taken part in playgroups the previous year. In order to facilitate the relationships these parents and children had formed with each other, these families were placed together in one playgroup, and new families were placed in the other. At the first session, parents were invited via written notice to participate in the research study. Six interested parents out of the larger group of 27 completed consent forms to take part in the focus group. Parents were able to attend play sessions even if they were not interested in participating in the study.

**Procedure**

The two-hour playgroups were held on campus. Pre-service teachers attended for one hour per week, taking part in three playgroups. They had a three-week semester break and then returned for another seven
consecutive weeks. The playgroups were not held while the students were on semester break. Two lecturers supervised the groups, but were not involved in the research.

Parents attended the playgroups with their children. In their first week they were given a letter outlining their responsibilities of supervising their children, as well as the role of the pre-service teachers. Regular attendance was requested of parents and they were told that if they could not attend consistently then their place would be offered to another family. However, attendance did fluctuate.

Pre-service teachers, with the aid of a research assistant, were responsible for setting up the play area each morning. A range of resources was provided for children, including blocks, books, puzzles, art activities, balls, tunnels, sandpit, dolls, dramatic play materials, and an area with infants’ toys. Pre-service teachers also interacted with the parents and children during free play. Occasionally, pre-service teachers chose to conduct more structured activities, such as singing with the children.

Additionally, pre-service teachers were given weekly tasks by their subject lecturers, including using a variety of observational techniques to record behaviour, practising various guidance strategies when conflict occurred, and documenting particular behaviours in relation to different theoretical perspectives. Pre-service teachers were expected to interact with parents to gather information to develop and share a parenting resource focused on child guidance. Topics researched and presented to parents included sibling rivalry, tantrums and sleep issues. In groups of three or four, pre-service teachers presented their resources to parents during the final playgroup.

Data gathering

During the last week of semester, two focus groups were conducted, one with pre-service teachers and one with parents. The interviews focused on their respective experiences of the playgroups, with a particular emphasis on community and family involvement. The pre-service teachers’ focus group was conducted by a researcher who was not associated with teaching the subject, thus limiting the likelihood that responses could be unduly influenced. The focus group was scheduled outside of class time to enable pre-service teachers to attend. The semi-structured and open-ended questions asked related to their experiences in the play sessions and their understandings of community involvement and relationships with parents. The researcher followed the lead of the participants to facilitate the discussion, which lasted for approximately 40 minutes.

Questions about community and parent relationships included: ‘What did you think of the experiences in relation to developing skills around interacting with parents?’; ‘What did you think about your role in developing relationships with parents in educational settings, and did play sessions help you feel more comfortable with this?’; ‘Have you thought much about the role of community in education and did play sessions help you think about this more?’; and ‘What did you think about your role in developing parenting resources?’.

The parent focus group was conducted by one of the researchers who did not have regular contact with the families, in order to minimise possible bias. The parent focus group lasted approximately 40 minutes and was conducted during the last play session. Questions focused on their experiences in the play sessions, what they thought about the pre-service teachers’ role, and their views on the role of community and parent-educator relationships in education. They included ‘What did you think about the parent resources the students developed?’; ‘Do you believe the early educator has a role in acting as a resource for some parenting issues?’; ‘What role do you think educators should have in establishing and maintaining relationships with parents?’; ‘What role do educators have in establishing relationships with the community?’; and ‘What could be done to further strengthen community connections?’.

Both focus groups were taped and transcribed by a research assistant. Names were not recorded during the interviews in order to maintain confidentiality and to protect identities. Results of this study will be shared with the participants, as well as other pre-service teachers in the course, via the course forum.

Results

Grounded Theory guided this study as the intention was to discover new constructs or theories related to the research question ‘How can connections between families, communities and pre-service teachers be facilitated in teacher education courses through the use of playgroups?’. This type of data analysis requires immersion in the data (Patton, 2002) and so the interview transcripts were read repeatedly in order to identify key themes related to the phenomenon of interest. First, analytic induction was used to develop the themes and properties that emerged from the transcripts. Analytic induction is the ‘systematic examination of similarities between cases to develop concepts or ideas’ (Punch, 2005, p. 196). The audio-recorded interviews were transcribed and coded using the principles of the Constant Comparative Method (see Bogdan & Biklen, 1998; Glaser & Strauss, 1967; Strauss & Corbin, 1998).

Coding was done by the two lead researchers who were not involved as subject lecturers for the pre-service teachers. Each researcher read the transcripts
repeatedly and took notes about prevalent themes. The two researchers then met to discuss the initial notes and compared them, looking for commonalities. Similar aspects of the transcripts were categorised initially into lower level properties of ‘outsiders’, ‘ratios’, ‘preparation’, ‘praxis’, ‘confidence’ and ‘investment’ for the pre-service teacher data, and ‘positive relationship building’ for parents. As these codes were checked and re-checked against the initial or early codes, the researchers were able to identify two major themes for the pre-service teachers and one major theme for the parents. For the pre-service teachers, ‘Constraints’ encompassed aspects of the properties of ‘outsiders’ and ‘ratios’, and ‘Enablers’ encompassed aspects of ‘preparation’, ‘praxis’, ‘confidence’ and ‘investment’. The results for pre-service teachers are reported first.

**Constraints**

This theme arose from the data and highlighted pre-service teachers’ feelings about interacting with parents in the playgroup environment. The properties that emerged from the data explain what made pre-service teachers uneasy and how they coped with these feelings, what strategies they employed or those they thought lecturers employed to ease these feelings.

**Outsiders:** Despite playgroups being held on the university campus in an environment familiar to pre-service teachers, some of them referred to parents as ‘insiders’, which in effect placed themselves as ‘outsiders’ in the playgroup environment:

*The Wednesday group which is the well-established group, so they have got their networks (PST #3).*

*The parents were really friendly and good about it but also, like, on Wednesdays when you had more of them [parents] and they were grouped together it was kind of intimidating (PST #4).*

Two pre-service teachers placed themselves either as ‘insiders’ or ‘outsiders’, depending on their own status as parents:

*I didn’t find it too hard because I am a mum myself and I mean, playgroup is not new to me so that sort of thing didn’t bother me (PST #3).*

*I think personally, because I am not a parent I think when I am talking to a parent I don’t know what I am talking about and so I don’t have the confidence to strike up a conversation (PST #2).*

Because of the way pre-service teachers had positioned themselves, many of them commented on the difficulty they had in starting conversations with parents. Following are examples from one pre-service teacher:

*I had trouble trying to think of something to say a good portion of the time, or how to like start a conversation, to ask questions, you know, ‘cause I felt kind of awkward just trying to go up there and ask (PST #4).*

*Because I don’t know exactly what to say, I mean I don’t have kids and so it’s harder, and like I’m not around kids a whole lot either, I mean I’m learning stuff and more now, but it’s still hard to pick up on what exactly I should say to them [parents], or shouldn’t or you know how to get a good conversation going (PST #4).*

**Ratios:** Apart from how pre-service teachers positioned themselves and parents in the playgroup environment, other factors were cited as contributing to their feelings of uneasiness during playgroups. Ratios of adults to children in the room were often cited as a reason for pre-service teachers having difficulty with their interactions with children and their parents. The ratios may have led to a feeling of awkwardness for the pre-service teachers. Some thought there were too many adults and this hindered interactions and made them feel less at ease:

*It was hard as well because there wasn’t enough kids for the amount of students (PST #3).*

*On some days we only had two kids for the group and that was sort of intimidating (PST #2).*

Although many of the pre-service teachers had difficulty in the playgroups because of the number of adults present, some used a ‘safety in numbers’ approach, where a group of them would approach a parent together. This was a strategy some pre-service teachers employed to help them overcome their personal uneasiness in approaching parents:

*We were sort of in groups, we could speak to parents so it wasn’t quite as scary (PST #2).*

The over-arching theme ‘Constraints’ highlights how pre-service teachers felt when put in the playgroup situation, which may have not initially felt authentic. The properties ‘outsiders’ and ‘ratios’ explain and describe how some pre-service teachers saw themselves and how a large number of adults added to their feelings of unease.

**Enablers**

The theme of ‘enablers’ explains the learning of pre-service teachers, particularly their awareness and importance of engaging with parents and community. The properties that emerged from the data, ‘preparation’, ‘praxis’, ‘confidence’ and ‘investment’, help to explain pre-service teachers’ learning over the course of the 10 playgroups.
Preparation: Most pre-service teachers agreed that being given structured tasks eased their feelings of uneasiness. Tasks included practising observational techniques, conversing with parents about children’s interests and guidance issues, and preparing a parent resource. Pre-service teachers indicated that the prepared or staged tasks forced them to interact, and that this was in many ways easier:

… oh, probably apart from the resource that we had to make, I didn’t think there was a structure there to make us interact with the parents (PST #1).

… the best part was when we had to do the parent resource so we were sort of forced to talk to the parents to do that, I think that was good …(PST #2).

Praxis: Most pre-service teachers viewed the playgroups as an opportunity to see theory-in-practice. Elements essential to the quality of the learning environment were becoming more obvious to pre-service teachers. One such element was the importance of parent/teacher relationships:

… rather than being seen as a drop-off for the kids, to have that relationship between the caregiver and the parents (PST #1).

Even just as a trust thing … even though the parents are right there in that same room but obviously they did to a certain extent because they went out … which is good in a way that they could leave the room (PST #1).

… as far as text books and Bronfenbrenner’s model, I had never put it into place before the play sessions where I could see, and from outside in a community … it has been part of our community … so part of the model [Bronfenbrenner] definitely gave me a bit more focus (PST #5).

The subject that was linked with the playgroup focused on children’s development from birth to age 12 and specifically covered aspects of children’s contexts, including parenting and the importance of community. Bronfenbrenner’s (1979) social ecological theory was covered, as well as parent–child relationships as they relate to children’s development. Other pre-service teachers were able to see how the subject content they were studying integrated with the playgroups and their own understandings of community:

I thought that the community was really important … I really got that from [names subject] … it was all about our own community and how important it is to have the children feel comfortable … the play sessions I do think help because it gets you a bit more familiar with the parents and the importance of them being there (PST #4).

… we have put what we learnt in theory into practice (PST #2).

Pre-service teachers could also appreciate the diversity in the community:

Yeah it opens your eyes to the diverse range of children you will be having come into your classroom from the community (PST #2).

Playgroups enabled pre-service teachers to practise positive guidance techniques with the children and develop resources for parents. Some pre-service teachers were also able to take this into other situations such their own homes and problem-solve positive ways to deal with challenging behaviour.

I don’t think I will have any worries about it [positive guidance], yeah and I think it was good actually as it helped us think about what we were saying and re-wording it at home, every time I say the word ‘don’t’ I think how can I better say that? (PST #6).

Researching and making the parent resource facilitated pre-service teachers’ interactions with parents. This was a positive relationship-building experience for the pre-service teachers and they believed that a structured task aided in their interactions:

I think it was a good task to do because it allowed for interaction with the parents and also the information we had to research, obviously we discovered more about it … it built up that relationship (PST #7).

… it was interesting finding out what parents do wonder and think about (PST #4).

Confidence: The interactions, particularly around the preparation of the parent resource, appeared to add to the positive feelings and increased confidence that pre-service teachers took from the groups. For example, one pre-service teacher observed:

… yeah they were responsive to the information we gave them, and took that on board which was good (PST #2).

… they [parents] obviously cared about what we were doing, were listening and taking it in so it made you feel like it [developing the parent resources] wasn’t pointless (PST #2).

The sustained weekly contact with children aided some pre-service teachers in their confidence, particularly around relationship-building:

I felt we were able to build relationships with the kids … you could go back to the same child and they would remember what you were doing … you would continue on with your little game or go onto something else (PST #6).

I think it sort of builds confidence in what you say to young children to engage them in what you’re doing … to begin with when you first go in there it is scary and daunting and you wonder what to say, then they run away and it’s like, ok, but as that
illustrate the theme of ‘positive relationship building’. The following quotes by parents (PR) had for children. The following quotes by parents (PR) and relationships with families and the benefits this educators should have in developing community links (NSW DoCS, 2000; Stonehouse & Gonzalez-Mena, 2004).

Parents indicated the role they thought early childhood (play sessions) and especially for the students to see the different cultures. And even probably for the little ones to see, like oh those ones are very dark, they’re very, very dark, so to see mine have known them since birth so it’s not a big thing for them, but the ones that don’t see other cultures I guess … it’s good for them (PR #1).

Some parents also mentioned the notion of diversity as an important aspect of involvement with community:

I think it’s good for them that they interact with parents. I don’t know whether they all have children or if they’ve got grown children. Just so they know what’s going on and help keep us informed and we I guess can do the same to keep them informed of what’s going on (PR #1).

When asked whether educators’ links with communities and families would have a positive impact on children, one parent said:

Yes, yes definitely because they would see their early childhood teachers outside of the environment that they....and the community as well, other than just at that setting (PR #5).

The theme ‘enablers’ explains how playgroups encouraged many pre-service teachers to grow as learners and become more aware of the importance of relationships between teachers, parents and community. Most pre-service teachers stated that building relationships was difficult. However, the tasks and time invested in playgroups equipped them with skills to begin to form relationships. When pre-service teachers were accepted, encouraged and listened to by parents, they felt valued and more able to develop these relationships further. Positive experiences that have been scaffolded by the playgroups have set many of the pre-service teachers on the path to successful professional experience and, more importantly, the ability to include the notion of community in their future teaching.

Parent data

The main theme to emerge from the parent transcripts was that of ‘positive relationship building’, indicating that most parents generally thought it was important for early childhood educators to establish relationships with families and communities and that the playgroups were one way for pre-service teachers to practise this. This theme is similar to the notion of ‘collaborative partnerships’ which involve trust, reciprocal respect, sensitivity to diverse perspectives, ongoing and open communication, empathy, recognition of the partner’s strengths, collaboration and shared decision making (NSW DoCS, 2000; Stonehouse & Gonzalez-Mena, 2004).

Parents indicated the role they thought early childhood educators should have in developing community links and relationships with families and the benefits this had for children. The following quotes by parents (PR) illustrate the theme of ‘positive relationship building’.

Maybe as an educator myself I think it is very important (educators’ role in the community). And we can see children differently to other people I think too, knowing about the education side of things and there is more to just education really. It’s not just education that we’re doing (PR #1).

I think it’s good for them that they interact with parents. I don’t know whether they all have children or if they’ve got grown children. Just so they know what’s going on and help keep us informed and we I guess can do the same to keep them informed of what’s going on (PR #1).

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Some parents also mentioned the notion of diversity as an important aspect of involvement with community:

I think it is great that it can be available for everyone (play sessions) and especially for the students to see the different cultures. And even probably for the little ones to see, like oh those ones are very dark, they’re very, very dark, so to see mine have known them since birth so it’s not a big thing for them, but the ones that don’t see other cultures I guess … it’s good for them (PR #1).

Discussion

The aim of this study was to examine how the relationships between community, families and educators could be facilitated in teacher education courses through the use of playgroups. Barriers to building relationships, as well as the perceived benefits of these relationships to families and pre-service teachers, were also explored.

The findings contribute to the literature about the importance of teacher education courses in establishing authentic opportunities for pre-service teachers to practice building relationships with families and communities as well as potential avenues to develop such skills. We found that pre-service teachers experienced some unease in developing relationships with families, although they also understood why establishing relationships with families and communities is important. Other research also supports our finding that developing relationships with parents, although important, is an area that teachers and pre-service teachers have difficulty with and feel under-prepared for (Bennett et al., 2006; McFarland & Lord, 2008). This suggests that teacher education programs may need to provide pre-service teachers with more opportunities to practise building these relationships, and perhaps participation in playgroups is one way to do this.

Finally, the fact that pre-service teachers were beginning to make connections as to why building relationships with parents and community is important
suggests that involvement in community activities, such as playgroups, from an early stage in their course may be beneficial. The playgroups appeared to highlight for pre-service teachers how to make connections with the community through their teaching. Again, knowing that community relationships in educational settings promote positive outcomes for children (Kamara, 2007), pre-service teachers’ knowledge and understandings about how to establish these community connections should be a focus in teacher education courses through the use of practical and ‘authentic’ community experiences.

The analysis of focus group interviews from parents in our study suggests that parents also viewed building relationships with communities and families as an important aspect of the early childhood educator’s role that has benefits for children. Parents appear to echo the pre-service teachers’ views that the development of such relationships is an expected and beneficial aspect of teaching.

There are some limitations to this study that impact on the generalisation of the data. First, the sample size was small and it is possible that the views of the seven pre-service teachers who took part in the focus groups were not representative of the larger group of students who participated in playgroups. A possible explanation for the low participation is that interviews were conducted at the end of the semester, which was a busy time for university students to complete assignments and finish classes. Taking time to participate in a focus group may not have been a high priority for most pre-service teachers. The small sample size of both parents and pre-service teacher limits how we can talk about the findings, so results found and conclusions drawn in this study are tentative. However, the data is still valid in that it reflects the views and experiences of our participants, and the findings can be used to plan other studies. Future studies are needed, using larger samples and with more diverse populations.

Another limitation of this study was that the focus group interviews were relatively short, and multiple sources of data were not available. It is possible that longer focus groups would have allowed participants to reveal their perspectives and experiences in more depth. However, we began the focus groups with a set of questions and did not limit the time frame. The focus groups ended only when participants had finished discussing the set questions and had made any additional comments. Multiple sources of data (such as observations or field notes) would have added more depth to the data. Future studies need to use methods of triangulation to check the consistency of information from the participants (see Patton, 2002).

Also, we did not specifically ask pre-service teachers and parents how they defined the term ‘community’. Therefore it is possible that participants had a variety of views about what this may mean. In lectures, pre-service teachers had studied Bronfenbrenner’s (1979) ecological model, which highlights community influences on children’s development. Thus it is likely that pre-service teachers had some consistent understanding of ‘community’ as it was addressed in this study. However, it is not known if parents had a similar understanding.

Despite some limitations, the results of this study do reflect the views and experiences of our sample and can be used to inform future studies, as well as inform practice in teacher education courses. Our findings suggest that, although the pre-service teachers and parents in our sample thought that building relationships with families and communities was an important aspect of the early childhood educator’s role, the pre-service teachers faced challenges in developing these relationships. Indeed, playgroups may be a useful way for teacher education courses to prepare pre-service teachers for this aspect of their career. Although the sample in this study was situated in a rural Australian community, the findings support other research suggesting that teachers and teacher education programs need to be responsive to communities and families in order to facilitate the best outcomes for children and families (Dockett & Perry, 2008).

**Conclusion**

Teacher education courses need to provide pre-service teachers with support and authentic learning situations to foster their ability to develop relationships with families and communities. Community playgroups are one way this can be done. Giving pre-service teachers these authentic experiences from an early point in their course may equip them with a deeper understanding of why building these relationships is important, and how this can be done in early education settings. Early childhood educators who strive to build meaningful community and family connections will enhance the quality of children’s, families’, and their own experiences in the educational setting.

**References**


Reframing early childhood leadership

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RAPID CHANGES IN AUSTRALIAN education have intensified the role of early childhood leaders and led to unprecedented challenges. The Australian Curriculum (ACARA, 2011), mandated Australian National Quality Framework (NQF) for Early Childhood Education & Care (DEEWR, 2010b) and the National Early Years Learning Framework (EYLF) (DEEWR, 2009) have heightened the need for leaders to guide and move the profession forward. Leaders need to build professional knowledge, pedagogical capacity and infrastructure in the early childhood education and care (ECEC) workforce in order to deliver reforms and achieve high-quality outcomes for children.

Yet research on early childhood leadership remains sparse and inadequately theorised, while the voice of the early childhood profession remains marginalised (Woodrow & Busch, 2008). In this paper I draw on my previous research in leadership and change management which investigated principals’, early childhood teachers’ and teacher-aides’ conceptual and behavioural positions on educational changes in work contexts. I present a model of leadership that connects to practice, builds professional capacity and capability, and recognises the importance of relationship building and quality infrastructure. The model calls for robust constructions of leadership and improved professional identity that will reposition the profession so that it keeps pace with the critical needs of early childhood professionals. Within this model, tertiary educational institutions and professional organisations will play their role in guiding the profession forward as new paradigms evolve and federal and state initiatives begin to surface.

Introduction

Recent national educational reforms and accountability measures have imposed responsibilities on early childhood leaders far beyond their professional training and expertise. No longer is their role predominantly to teach children. Rather, it is to lead with intent, mentor and advocate in their work context, in partnership with children and families, within community settings and in response to federal and state educational initiatives targeting children from birth to age eight years. National mandatory reforms that focus on educational practice demand shared visions, reconceptualisations of pedagogy and practice, and vigorous leadership. Leaders need to develop a shared sense of culture, strategic directions and infrastructure to motivate others to accept change. In this paper, ‘leaders’ are defined as early childhood professionals who share a reciprocal process to pursue changes that lead to a desired future. Rost (cited in Daft & Pirola-Merlo, 2009, p. 4) asserts leadership is an ‘influence relationship’ amongst leaders and followers, who may sometimes be the same people, who are engaged in different roles with varied levels of leadership responsibilities at different times. Leadership is constructed as each person interacts and influences another while contributing to a shared vision. Early childhood professionals who make decisions about educational practice in their work are leaders in their own right.

The recent introduction of a new wave of national reforms in 2010 has once again raised concerns from the early childhood sector on how national and state governments will implement changes in educational contexts and the support structures that will be put in place. Educational reforms such as the Australian Curriculum (AC), mandated Australian National Quality Framework (ANQF) for Early Childhood Education and Care, and the Early Years Learning Framework (EYLF) require specialised professional knowledge of new curriculum documentation for all professionals expected to take on leadership roles and make key
decisions about educational practice. This requires pedagogical leaders to reflect on their professional practice, focus on curriculum decision-making, teaching and learning processes and recognise the importance of nurturing relationships that promote children’s learning (DEEWR, 2009). To date in Western Australia (WA), a process has not yet been articulated nor an infrastructure developed to support those involved in change. There is clearly a need for vigorous leadership in such times of uncertainty.

This paper draws on data from previous research and the literature to develop a model of leadership with the capacity to build professional knowledge and apply it to practice through interpretation, ongoing dialogue and relational trust. Leadership is reframed as a shared responsibility for all early childhood professionals who must tackle educational change. This leadership model challenges those involved in change to build on their pedagogical and professional knowledge and maintain their professional identity. It recognises the fragmented nature of Australian ECEC contexts and the diverse qualifications that exist across the workforce (Ortlipp, Arthur & Woodrow, 2011).

The model acknowledges that leaders’ conduct is situated in their workplace and conditions of employment, and best understood in this context (Hewitt, 1976; Wood, 1982). Its theoretical basis, Symbolic Interaction Theory, concerns the ‘self’ and the interpretative and interactive process within the social system (Mead, 1927). This theory views the ‘self’ as the core from which behaviours, judgements and goals are constructed (Stamopoulos, 2001). Symbolic interactionism captures the ways individuals construct a stance towards change and provides a framework for exploring their perspectives. The stance of pedagogical leaders in respect of changes in their ECEC workplace is important because, as indispensable agents of change, they are capable of enhancing or obstructing its success. The term ‘stance’ in this paper refers to the conceptual and behavioural position adopted by leaders, specifically their beliefs about the change process and their intended mode of accommodating to those changes.

This paper draws on two research studies from the past and reframes the future through the application of an interpretive lens, professional knowledge, professional identity and relational trust. It supports the notion that educational reforms challenge leaders to reconceptualise their practice and follow a radical point of departure from present thoughts and practices (Nelson & Hammerman, 1996). The model prioritises the voice of pedagogical leaders, draws on the cumulative strengths of the early childhood profession, its members and associates to deliver reforms in ways which retain their professional identity and move the profession forward.

Reflecting on the past

History reveals that knowledge drawn from the past can be reflected upon in the present to generate new knowledge that informs the future. In this section of the paper I draw on two previous WA research studies (1992–1995; 1996–2001) that sought to better understand the complexities of leadership and change management along with the stance of individuals towards change. The studies offer a lens through which current educational reforms can be reflected upon to find innovative ways of initiating change outcomes. Anecdotal comments from the early childhood profession suggest that the government mandate to include early childhood teachers in birth–five ECEC contexts may, in its transition phase, challenge pedagogical leaders to seek professional knowledge, reconceptualise their practice, demand quality support structures, and seek guidance from within and beyond the profession. Calls for the upskilling of qualified and unqualified workers in birth–five ECEC contexts have already begun in order to keep pace with educational reforms. How these changes will be re-enacted in practice has yet to be articulated.


In the first research study (1992–1995) I examined the professional background and perceptions of principals on their leadership role in pre-primary. This was in response to the swift implementation of full-day five-year-old pre-primary programs in schools without support or consultation with the profession. During the implementation process there was growing resistance to change from early childhood professionals, parents and the WA community whose voices were marginalised. Data from this study (Stamopoulos, 1995) concluded that all principals drawn from one metropolitan district of the Education Department of Western Australia (EDWA) perceived they lacked the necessary knowledge and experience to provide adequate leadership in pre-primary; they felt pre-primary was specialised and different from the primary school, and revealed they had not been provided with adequate professional development to implement a leadership role.

Examination of the conceptual and behavioural stance of pedagogical leaders towards current educational reforms will be important in determining their success or demise. This process may help minimise the resistance to change that emerged in WA schools in 1994 and culminated in the Western Australian Government releasing a ministerial statement acknowledging that ‘the hurried introduction of full-time preprimary education for only one-third of the children of the state along with the poorly coordinated provision for four year olds is unsatisfactory’ (Moore, 1994, n. p.).
Resistance flared again in 1995 with the Government’s intended changes to the school entry age and its implementation of ‘Good Start’. Professional organisations expressed concerns that changes were based on administrative and economic reasons rather than educational (Ewing, 1997). Once again, the voices of the profession were marginalised, and a culture of mistrust emerged. Concerns were raised that government had not kept pace with the critical needs of staff and the pace of change (Corrie, 1999b). Data from this study was reported in The West Australian, July 12, 1995 (Tan-Van Baren, 1995) amidst community concern about the quality of learning for pre-primary children. Education Minister Norman Moore once again acceded to public pressure and modified ‘Good Start’. Premier Richard Court admitted there had been insufficient consultation with early childhood professionals and parents and that there would be no changes to the school entry age until the year 2000. Once again, a government decision was reversed as a result of the stance of those involved in change. Clearly there was the need for a collaborative process that would re-build a sense of trust.

Research study 2 (1996–2001)

In the second WA research study (1996–2001) I examined the stance of school staff in three independent and three government school settings to understand the beliefs and responses of those involved in change. Symbolic interaction theory was used as a basis of this study because of its primary concern with the ‘self’ and the interpretative and interactive process within the social system (Mead, 1927). The theory maintains that individuals are proactive, in control of their lives, responsible for their actions, and a critical part of the success or demise of any change process (Van den Hoonard, 1997; Wood, 1982; Woods, 1992). Symbolic interaction provides a methodological tool by which we can examine how ECEC professionals interpret leadership and the ways they reflect upon the social and cultural factors within their work contexts (Hard, 2006). This methodology can assist in applying an interpretive lens to current educational reforms and monitoring their progress (Stamopoulos, 2010).

In 1995, WA’s Education Minister Norman Moore’s promise to the community for local access signalled the beginnings of P1 combination classes in WA schools, based on economic reasons. Problems emerged during the implementation process when it was not possible to include all children in pre-primary classes. EDWA directed principals to include multi-grade classes when there were insufficient classrooms. The expectation was that P1 would fit into the school structure. Early childhood specialists, school staff and parents responded to the emergence of P1 combination classes with strong concerns about the rationale behind this change, limited evidence that this approach would provide quality education, and doubts that principals had the capacity to provide early childhood pedagogical leadership.

Data from the study gave voice to staff and identified explicit links between their beliefs and the ways they responded to change. In the opinion of staff, change impacted in some way on job success, job security, job satisfaction and/or job status, and the wellbeing of their students. Most staff who defined change as positive were in schools where there was some kind of leadership, guidance, support structures and/or resources. Those who lacked such supports tended to hold a different view. A clear majority of staff criticised the level of leadership and guidance provided, claiming there was a lack of external and internal support for schools.

It became apparent that the work of leaders was determined by the conduct of those around them and best understood in this context. Their stance was dynamic, complex, multi-faceted, and continuously evolving as the pressures of change forced them to re-evaluate their definition of change and focus on the projected costs and benefits to themselves and their students. The different kinds of relationships they had with others also became the basis for different responses to the same situation. School staff saw themselves as having varying degrees of power within their work contexts, which impacted on the way they behaved. The more positively they regarded their situation, the more they adopted a supportive stance. The more dissatisfied they were, the more they adopted an oppositional stance. In between these extremes were the passive dissenters who quietly withdrew, predicting the change would soon disappear; and the pragmatists who tried to negotiate for better conditions.

Ultimately, approximately two-thirds of staff leaned towards opposing P1 as a change because of the absence of educational leadership; trained early childhood staff; differences in philosophy, power and relationships; and the absence of curriculum guidelines and support structures. In addition to the dominant view, two strong minority views were representative of approximately one-third of staff. One minority view was supportive of this change, endorsing its continuation in its current form, while the other was not convinced that multi-age strategies could be applied only in vertical groupings. School staff reported their stance was ‘situated’ in their workplace

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1 Good Start was initiated to provide quality, developmental programs for all five-year-olds in their pre-primary year by the end of 1998. There was to be a transfer of kindergarten programs from the Department of Family and Children’s Services to EDWA and an adjustment of the entry age for kindergarten children.

2 School staff refers to principals, early childhood teachers and teacher-aides who lead or work in P1 classes.

3 P1 classes in this paper refers to pre-primary (non-compulsory year of schooling) and Year 1 children (compulsory year of schooling) who are combined in the one class for administrative benefits.
Rapid changes in Australia have intensified the role of ECEC professionals creating new pathways for pedagogical leadership to be reconceptualised and ultimately reframed to deliver reforms that achieve high-quality outcomes for children. The transition of early childhood teachers in birth to five contexts, along with the push for pedagogical leadership amongst all professionals who work with young children, will require monitoring so that current reforms meet their intended outcomes. The EYLF clearly stipulates that everyone who works with young children will take on a pedagogical leadership role, foster secure relationships with children and families, and generate curriculum decisions in teaching and learning (DEEWR, 2009). The professional judgement of leaders is considered central to the application of new reforms and the promotion of positive educational outcomes for children (DEEWR, 2010a).

Data from both studies across a 10-year period reported inadequate leadership, professional knowledge, support structures and consultative processes which led to an erosion of trust. Hardy and Palmer (1999) remind us of the limits of individual action and how individuals can become entrapped in webs from the past. The need for governments to understand the conceptual and behavioural positions of those involved in change, and to develop infrastructures that support them, is critical if reforms are to achieve their intended outcomes.

Reframing early childhood leadership: In search of a leadership model

Leaders with vision have the skills and capacity to draw on the best from the past, and to move with clear purpose into the future (Woodrow, 2008). Shared leadership that is inclusive of all those who work with young children will provide multiple perspectives to better understand the change process. Leadership is reframed as a shared responsibility amongst all professionals, tertiary educational institutions, professional organisations and those who work and interact with young children and their families.

This section of the paper targets four aspects of leadership that early childhood leaders need to know, understand and apply in their work: 1) professional knowledge; 2) professional identity; 3) the application of interpretive lenses; and 4) relational trust. Each of these aspects is interrelated and builds capacity in leaders and the early childhood profession to find a model of leadership that best suits their needs. According to Sumson, Cheeseman, Harrison, Kennedy and Stonehouse (2009), early childhood professionals should be entrusted to make sound judgements and initiate change. A brief overview of each aspect is presented here to stimulate future discussion.

Professional knowledge

Leaders who pursue change within their work contexts require knowledge of research, leadership and early childhood pedagogy. Responding to new reforms requires pedagogical leaders to reach consensus and, where warranted, apply change in their work context. Educational reforms such as the EYLF support a culture of professional inquiry where pedagogical leaders come together to examine current practice, review outcomes, generate new ways of thinking, build on professional knowledge and develop confidence (DEEWR, 2009). The model proposed here is conducive to the notion of having integrated services that will draw in a wider group of professional leaders from diverse specialisations. The early childhood leader’s role in developing nurturing relationships within and beyond work contexts, and applying a strong early years’ knowledge base to integrated service delivery, is important.

Mandated educational reforms such as the AC, ANQF and the EYLF require pedagogical leadership from all professionals who work in early childhood education. The mandatory inclusion of four-year-trained early childhood teachers in child care, along with the growing trend for the admission of younger children, will challenge existing pedagogical practice and call for new constructions of leadership. Shared leadership where all personnel interact and influence one another will be important in making decisions about educational practice.

The EYLF articulates the need for pedagogical leadership from all professionals who work with young children. However, a sound understanding of new curriculum reforms is required to achieve this task, along with the identification of those who require new knowledge to perform such tasks. Support structures and ongoing professional learning will be essential. Relationship building and trust will be critical in avoiding the resistance to change that appears to emerge when new reforms are implemented (Stamopoulos, 2003b). However, it should be noted that leaders’ support for change is not always warranted, especially when change is not in the best interests of children, their families, staff and the early childhood profession.

Professional identity

Developing professional identity requires early childhood professionals to think in alternative ways, to reconstruct or reshape who they are, what they stand for and what they want to achieve. ‘If we know who to be, then what
to do falls into place’ (Cunliffe, 2009 cited by Carroll, 2010). No one person holds the key to understanding the complexities of leadership, nor a template for finding the correct answers. Instead, leaders need to create a space in which professional identity can be crafted through ongoing dialogue and reflection. Competence breeds confidence and the knowledge to lead in a successful manner.

Overton’s (2009) research examines the personal and professional identity of teachers to ascertain the implications of ongoing educational change and power relationships on teachers. Disempowerment emerged through the lack of appreciation of teachers’ work; the lack of resources and funding; and lack of support from system management. In research conducted by Stamopoulos (2001), power, relationships, pressure and different definitions of the change process were important factors in determining principals’, early childhood teachers’ and teacher-aides’ responses to change. In numerous instances they moved from empowerment to disempowerment as a consequence of leadership, infrastructure, philosophical difference, power, relationships and pressure from system management. Overton (2009) reveals empowerment was evident through involvement in professional associations, professional development, decision-making processes and length of teaching experience, and warns that the goodwills shared by employers and teachers in the past is in need of repair. The importance of professional identity is critical in the sustainability of the early childhood profession. Professional identity is supported through the construction of our own Early Childhood Australia Code of Ethics (Early Childhood Australia, 2006).

Interpretive lens

There is a need to build a leadership culture that is inclusive of key stakeholders such as government, policymakers, leaders, early childhood professionals, families and communities. An infrastructure that links policy to practice is required. Such an infrastructure needs to be regularly assessed to ensure that quality leadership drives change, reflects sound pedagogical practice, and connects to the needs of children, their family, community and the early childhood profession. Past reflections reveal that resistance to change tends to emerge when reforms do not keep pace with the critical needs of professionals and an interpretive lens has not been applied to the challenges that emerge.

Reforms require the support and leadership of those involved in change. The EYLF signals a need for pedagogical leadership, intentional teaching and professionals who are critically reflective (Surmison et al., 2009). Leaders who nurture reflective capacity in staff have been effective in constructing a shared culture of learning that meets the needs of organisations (Colmer, 2008). The importance of reflection and self-inquiry is seen as an essential component of leadership and change management (Dana & Yendol-Hoppey, 2005; Deakins, 2007). Leaders who apply an interpretive lens are more likely to interpret cause and effect, generate solutions and support others in achieving their goals (Forrest, 2010). In so doing, they build a professional culture that applies reflection and analysis in order to build leadership capacity.

Relational trust

Relational theories explore how leaders and followers relate to and influence each other (Daft & Pirola-Merlo, 2009). Interpersonal relationships are integral to leadership effectiveness because they entice followers to contribute to the change process. Motivation and empowerment, team leadership, and strong communication skills become the basis on which relationships are built. Early childhood leaders respond to the challenges of reforms through their capacity to lead colleagues, families, community and the profession through shared vision, purpose and identity. Evans and Stone-Johnson (2010) highlight the importance of effective networks that promote sharing of professional knowledge, empower teacher leadership and address the agency of teachers. However, they reveal this is often fraught with difficulties when teachers resist surrendering their professional identities to others (Little, 1995, cited in Evans & Stone-Johnson, 2010). The importance of robust leadership in promoting networking during the change process is critical because networking is fragile and complex to sustain. Initiating and sustaining change requires leaders to challenge others to reconceptualise their beliefs and respond in new ways. Alliances formed on the basis of consensus and perceived advantage enable leaders to connect in diverse ways with others that provides greater resilience when faced with challenges.

Connecting with the profession

Current reforms call for stronger constructions of leadership across diverse early years’ settings. Leadership that is both pedagogically focused on young children and sociologically focused on family and the community must interconnect with integrated services for children, families and communities. Nolan, Macfarlane and Cartmel (2010) highlight the need for early childhood professionals to lead integrated service delivery using a strong early years’ knowledge base. Pedagogical leadership can be strengthened through strategies and skills along with inter-professional practice. A critical aspect of leading change is a strong basis of professionalism that supports risk taking. Yet no Australian studies have been located which examine early childhood practitioners’ perspectives of themselves as professionals (Ortlipp et al., 2011).

Avenues through which leadership can be promoted and nurtured are important. My recent participation in Roundtable Discussions specific to early childhood leadership focused on the importance of leadership and research, and discussed how leadership can be
developed within the early childhood profession in ways which give voice to the profession (Semann & Slattery, Macquarie University & Children’s Services Central, 2010). Relationships between leadership, pedagogy and professional identity will also be strengthened with close connections to educational institutions and early childhood professional organisations. A professional culture that connects with early childhood professionals and leaders will assist in developing proactive professionals who face the challenges of the future (Nupponen, 2006).

**Tertiary educational institutions**

Educational institutions responsible for the preparation of early childhood professionals must play their part in developing pedagogical leaders with knowledge of leadership theory and change management, and a commitment to evidence-based research. The topic of leadership should be embedded in undergraduate coursework and early childhood postgraduate leadership specialisations, and grounded in theory, research and practice. Exit pathways that improve the capacity of professionals to gain promotion, enhance their status, draw financial rewards and match the professional aspirations of individuals are more likely to stimulate graduates to take on leadership roles and entice others to access graduate leadership courses. Graduate leadership units can link theory to practice and promote a sense of community between educational institutions and the general community. Internships with mentoring from leaders are important in the training of new leaders (Couse & Russo, 2006).

**Early childhood professional organisations**

The role of early childhood professional organisations in guiding the profession forward is crucial. Peak organisations such as Early Childhood Australia (ECA) currently provide support across Australia in order to guide professionals in the implementation of the EYLF. The construction of the ECA e-forum, e-Newsletter and Facebook site (EYLF PLP, 2011), as well as the recent release of a range of publications that focus on the EYLF, is reflective of the work of ECA as a professional organisation to support its members and move the profession forward.

**Conclusion**

If leadership is to be reframed, it must have a basis of professional knowledge, professional identity, an interpretive frame and relational trust. The early childhood profession’s focus must be on pedagogical leadership that connects to practice, builds professional capacity and capability, and recognises the importance of relationship building and quality infrastructure. However with the sparseness of research in early childhood leadership in Australia, the prospects are not promising. Of added concern is the view that mandated curriculum has resulted in greater control of the early childhood profession and negatively impacted on its capacity to build a strong leadership identity (Woodrow & Busch, 2008). It is disappointing that the Australian Teachers Leading Curriculum Change: Professional Learning Flagship Program (Australian Institute for Teaching and School Leadership) makes no mention of the EYLF in schools and that the profession’s voice would have been nearly silenced if not for the advocacy role of ECA WA Branch. Frameworks that develop pathways for aligning beliefs and professional identity are important in building professional capacity and must be maintained (Raban et al., 2007).

Leadership models must draw on the cumulative strengths of the early childhood profession, its members and associates, and provide scaffolds that achieve quality outcomes (Stamopoulos, 2010). Constructions of leadership are not static but evolve as traditional approaches are replaced with new paradigms. The early childhood profession must swiftly respond to Federal Government initiatives that acknowledge the importance of the early years. Public investment in the infrastructure is required, if pedagogical leaders’ needs are to be established and comprehensive evaluations put in place. Without evaluations, those involved in change often resist what they define as misinformed policy, especially when met with more than one interpretation. In this leadership model it is important that lessons are applied from the past to guide our understandings of human nature and remain in tune with the conceptual and behavioural stance of those who lead change.

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Case management of young children with behaviour and mental health disorders in school

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WHEN YOUNG CHILDREN WITH behaviour and mental health disorders do not receive appropriate specialised support their problems can escalate over time. Their parents find the transition to and early years of schooling stressful and difficult. This paper argues that case management can be an effective strategy for this group of children. Although there is a body of literature on the topic of case management in schools, most of it supportive of this as a strategy, the bulk of the literature consists of policy discussion and anecdotal evidence; there is very little research in the area. This is especially true of the critical area of early childhood and the transition to and early years of schooling.

Background

Educating children who are at risk because of behaviour and mental health problems is an important issue. In Australia there is a commitment from educators, from individual teacher to school and public policy level, to support young children with behavioural and mental health disorders (NSW DET Student Services and Equity Programs, 2000; NSW DET, 2009). Unfortunately, this group of children continues to have very poor social and academic outcomes (Bradley, Doolittle & Bartolotta, 2008; Larmar, 2008). There is a growing body of research showing that the most promising school-based interventions reach beyond the classroom to families and peers (Hoagwood, Burns, Kiser, Ringeisen & Schoenwald, 2001; De Jong & Griffiths, 2008; Larmar, 2008). There is a growing body of research showing that the most promising school-based interventions reach beyond the classroom to families and peers (Hoagwood, Burns, Kiser, Ringeisen & Schoenwald, 2001; De Jong & Griffiths, 2008; Larmar, 2008).

It is challenging for schools to help children with behaviour and mental health disorders reach a level of academic competence and control over their behaviours. This issue is worth addressing, as longitudinal studies have shown that, without support, children’s behavioural/mental health disorders persist over time and often with increasing severity (Malmgren & Meisel, 2004). The association between such problems and later social and academic failure has been made by researchers in education and mental health (Brame, Nagin & Tremblay, 2001; de Jong, 2005b; Larmar, Dadds & Shochet, 2006).

Lack of support for and/or interventions with these children can mean they develop short- and long-term problems. In the short term they are likely to interfere with the learning of other children, disrupt teachers and class instruction, and often demonstrate aggressive, confronting and unsafe behaviours. In the long term, they have reduced high school completion rates, experience poor employment outcomes, are more likely to become involved with juvenile justice system, become involved in substance abuse, and have mental health problems (Wagner, Kutash, Duchnowski & Epstein, 2005; Wagner, Kutash, Duchnowski, Epstein & Sumi, 2005).

Since children with these disorders commonly engage in rule-breaking, and anti-social and aggressive behaviours, they are likely to be treated as school discipline problems and subjected to behaviour management measures rather than being provided with needed services (Forness, Kavale, MacMillan & Asarnow, 1996). Children with behaviour and mental health disorders come to the attention of mental health services later than any other group. That is, they tend to be older than other special needs groups in spite of demonstrating troubling behaviours at a very early age (Hayling, Cook, Gresham, State & Kern, 2008). This late identification makes helping the child and their family more difficult because the disruptive behaviours become routine (Malmgren & Meisel, 2004).
Researchers investigating behaviour and mental health disorders with 145 children from Grades 1–12 found that risk factors rarely occur in isolation and more often tend to cluster (Gutman, Sameroff & Cole, 2003). Children often experience recurring stressors, or risks that that are multi-factorial in nature. If left without intervention, the conditions often become worse (Fraser, Richman & Gainisky, 1999; Gutman et al., 2003). In analyses of multiple risk factors, it is has been found that a single environmental risk factor does not increase the probability of a behaviour or mental health disorder, but rather that a constellation of risk factors or the strength of the cumulating stressors contribute to increased problems (Masten et al., 1999; de Jong, 2005b).

Similar findings were made by Caughey, Nettles & Campo (2007) in a study that examined the impact of community characteristics, and parent/child relationship characteristics, on the behaviour and school adjustment of 362 children in their first year of school. The study used structural equation modelling to estimate the effects of community and parental characteristics on child outcomes. Results indicated that adjustment to school is influenced by a complex interaction between the family and community (Caughey et al., 2007).

Young children identified with behaviour and mental health issues often have relationship problems and aggression. Children who demonstrate early onset physical aggression are more likely to demonstrate adolescent high-level physical aggression (Brame et al., 2001; Broidy, Nagin, Tremblay, Bates, Brame et al., 2003). Conroy and Brown (2004) have asserted that children with behaviour and mental health disorders experience more rejection by peers, increased likelihood of drug abuse, clinical depression and delinquency, and perform poorly at school compared to students with other learning disabilities and their non-disabled peers.

**Transition to school and parenting**

Transition to school is a challenge for many children. For children at risk of/with behaviour and mental health disorders, the challenges can be greater. In a longitudinal Australian study, Margetts (2009) noted a correlation between early adjustment in kindergarten and later (Year 5) success in school. There was a statistically significant correlation on all the subscales of social skills, problem behaviour and academic competence. Success in this transition from the relatively more supported preschool environment to school is critical to children’s ongoing success.

Using a stress scale developed by the researchers, a study of 120 parents of children and young adults (2–17 years) with autism indicated that parents found transitions to different schools and from one year to the next stressful. On a scale of 1–10, with 1 being not stressful and 10 very stressful, the mean for the 120 participants was 7.37 (Newsome, 2000).

The combination of challenging behaviours and transition to school is a time of opportunity and risk. If children with behaviour and mental health disorders can be supported, negative consequences could be ameliorated (Brame et al., 2001; de Jong, 2005b; Larmar et al., 2006). There is evidence that support from health professionals can help. Sanders, Ralph et al. (2008), in an evaluation of a large-scale introduction of a Triple P-Positive Parenting Program delivered in Brisbane, Australia, found a significant reduction in behaviour and emotional problems in children (4–7 years old) whose parents had undertaken the program. They also found that parents were less stressed in their parental role. For the study, parents in Brisbane were used as the intervention group and matched to parents from Sydney and Melbourne who were used as the control. The study used questionnaires and telephone interviews to evaluate the Triple-P program. The trained interviewers telephoned the randomly chosen participants booked into the program before it began, and again two years later (Experimental group n = 1499 T1 and 1504 T2; control n = 1500 T1 and 1500 T2). The parents telephoned in the second interview were not necessarily the same as in the first (Sanders et al., 2008). Many parents can benefit from education about and the opportunity to discuss their parenting.

A large study such as the one above identifies general trends but is not sensitive to individual differences. Generally, parents respond well to support and training regarding their parenting, but not all parents can take advantage of the resources on offer. Some, whose parenting is complicated by their own mental health problems, relationship conflict, substance abuse, or their inability (because of motivation or availability) may not be able to benefit from parenting programs (Sanders et al., 2008) and need more specific and targeted support if they are to help their young children succeed in school (Tough, Siever, Benzies, Leeuw & Johnston, 2010).

The parents of children with behaviour and mental health problems often find their children’s challenging behaviours difficult to deal with and stressful (Braet, Meerschaert, Merlevede, Bosmans, Van Leeuwen et al., 2009). In a study evaluating the effectiveness of a parenting education program (Parent Management Training) for helping parents manage young children (aged 4–7 years) with anti-social behaviour, results indicated that the parents who did the training had less stress and improved parental skills (Braet et al., 2009). Similarly, a longitudinal study by Cooms-Ronto et al. (2009) found that parenting is a complex interaction between the child and parents which, together with parenting style, impacted on the disruptive behaviours. These studies indicate that, with appropriate and ongoing support, parents can learn to manage the relationship and better support their children’s social,
emotional and behaviour development so they can handle the demands of school and especially the transition from preschool to school.

Bradley et al. (2008), in a paper that reviewed the literature and data from two longitudinal studies (Special Education Elementary Longitudinal Study (SEELS) and the National Longitudinal Transition Study-2 (NLTS2)), supported by the U.S. Department of Education’s Office of Special Education Programs (OSEP) found that, although most children with disabilities have better outcomes than in the early 1980s, children with behavioural/mental health disorders have made only small gains (Bradley et al., 2008). Some of the contributing factors were: teachers in the US are often not qualified to help younger children with behavioural/mental health disorders; teachers can have a negative and reactive approach; and these children lack social support and change schools more often. Another factor was that there is little united effort to help children with behavioural/mental health disorders (Bradley et al., 2008). It is plausible that the parents of these children have more difficulty negotiating the complex health and education systems.

In Queensland an early intervention program was developed to address the perceived increase in young children’s conduct problems (Larmar et al., 2006). A randomised control study evaluated the effectiveness post-intervention and again months after it was delivered. The program targeted young (n = 455, aged 4–6 years) children and their families from 10 schools in Brisbane. The schools were matched in pairs on the basis of socioeconomic status and size, and then randomly assigned to the experimental or control group. The experimental group was given the program; the control group received no interventions. Pre-school teachers screened the children at risk of conduct problems. The participating children had no serious physical disorder, developmental disability, or untreated ADHD (Larmar et al., 2006).

The school component of the program focused on developing teachers’ skills in helping children in the areas of communication, friendship formation, socialisation and self-control, and was offered in a one-day training workshop. A parenting program held at home included reflection on parents’ values, beliefs and experiences; skills in handling authority; child development; communication; rules and limits; parent consistency; reinforcing appropriate behaviour and consequences; problem solving and ownership; assertiveness; managing anger; quality time; and self-preservation. The program was offered over three 120-minute sessions (Larmar et al., 2006). The results of the early impact evaluation lend support for the school component of the program in reducing the incidence of challenging behaviour over time, with the experimental group having significantly reduced challenging behaviours when compared to the control group (F [2,236] = 4.28, p < 0.05). Teachers were highly engaged in the program. Parents, on the other hand were less likely to engage, with only 34 per cent attending one of the three training program sessions, with very few (percentage not reported) attending the whole program. There was a significant difference in the father’s education level (F = 5.3, p < 0.05) between the parents who attended and those who did not, with the higher education level associated with more sessions attended (Larmar et al., 2006). Although it appears that this program can be effective, parents need to be engaged in a different way.

Many demands are made on teachers. Their training and expertise is in teaching, not mental health care. They do not necessarily have the time or background to assess, select and implement appropriate behaviour management strategies/therapeutic interventions for children with mental health problems, emotional disorders, or conduct/behaviour disorders etc. (Grossman, 2005).

**Case management**

Gifford, Wells et al. (2010), in a paper describing a service in North Carolina USA, argued that, when children are struggling in school, underlying causes often include physical or behavioural health problems, poverty, abuse and/or neglect. It was proposed that children with behavioural problems are much more likely than others to have lower grades, miss school, be suspended or expelled, and drop out. Access to needed health and human services is critical for these children’s success. The authors’ experience was that available services are often fragmented, making it difficult for families to access and utilise them effectively. It was argued that, given their primary role in children’s lives, schools are a logical base for such coordination (Gifford et al., 2010). Gifford and colleagues went on to describe a successful program in which nurses and social workers collaborated in case management. Unfortunately, this program was not formally evaluated. Clearly, though, the argument that case management can be helpful is worth further consideration.

To explore the literature on case management, the databases ERIC, Education Research Complete, PsychInfo, Sociological Abstracts, CINAHL, Medline and Pub Med were searched from 1990 to the present. The findings from this search seem consistent with other reviews in this area; there is a body of literature mostly agreeing that case management is a useful strategy. The literature, however, is mostly policy discussion and anecdotal evidence. There is a paucity of research in this domain and thus evidence of effectiveness.
In the Australian context, a review has revealed a limited amount of published literature (de Jong, 2005b). De Jong ran a two-round Delphi Method (Linstone & Turoff, 2002) project to build a consensus on what are the principles and practices of case management in schools. The participants were service professionals from the health and education sectors, and included 15 Australians, five from the US and one from the UK (de Jong, 2005b).

A questionnaire addressed the four key areas identified in the literature review. They included: defining effective case management, establishing a system for effective school case management, principles of effective case management, and strategies of effective case management. There were two rounds of data collection/collation. Thirty-three questionnaires were sent out with 21 returns (15 Australians). There was a high level of agreement on 70 per cent of the items in the first round. Only nine people responded in the second round, with a 77 per cent agreement.

The participants in this study agreed that the processes involved in effective case management require high levels of collaboration between all parties. Case management should be guided by five principles: the promotion of the student’s health and wellbeing through empowerment and family involvement; an individualised process; maintenance of legal and human rights, privacy and confidentiality; be non-discriminatory; and exhibit culturally appropriate practice (de Jong, 2005b).

Other authors described similar principles for the delivery of case management services, although with a greater emphasis on the individuality of the child and involvement of the family, especially with younger children (Barrett 2000; Farrior, Engelke, Collins & Cox 2000; Reel, Morgan-Judge, Peros & Abraham 2002; Smith & Prelock 2002). Case management also implies a longer-term relationship with the child and family, it is more than crisis management in that it includes health promotion and illness/disorder prevention (Reel et al., 2002). The individual focus of case management may be helpful in getting the parenting support to the parents of children with behaviour and mental health problems.

Gulchak and Lopes (2007) reviewed the literature on interventions with children with behaviour and emotional disorders from outside the U.S.A. They concluded that there was an established body of literature on interventions with children with behaviour and emotional disorders but there was a paucity of actual research on the topic. This was concerning as research reports the prevalence of behaviour and emotional problems at 22 per cent in the U.S.A. As children with behaviour and emotional disorders mature, the research indicates that they have a very high dropout rate (50%) and are often excluded from school (72%), with these obvious difficulties impacting negatively on their lives, their families and schools (Gulchak & Lopes, 2007).

In an opinion piece Barrette (2000) argued that having a case manager can contribute positively to the outcomes for children with special needs. The author, to argue her case, described a project in which a US college implemented a case management program that used student nurses as case managers for part of their clinical practice. The students were allocated a child for the semester and attended meetings with health and welfare services, schools and the families in their homes. Barrette reported a perception that the families valued the rapport developed with the students. Also, having a case manager (even though they were students) meant that there was better coordination between services, that is schools, individual teachers, health care agencies, health care providers and families (Barrett, 2000).

Although not formally evaluated, the C-STARS model for school-based inter-professional case management was, at the time of publishing in the late 1990s, established in 32 schools across the south-western USA (Smith, Oaks, Washington Univ & Teaching of At-Risk, 1992; Smith, Armijo & Stowitschek, 1997; Smith Jr & Stowitschek, 1998; Stowitschek, Smith Jr & Armijo, 1998). The C-STAR model of case management was developed to maximise the opportunities for children at risk of failure in elementary/primary school. It involved partnerships between schools; community-based agencies that serve families and children residing in the schools’ attendance areas; and universities responsible for preparation of school and community-based professionals. C-STARS defined school-based inter-professional case management as a series of logical and appropriate interactions within a comprehensive service network of schools, social service and health agencies responsible for the wellbeing of common client populations of children and families. These interactions were aimed to maximise opportunities for children and their families to receive a variety of needed services in a supportive, efficient and coordinated manner while empowering parents and guardians (Smith, Oakes et al., 1992). Because each school and its community are unique, each case manager developed a plan suited to the individual, school and community.

In the C-STAR program the school-oriented case manager worked with at-risk children, their families and their teachers to identify the types of help needed, support families to identify and overcome barriers to using that help effectively and intervened directly as necessary to overcome these barriers. The case manager connected families and their children with potential help and facilitated and monitored the delivery of needed services in close communication with
parents, teachers and other case management team members. This is an interesting model and its use seemed to be expanding at the time of publishing in the late 1990s (Smith et al., 1992; Smith et al., 1997; Smith Jr & Stowitschek, 1998; Stowitschek et al., 1998); unfortunately there is no formal evaluation of the project to provide evidence regarding its effectiveness.

In a study that used structured interviews to explore the practices of 20 social workers acting as case managers of children with behaviour and mental health disorders, Werrbach (1996) found social-work-trained case managers had a variety of approaches to their role. Generally they emphasised empowerment of families with a focus on active partnership between case managers and families and acknowledgement of the families’ strengths. In the study the participants were given a case scenario and asked to comment on how they would respond, the data were transcribed and the data analysed for emerging themes. Although this study is small the findings indicated the participants in the study focused on the strengths of the family and worked using a model of collaboration.

A study by Werrbach (2002) described a training program for parent employees of a service that provided case management and wraparound services for children with serious emotional problems. Wraparound service is a term for a model for supporting children with emotional and behaviour problems and involves an intensive case management approach that emphasises aggressive outreach and care that is flexible. It is also child- and family-centred and aims to include all aspects of the child’s life in the planning. This study was limited by a lack of description of the method used.

In the evaluation of a Wraparound Care program in Vermont, the authors found case management could be of use (Yoe, Santarcangelo, Atkins & Burchard, 1996). The program aimed to support children and families with severe emotional or behavioural disturbances. The participants were 40 children/young people referred to the program; their ages ranged from seven to 20 years (85% under 18 years, mean age 16). Many were in care outside their homes (78% in substitute care) and were receiving support to stay in school or in special schools (Yoe et al., 1996). After 12 months of case management, the participants were living in significantly less restrictive environments and exhibiting fewer total problem behaviours. There was no significant change in their truancy, contact with police, suicide attempts, or alcohol use (Yoe et al., 1996). Perhaps if the services had been offered earlier, they would have been more effective in helping these young people.

Parents appreciate being part of the process of their very young children’s transition to preschool. In-depth interviews in a study that evaluated a model of case management indicated that the parents valued being part of the decision-making process (Appleton, Böll, Everett & Kelly, 1997). Participants in the study were parents of 20 children (2.5–3.5 years) with complex needs. The model used a named case manager, a professional chosen by the family, in its aim to empower the parents. The finding that parents appreciate that case management helped them feel empowered is of interest.

Engagement of parents is critical to the success of any strategy that aims to support children with behaviour and mental health problems. Case management by professional mental health workers can both engage parents and help them develop parenting skills and creative ways to work with their child. A study by Colvin, Lee et al. (2008) evaluated a case management approach referred to as a Partners in Prevention program. There were 606 children aged 4–13 years (mean 8.06) referred for a range of problems that included academic issues, emotional difficulties, social issues, and disruptive behaviours. Most frequent were academic issues, followed by emotional problems which included grief over loss of a parent. Commonly the children referred had more than one of these problems. The model of case management was task-orientated; it focused on changing behaviours that impact negatively on school performance. It aimed to engage the child and parents in the identification of goals for change. Interestingly, if there is not an agreement on the goal, the final say is left to the child (Colvin et al., 2008). Results indicated a statistically significant improvement on all measures, including school academic results and behaviour as reported by teachers and parents (Colvin et al., 2008).

In Australia approximately one-quarter of the approximately 14 per cent of children with mental health problems receives professional help (ABS, 2007). Because schools have a significant role in the lives of young people, the Australian Guidance Counselling Association and the Australian Principals’ Associations Professional Development Council established a national Australian initiative called MindMatters Plus in 2002. It aimed to improve the capacity of secondary schools to cater for students with high support needs in health and wellbeing (De Jong & Griffiths 2008) and to improve mental health outcomes for all children and young people. One of the objectives was to establish case management for adolescents with mental health problems. Further, the Australian Ministerial Council on Youth Affairs established the Student Behaviour Management project in 2003 in response to concerns about discipline problems in schools (de Jong, 2005a). The project reviewed behaviour management projects in government and non-government schools across Australia and New Zealand. Only 20 per cent of the programs had any formal evaluation. De Jong concluded there is a lack of ‘hard’ evidence of what works (2005a).
With reference to schools in particular, de Jong (2005a; 2005b) highlighted four main reasons case management should be applied in these settings: 1. Case management offers a coordinating mechanism; 2. Case management empowers the student and all stakeholders to participate collaboratively; 3. Case management encourages clearer processes of accountability; 4. Case management contributes to the successful retention of students with high support needs (de Jong & Kerr-Roubicek, 2007).

Conclusions

In Australia there is a commitment from educators, from individual teacher to school and public policy level, to support young children at risk. Schools and preschools have strategies in place to support some children with special needs; for example, children with developmental disabilities and children with long-term physical health problems. For children with behaviour and mental health disorders, it must be noted that schools and preschools do attempt to support all students, but teachers are not mental health professionals and their understanding and skills are limited. Unfortunately, many of these children’s needs are not well met in the early years of schooling. If children with behaviour and mental health disorders are not identified until later grades, then helping them can be much more difficult as their behaviours are more entrenched. Existing school psychologists or counsellors in most states have high workloads and, although usually heavily involved with such students, case management is beyond their role.

The research presented above would suggest that children with behaviour and mental health disorders are likely to benefit from case management by clinicians with expertise in child and youth mental health, and further investigation is warranted. This assertion seems consistent with the commitment of respective departments of education to intervene early with children at risk.

There seems to be a consensus in the literature (although with little hard evidence to support it) that case management should be seen as a long-term commitment to effecting change. It is more than immediate crisis intervention and it should include not only the child but also support for the family, teachers and school, as well as coordinating other services. It is proposed in the literature that school-based case management not only benefits identified children and their families but has a flow-on benefit to society in potentially reducing costs associated with unemployment, ongoing mental health problems, delinquency, and reduced productivity.

References


Introduction

Starting school is an important event in the lives of young children and their families, and can be complicated by food allergy, because of the increased risks due to the allergy and the accompanying uncertainties surrounding children’s safety outside the home.

Food allergy is a type of health condition in which young children develop an allergic reaction to commonly available foods such as cow’s milk, eggs, peanuts, tree nuts and seafood, even when consumed in small amounts. The reactions can be mild—with sneezing, watery eyes, welts, and swelling of the face and mouth—or severe, involving breathing difficulties and collapse leading to fatalities or near-fatalities, a condition known as anaphylaxis (Teufel et al., 2007). At present, there is no cure for food allergy or anaphylaxis, and therefore the recommendations are to avoid potentially dangerous food/s, and administer the adrenaline auto-injector (known as EpiPen® or AnaPen® in Australia) in the case of anaphylaxis (Bertine, Block & Dubois, 2009).

Unsurprisingly, parents and children affected by food allergy experience high levels of anxiety owing to the potential risks and consequences (Cohen, Noone, Munoz-Furlong & Sicherer, 2004; Hu & Kemp; 2005; Lyons & Forde, 2004; Sanagavarapu, 2004; Sicherer, Noone & Munoz-Furlong, 2001) and tend to restrict social activities for the sake of children’s safety, which obviously compromises the families’ and child’s quality of life (Cohen et al., 2004; Primeau et al., 2000; Sicherer et al., 2001).

Most importantly, the risks of food allergic reactions increase outside the home, and about 85 per cent of deaths caused by anaphylaxis happened away from the home environment (Bock, Munoz-Furlong & Sampson, 2007). Even within an environment where the primary focus is on children and their welfare, adequate measures to manage this complex condition may not be in place at all times. While young children are exposed to many risks, such as road accidents, the fear of an unpredictable death from a food allergy is highly stressful (Kemp & Hu, 2008). It is understandable that parents and children may have significant and valid concerns about starting school and that parents, being necessarily highly vigilant, will be anxious about leaving their child in the care of others.

The number of children with diagnosed food allergy attending Australian schools is increasing. For example, in the ACT, one in 30 children has a diagnosed nut allergy at the time of starting school (Klijakovic et al., 2009). However, the arrangements for managing food allergy in some Australian schools are inadequate...
Food allergy and anaphylaxis: its prevalence

Food allergy is the body’s adverse reaction to natural foods, such as cow’s milk, eggs, peanut, tree nuts (e.g. walnuts, cashews), sesame seeds, fish, shellfish (e.g. prawn, lobster), wheat and soy (Anaphylaxis Australia Incorporated, n.d.). It is often confused with food intolerance, irritable bowel syndrome and other gastric symptoms (Teufel et al., 2007). But, food allergy reactions involve immune system responses, and anaphylaxis is ‘a severe, life threatening, generalized or systemic hypersensitivity reaction’ (Sampson et al., 2006, cited in Kastner, Harada & Waserman, 2010, p. 435) and is also ‘a serious allergic reaction that is rapid in onset and may cause death’ (Johansson et al., 2001, cited in Kastner et al., 2010, p. 435). In the case of anaphylaxis, children need prompt administration of the lifesaving adrenalin auto-injector. The instructions on how to handle a food allergy emergency or anaphylaxis are set out in an Action Plan for Anaphylaxis, prepared by an immunologist or general practitioner. Most allergic reactions are mild to moderate and do not require an adrenalin auto-injector, and about 20 per cent of the reactions that occur in child care or school settings are minor (Sicherer, Furlong, Munoz-Furlong, Banks & Sampson, 2001, cited in Hu & Kemp, 2005). But the concern with anaphylaxis is that it is difficult to predict when a mild or moderate allergic reaction will progress to being life-threatening. Anaphylaxis can be difficult to identify, owing to the variations in its symptoms (Kastner et al., 2010).

Food allergy is increasing in Australia, particularly in infants and preschool-aged children (Kemp & Hu, 2008; Kljakovic et al., 2009). Despite the constraints in undertaking research studies on the prevalence of food allergy, because of small sample size, and reliance on skin-prick test and parental reports (Osborne et al., 2011), a few recent Australian studies indicated that one in 10 infants studied in Melbourne have diagnosed food allergy to peanuts, egg, and sesame seeds (Osborne et al., 2011) and that about 3.3 per cent of the 3739 preschoolers studied in Canberra had a peanut allergy (Kljakovic et al., 2009). Currently it is estimated that, nationally, one in 20 children suffers from severe food allergic reactions (Anaphylaxis Australia Inc). While fatalities among preschool children are rare, the risks are greater for school-aged children (Kemp & Hu, 2008).

The explanation for the higher prevalence of food allergy in young children seems to be a combination of limited immunity in childhood years (van Putten et al., 2006), increased exposure to novel foods (van Putten et al., 2006), and lack of exposure to germs that leads to lower immunity known as hygiene hypothesis (Yazdanbakhsh, Kremsner & van Ree, 2002).

While the explanations for the increasing prevalence of food allergy in children are varied, the consensus among researchers is that effective management of food allergy is paramount in saving lives (British Columbia, 2005). Consequently, Australian educators have a duty of care that requires them to understand food allergy, take it seriously, and manage it effectively in a school or prior-to-school setting.

Psychosocial impacts of food allergy on children and their families

Food is not just a medical or health issue; it has many economic and psychosocial consequences for families, children and communities. The economic costs of managing food allergy for societies can be enormous. Although currently there are no clear measures to understand these costs (Miles, Fordham, Mills, Valvorta & Mugford, 2005), in Australia, the costs to communities to manage food allergy are estimated to be 10 billion dollars (Australasian Society of Clinical Immunology & Allergy: ASCIA, 2007). There are also many psychosocial and cultural consequences, which are more difficult to measure.

Food allergy can have a direct effect on people’s psychological wellbeing via biological or chemical reactions triggered by an allergic reaction, and an indirect effect through the stresses of coping with the allergy (Kelsay, 2003). In the case of children, the effects are also transferred through parents’ stresses and coping mechanisms. Therefore, to understand the impacts of food allergy on people holistically, researchers need to adopt a ‘bio-psychological perspective’ that emphasises understanding food allergy from both biological and socio-cultural perspectives (Engle, 1977, cited in DunnGalvin et al., 2006, p. 1337).

While the focus of research in initial studies of food allergy was on understanding the signs and symptoms,
risk factors, and prevalence and diagnostic methods (e.g. Bishop, Hill & Hosking, 1990; Burks & Sampson, 1992; Sampson & Albergo, 1984), in recent studies there is an increased focus on understanding the psychosocial implications for families’ and children’s daily lives (e.g. Bollinger et al., 2006; Cohen et al., 2004; Primeau et al., 2000; Sicherer et al., 2001).

The literature indicated that parents need to scrutinise food labels and avoid cross-contamination of foods, and that they tend to put restrictions on social activities, such as eating in restaurants and travelling, to avoid children’s exposure to potential risks (e.g. Avery, King, Knight & Hourihane, 2003). Further, parents experience higher levels of anxiety over the increased risks in out-of-home contexts (Akeson, Worth & Sheikh, 2007; Bollinger et al., 2006; Cohen et al., 2001; Kemp & Hu, 2008; Komulainen, 2010; Primeau, et al., 2000; Sanagavarapu, 2004; Sicherer et al., 2001). As a result, some parents opt to home-school their children (Bollinger et al., 2006), and others refuse to send their children to birthday parties or on school excursions (Primeau et al., 2000).

The impacts of food allergy on mothering were also highlighted, with the burdens tending to increase when mothers lack support from extended families or communities (Sanagavarapu, 2004). Mothers characterised their lives as ‘living with risk, living with fear, worrying about children’s well being, relying on resources and support networks, looking for control in their lived experiences and described their mothering as hard in some respects but it is not in other respects of caring for a child with food allergy’ (Gillespie, Woodgate, Chalmers & Watson, 2007, p. 33).

Other daily concerns for families are related to children’s poor nutritional intake, sleep difficulties, and management of health conditions and illnesses, such as diarrhoea, asthma, eczema, dermatitis, allergic rhinitis, eating problems and gastric disorders (Bertine et al., 2009; Bollinger et al., 2006; Komulainen, 2010; Hu & Kemp, 2005)—with all these issues having a significant impact on both families’ and their children’s emotional wellbeing or quality of life (Cohen et al., 2001). The quality of life is defined as ‘the individual’s perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns’ (World Health Organization, 1993, cited in Bertine et al., 2009, p.133). Health-related quality of life, on the other hand, is defined as ‘the effects of an illness and its consequent therapies upon a patient as perceived by the patient’ (Meltzer, 2001, cited in Bertine et al., 2009, p.133).

Food allergy impairs children’s quality of life. Children reported issues with emotional wellbeing and their participation in school and other activities (Bock et al., 2007). Research with adolescents indicated that children with food allergies had higher levels of anxiety compared with their peers without allergies (Lyons & Forde, 2004) or with children with diabetes (Avery et al., 2003) or rheumatological diseases (Primeau et al., 2000). They also expressed feelings of insecurity and fear and were concerned that other people may disregard the seriousness of food allergy (Lyons & Forde, 2004). Adolescents reported psychological distress and ill-health including headaches, gastric problems, and dizziness (Sweeting & West, 2003). The common theme of their concerns was the constant need for vigilance over foods and their safety. Further, children did not like the extra attention that food allergies imposed and wanted to live normally (Marklund, Wilde-Larsson, Ahlstedt & Nordstrom, 2007). While there appears to be no Australian research on these issues, the evidence from overseas studies indicates that food allergy impairs both children’s and their families’ quality of life, with the restrictions it imposes on their social life and the need for constant vigilance and safety (Bock et al., 2007; Lyons & Forde, 2004; Sicherer et al., 2001). The quality of life of both parents and children is further diminished if children have other food-related diseases such as gastric symptoms, sleep disorders and so on (Marklund, Ahlstedt & Nordstrom, 2006).

While the psychosocial effects of food allergy are universal, its effects on children’s health and emotional wellbeing are varied by the child’s gender. For example, adolescent girls scored lower on health-related quality measures compared with boys (e.g. Marklund, Ahlstedt & Nordstrom, 2004, cited in DunnGalvin et al., 2006; Sweeting & West, 2003). Furthermore, the literature indicated that the psychological effects of food allergy can be varied by individual factors such as people’s self-efficacy and their perceptions of health (Gecas, 1989, cited in Lyons & Forde, 2004).

Despite the variations in the effects of food allergy relating to background factors, the conclusion from many studies is that it affects both children’s and their families’ quality of life (e.g. Bertine et al., 2009). The next section explores the impacts of food allergy on children’s experiences of starting school, as this is an important milestone in young children’s and their families’ lives.

**Implications of food allergy for starting school**

The literature suggests that parents’ fears and anxiety can intensify during children’s starting school (Mandell, Curtis, Gold & Hardie, 2002), because of the increased risks of food allergy outside the home (Bock et al., 2007) and in group care situations such as child care or school (Komulainen, 2010) and, as a result, transition to school...
can be ‘anxiety provoking’ (Gillespie et al., 2007, p. 34). Concurrent with the parents’ fears, the arrangements for management of food allergy were noted to be inadequate in some schools in Australia (Boros et al., 2000) and elsewhere, for example in Scotland (Rankin & Sheikh, 2006, cited in Kastner et al., 2010). Importantly, some young children who start school at the age of four-and-a-half years (the starting age for schools in NSW) may not be able to tell their teacher immediately that they have an allergic reaction, but any delay in treatment could have serious consequences. For these reasons, it is not surprising that parents who tend to be highly vigilant will be anxious about leaving their child in the care of others.

People’s increased awareness of food allergy, along with improvements in food-labelling systems in Australia, should ease parents’ anxiety, yet having to hand over the responsibility of affected children to others can still be quite stressful (Kemp & Hu, 2008), especially when transitioning from home to child care or school.

Starting school is an emotionally exhilarating event and the common feelings associated with it are excitement, anxiety and fear. Children’s first experiences of transitions can have a profound impact on their psychological adjustments and later academic success (Alexander & Entwisle, 1988; Brooker, 2008; Hamre & Pianta, 2001; McClelland, Morrison & Holmes, 2000; West, Sweeting & Young, 2008). When beginning school, children are required to make many psychological, social and emotional adjustments. For example, they need to understand the rules of school, make new friends, learn to play cooperatively with peers, know the facilities and communicate their needs and concerns, learn to relate to their classroom teacher and other adults, and to be independent and self-reliant in a school setting (Perry, Dockett & Howard, 2000). Transition to school is a very complex process for children, and therefore for their families (Perry et al., 2000; Perry, Dockett & Nicholson, 2002; Sanagavarapu & Perry, 2005; Sanagavarapu, 2010).

Starting school can be even more complicated for families affected by children’s food allergy, owing to the added issues surrounding their safety and health in a school setting. First, schools may not be totally safe if children are exposed to potential allergy-causing foods brought in by other children or adults. Second, parents worry that they can be perceived by the school community as paranoid and overprotective, their child may be singled out in relation to his/her special dietary needs, their child may not be able to take part in all school and educational activities involving foods and that their child may succumb to peer pressure to eat allergy-inducing foods. Third, issues of nutritional intake and growth and development (Christie, Hine, Parker & Burks, 2002) as well as illnesses can impair the children’s socio-emotional development and cognitive processing abilities (Marshall, Hara & Steinburg, 2000), with consequent impairment to their adjustment to school.

‘Parents who perceive a child as frail or vulnerable may be overly protective’ (Currie, 2005, p. 118). This could impact on children’s ability to operate individually and their social adjustment at school, and can also lead to behavioural problems (Currie, 2005).

The excitement associated with starting school can be replaced by anxiety and fear for these children and families. However, there is no research in Australia and elsewhere that specifically investigated the implications of food allergy for starting school, although previously a few studies investigated the arrangements for food allergy management in schools (Boros et al., 2000; Young, Munoz-Furlong & Sicherer, 2009). Therefore it is vital to explore the scope for research on starting school with a food allergy.

Implications for research and school communities

Understanding the concerns and support needs of families and children affected by food allergy can provide educators with guidance on supporting their smooth transition to school. The ecological theoretical framework (Bronfenbrenner, 1979) acknowledges that enabling a smooth transition to school is a responsibility shared between educators and families and that ‘children are part of a larger social system at the transition to school’ (Niesel & Griebel, 2006, p. 23). It further highlights the importance of support from the school community in easing families’ and children’s anxiety. This support can be interpersonal, through communication, or instrumental (Hanlin, 1991), for example through the provision of information on the prevention and management of food allergy at school and the incorporation of special dietary and health needs of children in school activities.

The health and wellbeing of children affected by food allergy in a school setting is dependent on educators’ knowledge; therefore they need training on food allergy management and emergency treatment. While risk of a food allergic reaction can be reduced, it can never be totally removed. It is now mandatory for all school teachers in Victoria and Western Australia who have a child at risk of anaphylaxis in their care to be trained in the prevention, management and emergency treatment of food allergy and anaphylaxis. The training is available in both face-to-face and online modes, although the former is preferred by the Australasian Society of Clinical Immunology and Allergy (ASCIA) and Anaphylaxis Australia Inc. The Anaphylaxis e.training is available for educators in school and prior-to-school settings in Australia and New Zealand, at no cost. It is
developed by the ASCIA, in liaison with the Western Australian and New South Wales (NSW) health departments, and will be of help to educators before completing face-to-face training (ASCIA).

As well, there are guidelines for the prevention of food allergic reactions in all schools and childcare centres in Australia (ASCIA and state departments of education and early childhood) which provide details on how to prevent and respond to food-related emergencies in all government and non-government schools (Hu & Kemp, 2005).

Parents can feel confident to leave their children at a school or prior-to-school setting if they know that educators are knowledgeable about food allergy and can handle food-related emergencies. While there are guidelines to manage food allergy, it is not yet clear whether parents are aware of their existence and their views might be on the efficacy of those guidelines.

Hence, research on starting school with a food allergy is urgently needed in Australia; it is important that researchers and schools understand parents’ concerns and support needs in relation to starting school, along with children’s perspectives (Fargas-Malet, McSherry, Larkin & Robinson, 2010).

Such research resonates with the current emphasis on the promotion of children’s health in the early childhood years (Almqvist, Hellnas, Stefansson & Granlund, 2006). The issues faced by families and children with food allergy are acknowledged by both state and federal governments in Australia, and management of Anaphylaxis across the nation was a major point of Federal Parliament discussion in 2006 (Anaphylaxis Australia Incorporated). Further, there is a proposal to support a national policy for children’s services and schools in the management of Anaphylaxis (Anaphylaxis Australia Incorporated). In light of this, research on starting school with food allergy in Australia is urgently needed, findings from which will enable educators to provide for children’s present and future health and wellbeing.

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Children’s strategies for making friends when starting school

Susan Danby
Catherine Thompson
Maryanne Theobald
Karen Thorpe
Queensland University of Technology

STARTING SCHOOL IS A CRITICAL and potentially stressful time for many young children, and having supportive relationships with parents, teachers and peers and friends offer better outcomes for school adjustment and social relationships. This paper explores matters of friendship when young children are starting school, and how they initiate friendships. In audio-recorded conversations with researchers, the children proposed a number of strategies, including making requests, initiating clubs and teams, and peer intervention to support a friend. Their accounts drew on social knowledge and relational understandings, and showed that having someone, a friend, to play with was important for starting school. Children gave serious attention to developing strategies to initiate friendships.

The value of friends and peer relationships in starting school

Friends provide social support and protection against the difficulties of starting school (Dunn, 2004; Dunn, Davies, O’Connor, & Sturgess, 2001). Being a member of a peer group suggests young children ‘doing things together’ (Corsaro & Molinari, 1990, p. 221) and opportunities for shared social interaction. On entering school, children who have friends already, and who have high levels of peer acceptance, have a better adjustment than those who do not (Johnson, Ironsmith, Snow & Poteat, 2000). They seem to enjoy school more and adjust better if they have friends, according to children’s own reports of how much they like school (Diehl, Lemerise, Caverly, Ramsay & Roberts, 1998; Ladd, 1990; Tomada et al., 2005). On the other hand, children who are rejected by their peers at school are more likely to participate less in classroom activities, report feelings of isolation, indicate that they do not want to go to school, and achieve less (Buhs & Ladd, 2001).

The growing attention on how children experience the transition from preschool to formal schooling informs understandings of children’s everyday experiences and can support transition practices. The focus on school
transitions has been investigated through a variety of theoretical positions. For example, a number of studies use sociometric assessments, surveys, tasks and assessment tests to evaluate academic achievement, and emotional, social and moral development (Buhs & Ladd, 2001; Diehl et al., 1998; Dunn, 2004; Dunn, Cutting & Fisher, 2002; Rubin, Fredstrom & Bowker, 2008). An increasing number of studies examine transition to school through a theoretical lens interested in understanding the children’s collaborative work of peer culture. These studies aiming to understand the significance of the peer relationship use observations of friendship dyads and groups (Corsaro & Molinari, 2000; Dunn, 2004; Dunn et al., 2002). Studies also are asking teachers and parents to report on their children’s transitions to school (Dockett & Perry, 2004; Fabian, 2000; Peters, 2000). Some studies identify the transition to school phase as an ‘anchor point’ (Koizumi, 2000), and indicate the importance of preschool ‘priming events’ such as preschool routines that help children to understand school culture (Corsaro & Molinari, 2000). Other studies ask children about their experiences of starting school (Dockett, 2004; Dockett & Perry, 1999, 2001; Fabian, 2000; Peters, 2000) and invite them to represent their experiences in drawings (Einarsdottir, Dockett & Perry, 2009). Many of these studies offer suggestions about how schools, parents and teachers can offer prevention programs and build strategies to support individual children (Fabian, 2000; Koizumi, 2000; Ladd, Birch et al., 1999).

Despite the interest in children’s transitions to school, the focus predominantly has remained on what adults can do to integrate children into school life, and only a few studies have explored the children’s own accounts of how they initiated and managed friendships and peer relationships in the first few weeks of school life. In this paper, we draw on children’s accounts to examine their standpoints on matters that concern them (Mayall, 2000) and found that they presented a wide range of strategies describing how to make friends. Similar to Dockett and Perry’s (1999, 2005) Australian Starting School Research Project, and Yeo & Clarke’s (2005) study of children in Singapore, we found rich descriptions and accounts of how the children initiated and built friendships. Their accounts showed their social knowledge and relational understandings related to having friends for starting school.

Data and method

This paper draws on data collected from a study of children’s friendships and their social networks that investigated their experiences in their beginning weeks of school in urban and regional settings. Children were aged four to six years and enrolled in Year 1 (the first formal year of schooling) classrooms in Queensland, Australia. Parents and children who were starting formal schooling for the first time were invited to participate in the study. The data have been de-identified through the use of pseudonyms and removal of identifying information.

Four researchers and 162 children were involved in the study that included video-recordings of classroom interactions, and child-initiated drawings and conversations. From this larger study, the data used for this paper were drawn from the audio-recorded conversations, approximately 30 minutes long, in small groups of up to six children at a time, within their first few weeks of the school year. As the aim of the conversations was to understand children’s recent experiences of transitioning to school, we asked them to talk about these experiences. They discussed a range of matters, including strategies they used to initiate social contact. We focus specifically on those strategies in this paper.

In line with work by Theobald (2012) and Pomerantz (2005), our interest was not on the accuracy of the children’s memory but rather to uncover their ‘interpretations, aims and concerns’ (Pomerantz, 2005, p. 93) related to their first days of school. The focus, in this instance, was on strategies for supporting peer and friend relationships. We cannot know, in practice, how the children actually engaged with each other, but we can highlight the work of both the interviewer and respondent in making sense of the cultural and social activity involved when building peer and friend relationships.

The first analytic step, often used in qualitative research (Corsaro, 1979; Genishi, 1982; Silverman, 2007), was to transcribe the audio-recorded conversations with the children. A transcript is a visible and accessible piece of data to which others have access (Peräkylä, 1997; Silverman, 1993). Audio-recordings offer the researcher the opportunity to study the transcripts repeatedly, and others can study the transcribed data ‘to make of it what they could, if, for example, they wanted to be able to disagree’ (Sacks, 1984, p. 26). Second, we selected for analysis all segments of the transcribed talk where the children described strategies they used to initiate friendships. These segments were categorised into different types of strategies, and the initial sorting process led to some changes so that categories were combined or segments moved from one category to another. Third, we selected for analysis those extracts that represented clearly the predominant strategies identified and discussed by the participants.

This paper uses an interpretative approach grounded in the sociology of childhood studies to understand the children’s strategies as they actively constructed friendships (Corsaro, 1985, 1997; Dunn, 2004; Waksler, 1996). This theoretical approach is based on principles
that recognise the agency of the child (Hallett & Prout, 2003; James, Jenks, & Prout, 1998; Prout & James, 1990; Johnson, 2010; Mason & Danby, 2011; Speier, 1982; Waksler, 1996). Analysis examines the children’s descriptions of friendship, and their accounts to show how they initiated and built social and peer membership. In this way, our study reflects earlier studies that draw on an ethnographic interview approach interested in children’s everyday experiences to provide rich insights of their social processes of friendship and school transition (Christensen & James, 2000; Corsaro & Molinari, 2000; Danby, Ewing & Thorpe, 2011; Hagerman, 2010).

The research conversations

In the research conversations, we first asked the children about how they felt about starting school. The conversation then moved to friends at school, with specific questions including ‘What is a friend?’ and ‘What sorts of things do friends do at school?’ The conversation began with a general statement by the researcher: ‘We’re really interested to know about friends at school’. We specifically introduced the topic of friends in this way, as this construction does not suppose that the child does or does not have friends. We next invited the children to ‘tell us about school’, with specific follow-up questions, including ‘What can you tell us about starting school?’ and ‘What was the best and worst thing about starting school?’

Table 1 outlines the children’s perspectives on starting school, with children describing a wide range of responses from eager and excited to apprehensive and frightened.

A more detailed understanding is evident in the transcripts of the conversations, where the children’s accounts highlight their key strategies for constructing new friendships and building peer interaction. Excerpts from these transcripts are discussed below. Children reported strategies including finding someone they knew from their previous experiences before coming to school, and joining in peer-initiated play activities before asking someone’s name. We discuss the three main strategies: making requests, initiating clubs and teams, and child intervention to support a peer.

Making requests

In the extracts below, we show how children made requests to be a friend and to participate in play. It is not possible to show the accounts of all children who participated in the research, so we have used those extracts that most clearly show the children’s perspectives.

In Extract 1, as in many of the accounts offered by the children, we see how the activity of play features strongly in descriptions of making friends, making it a serious concern for the children.

Table 1. Feelings about starting school and strategies for making friends

<table>
<thead>
<tr>
<th>Feelings about starting school – Emotions</th>
<th>Best things about starting school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scared</td>
<td>Meeting old friends</td>
</tr>
<tr>
<td>Nervous</td>
<td>Making new friends</td>
</tr>
<tr>
<td>Shy</td>
<td>Learning</td>
</tr>
<tr>
<td>Excited</td>
<td>New playground</td>
</tr>
<tr>
<td>Good</td>
<td>Playing games</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Worst thing about starting school</th>
<th>Finding new friends</th>
</tr>
</thead>
<tbody>
<tr>
<td>New class</td>
<td>In the playground</td>
</tr>
<tr>
<td>New teacher</td>
<td>In the classroom</td>
</tr>
<tr>
<td>Going every day</td>
<td>In clubs/teams</td>
</tr>
<tr>
<td>Hard work</td>
<td>At lunch</td>
</tr>
<tr>
<td>Leaving Mum</td>
<td>Having conversations</td>
</tr>
<tr>
<td>Fear of having no friends</td>
<td>Asking names</td>
</tr>
<tr>
<td>Thought work would be too hard</td>
<td>Joining in</td>
</tr>
<tr>
<td>No-one would play with me</td>
<td>Teacher gave us name badges</td>
</tr>
<tr>
<td>Had the wrong lunch</td>
<td>Buddies helped</td>
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<tr>
<td>Different people</td>
<td>Existing friends</td>
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<td></td>
<td>From out of school</td>
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<td></td>
<td>From pre or prep</td>
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<td></td>
<td>Friends in higher grades</td>
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<tr>
<td></td>
<td>Role of siblings, cousins, twin</td>
</tr>
</tbody>
</table>

Extract 1. Aaron (G2 ph 2, 276/04)

Researcher: You felt good. Why did you feel good?
Aidan: Meeting new friends.
Researcher: Meeting new friends, was that fun?
Aidan: Yep.
Researcher: Was it hard meeting new friends or was it easy?
Aidan: Pretty hard.
Researcher: Pretty hard. How did you go about meeting new friends?
Aidan: Good.
Researcher: What did you do to try and finds friends?
Aidan: Play with them.

In Extract 1, Aaron says making friends is ‘pretty hard’ but, once achieved, it feels ‘good.’ The actions of asking and being asked require the serious business of actively choosing, or not choosing, a friend. As Denzin (1982) points out, children need to work at ‘construction
rules of entry and exit into emergent social groups’ (p. 192). These matters are serious ones for children (Danby, 2005; Denzin, 1982). In Aaron’s view, play is the medium through which friendships are made.

In Extract 2, we see how Anna, who had moved schools to start the new school year, first displays her main concern (‘I won’t make any friends’) and then she describes how she went about initiating friendship.

**Extract 2. Anna (G1 ph 2, 210/07)**

Researcher: *Can you remember when you started school in Grade One? What was it like?*

Anna: *I was a bit nervous."

Researcher: *What were you nervous about?*

Anna: *I won’t make any friends. Nobody will be my friend."

Researcher: *And what happened?*

Anna: *I did have some friends."

Researcher: *How did that happen?*

Anna: *I asked ‘Do you want to be my ...’ And then, I found out who they played with, and asked if they want to be my friend, and they said ‘Yes I do.’ And then we go off and play together."

Researcher: *How did that make you feel then about school?*

Anna: *Happy."

Researcher: *So making friends was an important part of coming to school? Did the teacher help you to make friends?*

Anna: *No, I did it."

In Extract 2, Anna discloses that, as she had recently moved schools to start the new school year, that she was ‘a bit nervous’, and her concerns were that she won’t make any friends and that ‘nobody would be my friend’. Her use of ‘nobody’ displays her high level of concern (Pomerantz, 1986). Later, when asked by the researcher about how she made friends, Anna indicates that she was ‘happy’ as she was able to ‘go off and play together’. In this account, Anna introduces her strategy of ‘asking’ several members of an already formed social grouping. First, she asked one member, and then she asked the friends of that member, producing a snowballing action. Anna takes all the credit for this strategy, disagreeing with the researcher’s question that the teacher might have helped.

In Extract 3, Leon identified the pragmatic nature of making friends. He describes that there needs to be a ‘fit’ or ‘match’ for friendship, and a period of ‘trying them out’.

**Extract 3. Leon (G2 ph 2, 271/14)**

Researcher: *How do you make friends?*

Leon: *If you don’t know them maybe if you changed, don’t want to be there for them, try them out if you want to be their friends."

Researcher: *How do you try to be their friends? What do you do when you try to be their friends?*

Leon: *Ask."

Researcher: *You ask?*

Leon: *Yeah. And they said yes or no."

Leon suggests that making friends is a serious matter requiring some thought and decision-making. Within Leon’s account is the implication that friendship is more than being together or sharing some activity; it is about being a ‘match’. While it is not possible to know exactly what Leon was considering, it is possible that the match could involve shared interests, and perhaps liking someone for their particular qualities.

Extract 4 also shows that making friends is undertaken strategically. Here, Wilson indicated that it wasn’t something to be achieved instantly;

**Extract 4. Wilson (G1 ph 2, 173/04)**

Wilson: *I asked people if they wanted to play with me and they would."

Researcher: *How did you find Wal to be your friend?*

Wilson: *Because I asked everyone their names and they told me."

Researcher: *Yeah, and what made you pick Wal to be a special friend? Were you his friend right from the very first day you started here or did it take you a little while to get to know each other?*

Wilson: *It took a little while to get to know each other."

Here, Wilson’s comment that ‘it took a little while to get to know each other’ might imply that it took some time to meet up with a friend, but another understanding is that it took some time to connect as friends. In other words, it takes time to develop a friendship as making a friend is more just being together. Wilson’s perspective, then, suggests that friendship involves being in a particular relationship built over time.

In Extract 5, we note Cathryn’s strategy of observing her peers’ interactions before she asks to be their friend. She also identifies the strategy of asking, with the realisation that this approach may not be successful.
Extract 5. Cathryn (G2 ph 2, 279/01, 02)

Cathryn: I found friends very quickly at this school but last year at that school it took a long time for me to find friends.

Researcher: Did it? So this year when you found some new friends, how did you go about finding new friends? What did you do to get some new friends?

Cathryn: I just looked and listened to what they do and what they say. And then I found out who will be nice to play with and to (inaudible).

Researcher: Right.

Researcher: When you wanted to find a new friend to play with, how did you go about it? Did you have to talk to them first or did you just join in with their game?

Cathryn: I had to talk to them first.

Researcher: Was that easy or tricky?

Cathryn: Easy.

Researcher: That’s good. What sorts of things did you say to try and make a new friend?

Cathryn: If I wanted to join in the game then I said ‘can I please play with you?’ Sometimes the answer is yes; sometimes the answer is no.

Researcher: So when the answer was yes, you just joined in and played.

Cathryn: Yeah.

Researcher: What happened when the answer was no? How did you feel about that?

Cathryn: Sad.

Researcher: What did you do?

Cathryn: Just walked away to see if I could play another game with someone else.

Researcher: That’s a very sensible thing to do, Cathryn.

Anne: I did that as well.

Here, Cathryn makes visible her idea of a friend being a ‘match’ or ‘fit,’ similar to the strategy described earlier by Leon (Extract 3). Friendship is reported as something more than simply being located in the same place at the same time and making a pragmatic choice based on that. Rather, asking someone to be a friend is described as a thoughtful, considered action formulated over time and following periods of observation and assessment of a peer’s qualities. Cathryn’s account shows children’s awareness that they have to be prepared to identify themselves as seeking someone to play with or to engage in some shared activity. That is, they need to display their own dispositional state of seeking a friend and, along with that, the recognition of the possibility that their request will be rejected. Asking someone to play, then, is not a straightforward request but involves skill in social knowledge and well as a particular disposition of being able to put oneself in a position where rejection is a possibility.

Clubs and groups

Mutual interests and sharing things within a peer group, ‘team’ or ‘club’, can work to create an interactional space for friendship. Extracts 6 and 7 show how children, through shared peer culture, build social networks. Both extracts are examples of peer social networks formed outside the teacher’s direct influence, highlighting the importance of opportunities for unstructured activities for children to actively engage with each other.

Extract 6. Iris (G1 ph 2, 212/01, 03)

Researcher: … Because you were telling me before that you’ve made up a colouring-in club haven’t you?

Iris: Yeah.

Researcher: And there can be you in it and three other people and the people can be different every day, can they?

Iris: Yeah.

Researcher: That’s good.

Mary: [Overlapping with researcher speaking] But mainly we are starting … we started it yesterday. We just started colouring–the club–yesterday.

But normally the same people …

Iris: The club started in term one the club started (sic). But then I had these friends and then they wouldn’t play with me so I started it in term one and then all of a sudden I got my friends wanted to play with me again and I cancelled it and blah, blah, blah …

In Extract 6, Iris reports that she initiated a colouring-in club as a strategy to encourage friends to play with her. She reports finding that ‘all of a sudden’ she had friends to play with. Mary also reports that she started a colouring-in club, and describes a different membership composition. While Iris’s colouring-in club was open to different members, Mary’s club had regular members. Both girls’ accounts indicate that the strategy was designed with the intention to encourage friendship through club activities.

In the following extract, Regan engages in a similar description, describing his motive to make friends as a ‘mission’.
**Extract 7. Regan (G2 ph 2, 276/01)**

Researcher: ... How did you make friends when you started school?

Regan: I had a mission and the mission was that we had to choose people that would play with us in our team.

Researcher: Okay, so you had some teams that helped you choose friends?

Regan: I'll tell you all of my team. It's John, Jenny is the boss, Jim, Jeb, John Smith, Joe.

Researcher: Sounds like a pretty big team.

Regan: I've got a little team. I've got some people in my team.

Researcher: Awesome.

Here, Regan brought peers together by using a strategy of choosing friends to play in football teams. Regan points out that, while it was his mission to build a team, it was actually Jenny who was the ‘boss’ of the team. It is then unclear whether Regan refers to a separate team when he talks about his ‘little team’ or whether he is correcting the researcher’s description of its size. Extracts 6 and 7 are both examples of peer social networks that operate outside the teacher’s culture.

**Child intervention to include others**

In the previous extracts, we saw how the children observed what was happening in their social worlds as a strategy to find ways to join in with others, or to construct new contexts for others to join them. Observation was reported as a strategy for realising that someone was alone before joining them in shared activity. In Extract 8, we focus on Sam’s account of observing another member of the class, Paul, and his discussion of how Paul manages without friends. Sam’s account suggests a sensitive approach when he describes how he thinks Paul might feel.

**Extract 8. Sam (G2 ph 2, 271/06)**

Researcher: What do you do if somebody hasn’t got a friend?

Sam: I play with them.

Researcher: Do you?

Sam: Yes.

Researcher: How do you think they feel if they haven’t got a friend?

Sam: Pretty sad. One kid in my class called Paul, not the Paul in this class, Paul in my class—well, I don’t know how but he knows how to play by himself without anyone.

Researcher: Does he?

Sam: Yeah.

Researcher: Do you think he wants to play by himself?

Sam: Well no, but I think he manages it.

Researcher: Is he the sort of boy you’d think you’d want to be a friend with?

Sam: Yeah, and I am a friend with.

Researcher: Well that’s lovely, isn’t it?

Sam: Yeah.

Researcher: Do you play with him sometimes?

Sam: Yep, a lot of the time.

Researcher: I think you’re following that lovely school rule, Sam, about including people.

Sam: Yes.

Sam reveals an empathy with Paul’s situation of being alone, and also an appreciation of Paul’s competence to manage this situation. In response to the researcher asking if Sam played with Paul ‘sometimes’, Sam responds that he plays with Paul ‘a lot of the time’. In this extract, we see evidence of an awareness of how the social world works and how to support friends. Sam’s account of his awareness of, and sensitivity to, the needs of his classmate displays a sense of solidarity, a quality of friendship (Dunn, 2004). As this extract shows, children do orient to the work of including and helping others enter into peer interactions.

**Discussion**

Through these extracts, we showed three main strategies identified by the children in building peer interactions. The first strategy was to make requests. Suggesting that a child request to enter an already occurring play interaction is a typical pedagogic strategy used by early childhood teachers (MacNaughton & Williams, 2009). On the surface, this appears to be straightforward. However, the act of asking is a complex interactional task that requires understanding the children’s organisation of peer relations and how they communicate effectively in that social context.

Making requests requires ‘different kinds of social knowledge’ (Wootton, 1997, p. 176). The social knowledge might include a number of considerations, such as the child’s judgement of how favourably their request will be received and the likelihood of their request being/not being met (Wootton, 1997). In addition, making requests requires knowledge of a range of interactional strategies, such as how to use politeness markers and how to negotiate ownership and access to places and materials (Theobald, Danby & Ailwood, 2011; Corsaro, 1985, 1997; Corsaro &
qualities identified as offering immediate and long-term benefits for school adjustment and social relationships (Dunn, 2004; Petriwskyj, Thorpe & Taylor, 2005).

Working from the children’s accounts, we now outline four considerations for early childhood educators. First, teachers and schools who value children's competency and social relationships support children's success and participation at school. This paper shows that their agency and concern for making friends is located neither within nor outside adult culture, but reflects broader social understandings of how to be a friend, regardless of whether one is an adult or a child. It is possible that the children draw on their experiences from participating in adult social worlds, but their strategies do not mirror or mimic adult strategies; rather, they make them their own in how they enact them.

Second, teachers and schools who entrust children with time and opportunities to attend to social matters support children’s agency in their quest to make friends. Yet, the accounts presented in this paper show children describing their own strategies to initiate friendships, with less attention given to the adults’ roles in this process. This finding, however, does not discount the significance of the work teachers and parents do in supporting friendships.

Third, the children’s accounts of self-initiated and collective activity suggest the importance of schools providing opportunities for unstructured activity and time for children to build and maintain peer group culture. Reducing the amount of time children spend in playground activity reduces the opportunities for social interaction.

Finally, there are serious implications for teachers’ understandings of the importance of children's social relationships. This study found that having someone, a friend, to play with, is crucial to how children feel about starting school. Teachers who value children’s social relationships support their short- and long-term wellbeing.

**Conclusion**

The children’s accounts show the serious attention and the strategising that the children undertake in initiating friendships. Asking someone to be a friend, often a suggestion offered by teachers, and a strategy used by children, can appear to be straightforward. As shown, however, it requires complex understandings of social knowledge and the interaction involved in building relationships. Evident in the children’s accounts of the strategies they used was the thoughtfulness and attention they gave to the qualities of friendship. The children spent time observing their social environment before making requests to be a friend. As well, they showed their awareness of the high stakes involved in making such requests, not least having to consider the possibility of rejection.

An interactional analysis highlighted the concerns that children place on friendship and peer relationships as they transition to school, and the serious attention they gave to making friends and building peer interactions, qualities identified as offering immediate and long-term ability, and the social attention they gave to making friends and building peer interactions, qualities identified as offering immediate and long-term possibility of rejection.

A second strategy identified by the children was how they built relationships through a specific collaborative action in the playground in either their morning or lunch breaks. Here, their accounts show that play is a serious activity that builds friendships and social order (Danby, 2005; Denzin, 1982).

A third strategy the children identified was how they observed what was happening around them and intervened to include others. While some children mentioned being rejected by peers, there were no reports of their disliking or rejecting someone. Other studies have observed that children operating in their peer cultures engaged in criticism, conflicts, gossiping and joking, and excluding others (Church, 2009; Danby & Baker, 1998; Dunn, 2004; Evaldsson, 2007; Goodwin, 1990, 2003; Theobald & Danby, (in press)). The absence of such reports in our study may be because of the researcher’s presence in the conversations with the children, and the children’s awareness of a shared orientation to presenting themselves in a positive light (Danby et al, 2011; Rapley & Antaki, 1998).

**Acknowledgements**

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The association between playgroup participation, learning competence and social-emotional wellbeing for children aged four–five years in Australia

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DATA FROM Growing Up in Australia: The Longitudinal Study of Australian Children is used to examine the associations between playgroup participation and the outcomes for children aged four to five years. Controlling for a range of socio-economic and family characteristics, playgroup participation from birth to three years was used to predict learning competence and social-emotional functioning outcomes at age four–five years. For learning competence, both boys and girls from disadvantaged families scored three–four per cent higher if they attended playgroup at ages birth–one year and two–three years compared to boys and girls from disadvantaged families who did not attend playgroup. For social and emotional functioning, girls from disadvantaged families who attended playgroup at ages birth–one year and two–three years scored nearly five per cent higher than those who did not attend. Demographic characteristics also showed that disadvantaged families were the families least likely to access these services. Despite data limitations, this study provides evidence that continued participation in playgroups is associated with better outcomes for children from disadvantaged families.

PLAYGROUPS AND PARENT–CHILD groups are regular, organised gatherings of parents and young children typically held for a few hours once a week during school term. They provide preschool-aged children with opportunities to socialise and to learn about their environment through play with other children and adults in a safe, supportive and fun environment (ARTD Consultants, 2008; Dadich & Spooner, 2008). Unlike child care, crèche or kindergarten arrangements, where children are customarily left in the care of others, parents stay for the duration of the playgroup and interact with their children. Mothers and fathers also socialise with other parents, which may provide an opportunity to establish a valuable parenting support network.

In this paper, and unless otherwise stated, the term ‘playgroup’ is used to represent all types of formalised playgroups and parent–child groups currently operating in Australia. There are two broad playgroup models: community playgroups which are parent-led, and professionally supported or facilitated playgroups. In Australia there is no national register of playgroups; however, the substantial majority of known participants—approximately 145,000 children from 105,000 families in 8,500 community playgroups—are affiliated with state and territory Playgroup Associations (Playgroup Australia, 2011). The Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA) has contributed annual funding up to $9 million through its Playgroup Program. This program funds a range of playgroup models with a view to achieving several objectives, including improving parenting skills and family functioning, improving children’s wellbeing, and developing stronger...
playgroups, had a significantly positive effect on national exposure to a preschool experience, such as a nursery or further afield, research in Great Britain has found that ambivalent towards attending, they would likely stop.

Further methodological complexity arises through the voluntary nature of playgroup participation and access to such opportunities. As families choose whether or not to participate in playgroups, there is no certainty that any association between playgroup participation and improved child outcomes is a result of playgroup participation per se, or rather a result of the characteristics of the families who participate compared to those who do not. Additionally, these choices are not equal for all parents; since community facilities for playgroups are not equally distributed across socio-economic areas, some families may find playgroups more difficult to access than others. A well-designed study dedicated to researching the associated benefits of playgroup participation would need to include a large number of families from a variety of backgrounds, with detailed questions on the patterns of playgroup participation, where data is collected over a long period to evaluate outcomes. Such a study would be very costly and time-consuming.
In this context, Growing Up in Australia: The Longitudinal Study of Australian Children (LSAC) offers particular strength in addressing some of these methodological challenges. By following a representative sample of a large number of children over time, including children from a range of socio-economic backgrounds with varying degrees of playgroup participation, the study provides an opportunity to track both short-term and longer-term developmental outcomes on a range of objective measures and to address the following questions: What proportion of Australian children attend playgroup across the early years? How do the demographic profiles of families who participate in playgroups compare to families who do not participate? Is playgroup attendance associated with better learning and social-emotional outcomes in four–five-year-olds? And finally, are the associations between playgroup participation and these outcomes stronger for children from disadvantaged backgrounds than for those from non-disadvantaged backgrounds?

We hypothesised that there would be positive, if modest, associations between playgroup attendance and children’s cognitive, social and emotional outcomes, and that these associations would be more evident for disadvantaged children.

Method

This study used data from LSAC, a nationally representative study of Australian children and their families over time. Two cohorts of children were recruited into the study at the first wave of data collection in 2004: 5107 infants aged three–19 months (B cohort) and 4983 children aged four-years-three-months to five-years-seven months (K cohort). The same children were followed up again in 2006 (Wave 2) and 2008 (Wave 3), with further data due to be collected every two years until at least 2018. The B cohort from Wave 1 to 3 is used here. The LSAC design and sampling methodology are extensively documented elsewhere (Soloff, Lawrence & Johnstone, 2005; Soloff, Lawrence, Misson & Johnstone, 2006). In short, the LSAC employed a two-stage clustered sample design, with Australian postcode areas as the primary sampling unit. Approximately one in 10 postcode areas were randomly selected and children were randomly selected within postcodes, using the Medicare enrolment database as the sampling frame, ensuring that only one child per household was selected. The Medicare database had good coverage, with more than 90 per cent of infants estimated to be enrolled on the database by age four months (Soloff et al., 2005). The response rate for the B cohort at Wave 1 was 53.6 per cent. At Wave 2, the B cohort sample consisted of 4606 children aged two–three years (90.2% response rate), and at Wave 3 data was collected from 4386 children aged four–five years (85.9% of Wave 1 sample). Design, sample and population weights were calculated at each wave to ensure adequate representation of the data and to account for bias in sample attrition (Misson & Sipthorpe, 2007; Sipthorpe & Misson, 2009; Soloff et al., 2006).

Data collection

Data was collected from multiple informants, using a variety of methods at each wave. The main source of information was the primary caregiver of the study child (Parent 1), who in most cases was the biological mother of the study child (98.3% at Wave 1, 97.9% at Wave 2, and 97.6% at Wave 3). In addition to the in-home interview, Parent 1 was also asked to complete a questionnaire at each wave. Response rates on the questionnaires were generally good (85% at Wave 1, 77% at Wave 2, and 87% at Wave 3). Survey data was also collected from Parent 2, the study child, parents living elsewhere, teachers and childcare workers.

Key measures

The key outcome measures used in this study were development indices created by the Australian Institute of Family Studies (Sanson, Hawkins & Misson, 2010; Hanson, Misson, Hawkins & Berthelsen, 2010). Indices were calculated for each cohort of children at each wave of data collection, and consisted of three domains: health and physical development, social and emotional functioning, and learning competence. The outcomes used in this study were restricted to the social and emotional functioning index and the learning competence index that were calculated for the B cohort at Wave 3.

Social and emotional functioning

The social and emotional functioning outcome index was based on data collected from the Strengths and Difficulties Questionnaire (SDQ) (Goodman, 2001). The SDQ is a validated 25-item questionnaire consisting of five sub-scales of five items each relating to the child’s peer relationships, prosocial behaviour, internalising problems, externalising problems and hyperactivity. The SDQ was included in the Wave 3 Parent 1 self-complete questionnaire.

Conceptually, the social and emotional functioning outcome index was based on data collected from the Strengths and Difficulties Questionnaire (SDQ) (Goodman, 2001). The SDQ is a validated 25-item questionnaire consisting of five sub-scales of five items each relating to the child’s peer relationships, prosocial behaviour, internalising problems, externalising problems and hyperactivity. The SDQ was included in the Wave 3 Parent 1 self-complete questionnaire.

The individual components were first standardised and positively scaled so that higher scores represented better functioning. The means of the component measures (e.g. Prosocial scale) were then calculated for each sub-domain (e.g. social competence). The sub-domain scores were individually standardised and then combined to create an overall mean score for social and emotional.
functioning, which was then standardised to have a mean of 100 and a standard deviation of 10 (Sanson, Misson et al., 2010). Although the social and emotional functioning outcome index is simply a ‘standardised’ version of the SDQ, we chose to use the outcome index so that results and interpretations would be comparable to the learning competence outcome index. Secondary analysis using original SDQ scores, as opposed to the social and emotional functioning outcome index, revealed the same pattern of outcomes described in Results.

**Learning competence**

The learning competence outcome index was based on four sub-domains: language, literacy, numeracy, and approach to learning. Language was assessed using a shortened 40-item version of the Peabody Picture Vocabulary Test (Dunn & Dunn, 1997). This test requires children to identify one picture out of four that best represented the meaning of a word read out by the interviewer. **Literacy** was measured by three parent-rated and five teacher-rated ‘yes/no’ questions on the study child’s reading skills (e.g. ‘Able to read simple words, e.g. dog, cat’), and six teacher-rated ‘yes/no’ questions on writing skills (e.g. ‘Able to write his/her own name’). **Numeracy** was measured by five teacher-rated ‘yes/no’ questions on the study child’s numeric ability, such as counting and simple addition (e.g. ‘Able to count to 20’). **Approach to learning** was assessed using the Who Am I? (WAI) instrument (de Lemos & Doig, 1999). The WAI assesses cognitive processes associated with early literacy and numeracy skills, and includes tasks for the child such as copying figures and writing their name, numbers, letters and words.

As for the social and emotional functioning index, the learning competence index was derived by standardising and combining the separate component measures into sub-domain scores, and then standardising and combining these sub-domain scores to form the overall index score. These total scores were then standardised to have a mean of 100 and a standard deviation of 10. Where applicable, standardisation was performed within one of five age groups, to account for the varying ages and therefore the varying abilities of the children (Sanson, Misson et al., 2010).

**Playgroup participation**

At each wave Parent 1 was asked ‘In the past 12 months, have you used any of the following services for the study child … Playgroups or parent–child groups?’ and could respond either ‘yes’ or ‘no’. Playgroup items were collected from the self-complete survey at Wave 1, the self-complete leave-behind survey at Wave 2, and the face-to-face interview at Wave 3. As there were no further questions on the type of playgroup attended, or the frequency of participation, we cannot distinguish between children who attended playgroup every week throughout the previous 12 months and those who attended just once. Nor can we distinguish between the types of playgroups the families were attending. At Waves 1 and 3 there were follow-up questions asking if playgroups or parent–child groups were needed but could not be accessed. Very few parents indicated that they were unable to access the playgroups they needed (n = 99 at Wave 1 and n < 20 at Wave 3).

**Family disadvantage**

Socio-economic Position (SEP) was used as the measure of family disadvantage. SEP, calculated at each wave, is a composite measure derived from parent’s educational attainments, household income and occupational prestige (Blakemore, Strazdins & Gibbons, 2009). The measure is standardised to have a mean of 0 and a standard deviation of 1, where higher scores represent higher levels of SEP. Families were classified as being disadvantaged if they were in the lowest 25 per cent of SEP for at least two out of three waves of data collection.

When considering the families who not only participated in all interviews from Waves 1 to 3 but also completed and returned all of the self-complete questionnaires, the final sample size was 2958 children. This figure does not include further data loss through item-level non-response. All results presented are based on the families who participated during all three waves of data collection, except where noted. SAS 9.2 was the statistical software package used for all analyses, and sample weights were used to account for sample attrition bias across waves. Adjustments were also made to account for any postcode cluster effects resulting from the families being sampled according to their postcode.

**Results**

**Playgroup attendance**

Table 1 presents the proportion of Australian children who attended playgroup at each wave, with estimates based on the responding sample at each wave. More than 40 per cent of children had participated in playgroups when aged three–19 months (Wave 1), increasing to 53 per cent at Wave 2 when children were aged two–three years, and then decreasing to 25 per cent at Wave 3 when they were aged four–five years. The decrease at Wave 3 is to be expected, as this is the age when children move on to more formal education such as kindergarten or preschool. Wave 3 participation data is presented here to document the levels of playgroup use by this age group during the period of transition to formal schooling. As data from Waves 1 and 2 were not influenced by such transitions, further analyses were based on participation across Waves 1 and 2 only.
Table 1. B-cohort children: Percentage participating in playgroups at each wave, with 95% confidence intervals.

<table>
<thead>
<tr>
<th>Participation at each wave</th>
<th>Age range (years)</th>
<th>n</th>
<th>%</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wave 1</td>
<td>0–1</td>
<td>4206</td>
<td>40.3</td>
<td>(38.3, 42.3)</td>
</tr>
<tr>
<td>Wave 2</td>
<td>2–3</td>
<td>3491</td>
<td>52.5</td>
<td>(50.4, 54.6)</td>
</tr>
<tr>
<td>Wave 3</td>
<td>4–5</td>
<td>4385</td>
<td>25.0</td>
<td>(23.4, 26.6)</td>
</tr>
</tbody>
</table>

Note: Estimates are based on the responding sample at each wave.

Children were categorised as having attended at Wave 1 only, Wave 2 only, at both Waves 1 and 2, or at neither wave. Each of these categories contains a small number of children who also participated in playgroups when they were four–five years old at Wave 3 (see Table 2). Of the children who attended playgroup at Wave 3 (n = 864), the majority (88%) had also attended playgroup when they were three–19 months and/or two–three years.

Table 2. B-cohort children: Percentage attending playgroups across Waves 1 and 2, with 95% confidence intervals.

<table>
<thead>
<tr>
<th>Pattern of attendance across Waves 1 and 2</th>
<th>n</th>
<th>%</th>
<th>95% CI</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neither wave</td>
<td>1022</td>
<td>34.0</td>
<td>(32.0, 36.1)</td>
<td>(38.3, 42.3)</td>
</tr>
<tr>
<td>Wave 1 only</td>
<td>407</td>
<td>13.0</td>
<td>(11.8, 14.2)</td>
<td>(50.4, 54.6)</td>
</tr>
<tr>
<td>Wave 2 only</td>
<td>690</td>
<td>22.5</td>
<td>(20.8, 24.2)</td>
<td>(23.4, 26.6)</td>
</tr>
<tr>
<td>Wave 1 and 2</td>
<td>1007</td>
<td>30.5</td>
<td>(28.5, 32.6)</td>
<td></td>
</tr>
</tbody>
</table>

Note: 106 children attended at Wave 3 but not at Waves 1 or 2, 59 at Waves 1 and 3, 236 at Waves 2 and 3 and 463 at Wave 1, 2 and 3.

Demographic characteristics

Table 3 presents the demographic characteristics of families according to the pattern of playgroup attendance across Waves 1 and 2, and shows that the demographic profile of families that consistently attended playgroup was clearly different from that of those who did not attend. Consistent playgroup attendance across Waves 1 and 2 was associated with higher maternal education, higher maternal age at the birth of their first child, higher household income, two-parent families (either blended or intact), families without socio-economic disadvantage, and families who spoke English in the home. Conversely, associated with no playgroup participation was lower maternal education, lower maternal age at the first birth, mothers who consistently worked part time or full time across the five-year period, low family income, single-parent families, disadvantaged SEP, and a language other than English spoken in the home.

Multiple regression analyses were conducted to determine if, after controlling for socio-economic and family characteristics, playgroup participation was associated with improved child outcomes over time. Analyses were also stratified by family disadvantage and child gender to determine if results differed between disadvantaged and non-disadvantaged boys and girls. Socio-economic Position, the variable used to define disadvantage, is based on the education level of parents, family income and parent’s occupational prestige. Although the mother’s education and family income were integral to the calculation of the disadvantage measure, these variables were also included in the regression models. This approach was taken to ensure that any relationships between mother’s education, family income, playgroup participation and the outcome measures were accounted for within the sub-groups of family disadvantage.

Analyses were conducted separately for the learning competence outcome index (see Table 4) and the social and emotional functioning outcome index (Table 5). Each model controlled for equivalised household income, mother’s age at birth of first child, the study child’s attendance at day care and at preschool, mother’s highest level of education, mother’s degree of employment across Waves 1–3, study child’s position amongst siblings and neighbourhood SEIFA (Socio-Economic Index For Areas). For simplicity, the regression coefficients for these variables have not been presented, but are available on request.

Table 4 shows that, after controlling for socio-economic and family characteristics, boys from disadvantaged families who participated in playgroups only when aged two–three years (Wave 2), and those who participated both at birth–one and at two–three years (Waves 1 and 2) scored significantly higher on the learning competence outcome index than those boys from disadvantaged families who did not participate at either wave (F(19, 2584) = 21.53, p < 0.0001, Adjusted R² = 0.130). Furthermore, in non-disadvantaged families, boys who attended playgroups at both
birth–one year and two–three years (Waves 1 and 2) also scored significantly higher on learning competence than did boys who did not attend playgroup \(F(19, 2584) = 12.82, p < 0.0001, \text{Adjusted } R^2 = 0.079\). Girls from disadvantaged families who participated at both birth–one year and two–three years scored significantly higher than did girls from disadvantaged families who did not attend at either wave \(F(19, 2584) = 46.19, p < 0.0001, \text{Adjusted } R^2 = 0.248\). There was no association between playgroup participation and learning competence among girls from non-disadvantaged families.

Table 3. B-cohort children at Wave 3: Percentage with selected family and demographic characteristics according to the pattern of playgroup attendance across Waves 1 and 2.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>(n)</th>
<th>None</th>
<th>W1 only %</th>
<th>W2 only %</th>
<th>W1 &amp; W2 %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mother’s highest education</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than Year 12</td>
<td>806</td>
<td>38.4</td>
<td>11.1</td>
<td>25.4</td>
<td>25.0</td>
</tr>
<tr>
<td>Year 12</td>
<td>380</td>
<td>35.3</td>
<td>11.6</td>
<td>24.6</td>
<td>28.4</td>
</tr>
<tr>
<td>Post-school qualification</td>
<td>1929</td>
<td>30.8</td>
<td>14.4</td>
<td>20.0</td>
<td>34.8</td>
</tr>
<tr>
<td><strong>Mother’s employment across waves</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>636</td>
<td>34.5</td>
<td>8.5</td>
<td>27.8</td>
<td>29.3</td>
</tr>
<tr>
<td>Occasional part-time</td>
<td>1931</td>
<td>31.0</td>
<td>13.0</td>
<td>22.0</td>
<td>34.1</td>
</tr>
<tr>
<td>Consistent part-time or full-time</td>
<td>318</td>
<td>48.1</td>
<td>19.0</td>
<td>16.1</td>
<td>16.9</td>
</tr>
<tr>
<td><strong>Mothers age at birth of first child</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 20 years</td>
<td>137</td>
<td>46.1</td>
<td>14.7</td>
<td>27.1</td>
<td>12.1</td>
</tr>
<tr>
<td>20–24 years</td>
<td>530</td>
<td>40.9</td>
<td>11.1</td>
<td>25.6</td>
<td>22.4</td>
</tr>
<tr>
<td>25 years +</td>
<td>2453</td>
<td>31.5</td>
<td>13.3</td>
<td>21.3</td>
<td>33.8</td>
</tr>
<tr>
<td><strong>Equivalised household income</strong></td>
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<tr>
<td>Less than $30,000</td>
<td>761</td>
<td>38.9</td>
<td>12.8</td>
<td>24.4</td>
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</tr>
<tr>
<td>$30,000–$49,000</td>
<td>1096</td>
<td>31.6</td>
<td>11.5</td>
<td>23.3</td>
<td>33.7</td>
</tr>
<tr>
<td>$50,000 or more</td>
<td>1032</td>
<td>31.8</td>
<td>15.4</td>
<td>20.3</td>
<td>32.5</td>
</tr>
<tr>
<td><strong>Sibling position</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>An only child</td>
<td>321</td>
<td>31.5</td>
<td>15.6</td>
<td>22.3</td>
<td>30.5</td>
</tr>
<tr>
<td>Youngest child</td>
<td>1261</td>
<td>42.8</td>
<td>12.8</td>
<td>19.8</td>
<td>24.6</td>
</tr>
<tr>
<td>Middle child</td>
<td>527</td>
<td>37.7</td>
<td>11.5</td>
<td>23.6</td>
<td>27.2</td>
</tr>
<tr>
<td>Oldest child</td>
<td>980</td>
<td>21.6</td>
<td>12.9</td>
<td>25.3</td>
<td>40.3</td>
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<tr>
<td><strong>Family structure</strong></td>
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<td></td>
</tr>
<tr>
<td>Single-parent family</td>
<td>274</td>
<td>45.1</td>
<td>15.6</td>
<td>22.1</td>
<td>17.1</td>
</tr>
<tr>
<td>Two-parent family</td>
<td>2845</td>
<td>32.7</td>
<td>12.7</td>
<td>22.5</td>
<td>32.2</td>
</tr>
<tr>
<td><strong>Family disadvantage</strong></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not disadvantaged</td>
<td>2786</td>
<td>31.4</td>
<td>13.4</td>
<td>21.1</td>
<td>34.1</td>
</tr>
<tr>
<td>Disadvantaged</td>
<td>335</td>
<td>43.8</td>
<td>11.5</td>
<td>26.5</td>
<td>18.3</td>
</tr>
<tr>
<td><strong>Language spoken in home</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>English</td>
<td>2895</td>
<td>32.6</td>
<td>13.1</td>
<td>22.4</td>
<td>32.0</td>
</tr>
<tr>
<td>Other</td>
<td>231</td>
<td>47.1</td>
<td>12.3</td>
<td>23.2</td>
<td>17.4</td>
</tr>
</tbody>
</table>

a. Information collected and measured at Wave 3.
b. Information collected and measured at Wave 1.

For the social and emotional functioning outcome index (see Table 5), girls from disadvantaged families who attended playgroup at both birth–one year and two–three years (both Waves 1 and 2) scored significantly higher than did girls who did not attend playgroup at either wave \(F(19, 2441) = 16.24, p < 0.0001, \text{Adjusted } R^2 = 0.105\). We found no association between playgroup participation and social and emotional functioning for non-disadvantaged girls, and no association for boys in either category of disadvantage.
Table 4. B-cohort children at Wave 3: Learning competence outcomes according to playgroup attendance pattern, by family disadvantage and child gender.

<table>
<thead>
<tr>
<th></th>
<th>Non-disadvantaged families</th>
<th></th>
<th>Disadvantaged families</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coeff. p 95% CI</td>
<td>Coeff. p 95% CI</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Boys</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>87.05 &lt;0.0001 82.48, 91.61</td>
<td>85.19 &lt;0.0001 77.46, 92.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playgroup</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>attendance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neither W1 or W2 (ref)</td>
<td>– – – – – – – – – – – –</td>
<td>– – – – – – – – – – – –</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W1, not W2</td>
<td>−0.05 0.951 −1.71, 1.61</td>
<td>3.35 0.068 −0.25, 6.94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W2, not W1</td>
<td>0.20 0.781 −1.22, 1.62</td>
<td>3.19 0.008 0.83, 5.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Both W1 and W2</td>
<td>1.36 0.037 0.08, 2.63</td>
<td>3.73 0.018 0.66, 6.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Girls</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>98.05 &lt;0.0001 93.79, 102.32</td>
<td>96.18 &lt;0.0001 88.52, 103.85</td>
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<td></td>
</tr>
<tr>
<td>Playgroup attendance</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neither W1 or W2 (ref)</td>
<td>– – – – – – – – – – – –</td>
<td>– – – – – – – – – – – –</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W1, not W2</td>
<td>0.20 0.761 −1.09, 1.49</td>
<td>1.95 0.233 −1.26, 5.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W2, not W1</td>
<td>0.43 0.520 −0.88, 1.73</td>
<td>0.95 0.476 −1.67, 3.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Both W1 and W2</td>
<td>0.66 0.300 −0.59, 1.92</td>
<td>4.46 0.005 1.36, 7.57</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Fully adjusted model, includes equivalised household income, mother’s age at birth of first child, study child’s attendance at day care, study child’s attendance at preschool, mother’s highest level of education, mother’s degree of employment across Waves 1–3, study child’s position amongst siblings and neighbourhood SEIFA.

Table 5. B-cohort children at Wave 3: Social and emotional functioning outcomes according to playgroup attendance pattern, by family disadvantage and child gender.

<table>
<thead>
<tr>
<th></th>
<th>Non-disadvantaged families</th>
<th></th>
<th>Disadvantaged families</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coeff. p 95% CI</td>
<td>Coeff. p 95% CI</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Boys</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>94.56 &lt;0.0001 89.70, 99.41</td>
<td>93.65 &lt;0.0001 85.55, 101.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playgroup</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>attendance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neither W1 or W2 (ref)</td>
<td>– – – – – – – – – – – –</td>
<td>– – – – – – – – – – – –</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W1, not W2</td>
<td>−1.00 0.298 −2.90, 0.89</td>
<td>1.83 0.291 −1.58, 5.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W2, not W1</td>
<td>−0.35 0.661 −1.94, 1.23</td>
<td>−0.93 0.514 −3.72, 1.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Both W1 and W2</td>
<td>0.70 0.314 −0.67, 2.07</td>
<td>2.12 0.176 −0.95, 5.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Girls</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>98.29 &lt;0.0001 92.72, 103.86</td>
<td>84.63 &lt;0.0001 75.13, 94.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playgroup attendance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neither W1 or W2 (ref)</td>
<td>– – – – – – – – – – – –</td>
<td>– – – – – – – – – – – –</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W1, not W2</td>
<td>0.84 0.312 −0.80, 2.48</td>
<td>0.46 0.836 −3.88, 4.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W2, not W1</td>
<td>−0.47 0.581 −2.13, 1.19</td>
<td>−0.96 0.606 −4.61, 2.69</td>
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<tr>
<td>Both W1 and W2</td>
<td>−0.25 0.742 −1.73, 1.23</td>
<td>4.77 0.005 1.48, 8.06</td>
<td></td>
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</tbody>
</table>

Note: Fully adjusted model, includes equivalised household income, mother’s age at birth of first child, study child’s attendance at day care, study child’s attendance at preschool, mother’s highest level of education, mother’s degree of employment across Waves 1–3, study child’s position amongst siblings and neighbourhood SEIFA.
Discussion

This study set out to profile the characteristics of Australian families participating in playgroups, and to investigate the associations between playgroup attendance and child outcomes. We found that more than 60 per cent of infants aged three–19 months in 2004 had attended playgroup at least once by 2008. We also demonstrated a positive association between continued playgroup attendance and learning competence outcomes for boys and girls, particularly those from disadvantaged families, and between continued playgroup attendance and social-emotional functioning for girls from disadvantaged families. With the scarcity of playgroup research, this study makes a valuable contribution towards understanding the value of playgroups for children's social and learning development and shows the immense value of being able to use longitudinal data to assess these relationships.

To our knowledge this is the first empirical demonstration that Australian children likely to gain the most benefit from attending a playgroup were those who were less likely to access these services. There is a 10 per cent differential in the proportion of children from disadvantaged families who had attended playgroups at least once over the five-year period (60%) relative to children from non-disadvantaged families (70%). Having noted this, we were surprised at the overall level of some form of playgroup attendance by children from disadvantaged families, yet still concerned by the relative size of the gap between disadvantaged and non-disadvantaged families. This gap is significant, and the findings support policies aimed at resourcing, facilitating and prompting disadvantaged families in the uptake of playgroup opportunities.

Playgroup attendance is clearly dependent upon the time resources of mothers, particularly those who are employed. A much higher percentage of mothers who were consistently employed across the five years had not participated in playgroups at Waves 1 and 2 (48%) compared to mothers who were not in the labour force (34.5%). Also, a higher percentage of children without siblings (31%) and study children with younger siblings (40%) had participated in playgroups at Waves 1 and 2 compared to youngest children who had older siblings (25%). Parents have limited time resources, and activities that their children can participate in together will be an effective use of their time. Therefore a child with a younger sibling who attends playgroup is more likely to also attend a playgroup than is an only child. However, the youngest children in a family compete with the needs of their older siblings who may already have started school, and the competition for time resources may mean that they miss out on the playgroup experience altogether.

This study has limitations. The observed effects described here may be confounded; that is we cannot be certain that it is playgroup participation per se that is responsible for better outcomes in disadvantaged children. It may be that the parents who engage in playgroup services are those who also seek a diverse range of activities for their child, which may be the driving force of improvements to the child’s cognitive ability or sociability. Future research on this topic could assess if parenting style or other parenting activities better explain such outcomes, rather than a specific activity such as playgroup. Another plausible explanation for the relationship between playgroup attendance and social and emotional functioning is that children who continue to attend playgroups have better social and emotional skills from the outset, consequently making playgroup attendance an enjoyable experience for both the parent and child. Parents of children who are less sociable with other children may not find the experience very enjoyable, and are therefore less likely to continue participating.

This study also lacked information on both the amount of playgroup attendance and the type of playgroups attended. Our measure of playgroup attendance is therefore very broad, making it difficult to show clear associations between the frequency or timing of playgroup attendance and child outcomes. It is possible that, with further details on the patterns of playgroup participation, more informative results may have emerged. That is, data on the number of times a child attended playgroup within a 12-month period is much more precise than an indication of whether the child attended at least once during the same period. Future research is needed to determine these patterns of playgroup participation, along with the number of families and children involved and the types of playgroup they attend. We would encourage the establishment of a dedicated study of playgroups that incorporates both qualitative and quantitative components to allow deeper investigation of how playgroups impact on child development, parent wellbeing, and community engagement. Given the vast numbers of children who do participate in playgroups, such research would be worthwhile.

This study focused on outcomes for children aged four–five years; however, the LSAC is an ongoing study and outcome measures will continue to be collected for these children when they are aged six–seven, eight–nine, 10–11 and 12–13 years. This data will be valuable in assessing whether the positive association between playgroup attendance and child outcomes becomes stronger over time, or if other factors emerge as being more important.

In addition to the possible benefits for children, playgroups can also offer a range of benefits to the parents who attend with their children, particularly those parents who are socially isolated. Playgroups
offer parents a chance to talk with others about the trials and pleasures of parenting, and child development, opportunities which are not only social in nature but educative as well. Developing new and extended social networks can also improve the mental wellbeing of caregivers, which in turn, is better for children. This study therefore should be extended to investigate the mental wellbeing and social networks of parents who participate in playgroups compared to those who do not.

The findings here offer some support to those who develop family and early childhood policy in Australia. Some level of playgroup attendance is prevalent in families with young children, with more than six in 10 families with young children taking part. Our findings offer some encouragement that the children from disadvantaged families who engage in these services tend to have better associated learning and social outcomes than those who do not. However, even though the use of playgroup services by disadvantaged families was perhaps higher than expected, there is still more that could be done to attract such families to playgroups, ensure their continued participation, and achieve greater equity in participation relative to more advantaged families.

Acknowledgements

This study was funded by an NHMRC Program Grant (572742). We thank all involved in the LSAC study. Growing Up in Australia was initiated and funded as part of the Australian Government’s Stronger Families and Communities Strategy by the Australian Government Department of Housing, Families, Community Services and Indigenous Affairs (FaHCSIA). The study is being undertaken in partnership with the Australian Institute of Family Studies, with advice being provided by a consortium of leading researchers at research institutions and universities throughout Australia. The data collection is undertaken for the Institute by the Australian Bureau of Statistics. All views expressed in this paper are the authors’, and do not represent the views of FaHCSIA or the Australian Institute of Family Studies.

References


Support for quality delivery of outside school hours care: A case study

Kym Simoncini
Michelle Lasen
James Cook University

There has been little research investigating Outside School Hours Care (OSHC) despite the growing demand for it in Australia. OSHC services can be managed by schools, Parents and Citizens’ Associations, local councils, non-profit organisations or for-profit companies, and have varying levels of support available to them. This study investigates the different models of OSHC adopted by seven schools in a regional city in Queensland, with the aim of identifying elements that enhance quality of care. The schools—including two state, three Catholic and two independent—were all located in middle-to-high socioeconomic status (SES) suburbs in a small geographical area. In all seven, the OSHC services were on school premises. Data collection methods included interviews with principals, OSHC coordinators and area coordinators, as well as researcher observations. Quality Profiles awarded by the National Childcare Accreditation Council (NCAC) and themes emerging from an interview with the director of the Queensland Network of Children’s Activities (QCAN) were used for triangulation and validation of results. Findings suggest that models of OSHC that provide coordinators with additional levels of support are more likely to deliver quality care to children. While support from the principal is important, that from outside the school in the form of area coordinators is vital in providing assistance with accreditation, professional development and networking. One key recommendation for services managed by Parents and Citizens’ Associations is the additional support of an area coordinator.

Introduction

After-school care in Australia is part of Outside School Hours Care (OSHC), which includes before-school, after-school and vacation care. Outside School Hours Care provides school-aged children with supervised and planned recreational activities in safe and caring environments. Service providers of after-school care include schools and/or their Parents and Citizens’/Friends’ associations, local councils, church bodies such as Centacare, family day carers, long day centres, not-for-profit community groups such as the Police Citizens Youth Club (PCYC), and for-profit organisations such as Camp Australia. The purpose of this article is to describe different organisational structures, or what are also referred to as models, within the provision of OSHC services. In so doing, the article aims to identify elements that enhance the quality of OSHC.

The participation level of school-aged children in before- and after-school care programs has doubled from 6 per cent in 1996 to 12 per cent in 2005 (ABS, 2007). Sixteen per cent of six–eight-year-olds and 8 per cent of nine–12-year-olds attend after- and/or before-school care (ABS, 2010). According to the Office of Early Childhood Education and Child Care (DEEWR, 2011), the average amount of time an Australian child spends in before- and after-school care is approximately 12.6 hours per week. While after-school care could be perceived as a short filler between school and home, these hours in care should not be regarded as inconsequential, especially for children who also attend vacation care during school holidays. As such, it is important that children’s experiences in OSHC are as positive and enriching as possible.

Despite the demand for school-aged care, there has been very little research examining OSHC in Australia. Early studies were typically government reports that focused on funding or that described the activities provided by OSHC (Brennan, 1996). Since then, there have been profiles of service delivery (Glyde, 1997; Kennedy & Stonehouse, 1994) and, more recently, reports on availability and funding of places in OSHC services.
(Community Services Minister Advisory Council, 2006; FaCS, 2003, 2005; Taylor, Wills, Hayden & Wilson, 2006). Only two Australian studies (Elliot, 1998; Howie, 1996) have investigated the effects of attending after-school care. Currently, the Australian Institute of Family Studies’ study, Growing up in Australia: The longitudinal study of Australian children (LSAC) is collecting data about OSHC services. However, none of these studies has examined the organisation and management of OSHC services (Cartmel, 2007).

There has been considerable research investigating after-school programs in the United States (US). Yet differences in childcare provision and regulations between the US and Australia make it difficult to generalise American findings to the Australian context. Furthermore, differences in program intentions and purposes make it hard to compare the two contexts. After-school programs (ASPs) in the US are largely viewed as opportunities to promote children’s and adolescents’ development by providing academic, sporting or other skills instruction or enrichment. Many ASPs in the US have been aimed at low-income children because their neighbourhoods tend to be less safe than those of middle-income children, and because they are at risk of academic failure and require additional time in educational activities to supplement their school experiences (Lauer et al., 2006). In Australia, OSHC does not seek to enhance academic achievement or offer any academic remediation or enrichment beyond assistance with homework if so desired by children. Instead, it is a service for parents that provides care and recreational activities for their children in a safe environment until parents finish work (DEEWR, 2010).

There is great variety in the organisation and management of OSHC services. Out of School Hours Care providers include Parents and Citizens’ Associations (P&Cs), local councils, not-for-profit organisations and for-profit businesses. These providers offer varying levels of support to their respective OSHC coordinators. Depending on the organisational structure of the services, support may be afforded to OSHC coordinators by principals and administrative staff from within the school and/or area coordinators who are external to the school and responsible for a number of OSHC services. In Queensland, the Queensland Children’s Activity Network (QCAN) is available to support all OSHC services through networking opportunities and professional development. It seems reasonable to assume that the more support provided for coordinators, the more time and energy they can invest in the provision of quality care through programming and interactions with children. Conversely, the less support received by coordinators, the more time they must spend on matters involving legislation, accreditation and administration, resulting in less time for planning and delivering quality care.

### After-school care in Australia

After-school programs have been running in Australia since the 1900s (Brennan, 1998, 1999; Elliot, 1998; Finlason, 2004). They began as recreational programs for children and were operated in community playgrounds. The programs later moved to community halls and school sites and were coordinated by recreational or arts organisations. These recreational programs continued until after the 1970s, when a demand for services that provided ‘care’ rather than recreation emerged (Cartmel, 2007; Moyle, Meyer & Evans, 1996). During the early 1980s, with increased participation of women in the workforce, there was a rapid expansion of OSHC services (Brennan, 1996; Elliot, 1998; Moyle et al., 1996; OECD, 2001). Since then the focus has shifted from meeting the needs of children to those of parents (Brennan, 1996; Finlason, 2004).

In terms of child care, OSHC has always been considered the ‘poor relative’ (HAFS, 1997). It assumes a lower profile than other types of child care and formal schooling. While early childhood services are broadly perceived to offer both care and education for young children, school-aged children are thought to be educated at school and cared for, if required by working parents, at OSHC (ABS, 2007; FaCS, 2005; Elliot, 1998). The perception that OSHC has limited operational hours has contributed to its low profile (Cartmel, 2007). When compared with long day care settings, the hours of OSHC operation and children’s attendance patterns may appear insubstantial. However, split sessions before and after school disguise actual operating hours, which make up a total of five hours per day. If these hours are then added to school holidays and pupil-free days, OSHC services operate for an equal amount of time as schools over the course of one year (i.e. five hours a day during school term plus up to 10 hours a day during holidays, as compared to six hours a day for 40 school weeks).

In Queensland and across Australia, the majority of OSHC services are located on school premises (Moyle, et al., 1996; Queensland Department of Communities, 2005a). This has both advantages and drawbacks. Schools are considered an ideal OSHC venue by service providers and families. Schools generally allow service providers access to a range of additional resources such as playgrounds, sporting fields, and other equipment and classroom resources. Further, the location of OSHC on school grounds alleviates parents’ concern regarding availability of and risks associated with travel to care services (Queensland Department of Communities, 2005b). However, there have been ongoing problems associated with OSHC venues since services were established (FaCS, 2005).

Schools dictate the location of OSHC, which is often in classrooms or other school buildings such as music rooms or halls. Services may regularly be forced to
relocate within the school. Lack of dedicated space creates uncertainty, disruption and additional work for OSHC coordinators who, with each shift in location, must lodge licensing forms to show that the service meets spacing requirements. Many services are fortunate enough to have purpose-built facilities; however, any building constructed on a state school site becomes school property under Education Queensland policy (EQ, 2010).

Another problem associated with location at schools is that the concerns and issues of the OSHC sector are often hidden from the wider community (Cartmel, 2007). Like other childcare services, OSHC has serious difficulties recruiting and retaining staff (Community Services Minister Advisory Council, 2006). Employment in the OSHC sector is characterised by high casualisation, low pay and status, insecure work conditions and limited career prospects (Ackerman, 2006; Cameron, Mooney & Moss, 2002; Misko, 2006). Only 33 per cent of OSHC coordinators, according to the 2005 Queensland Childcare Services Census (Queensland Department of Communities, 2005a), were employed as permanent full-time members of staff. Ninety per cent of OSHC assistants were employed casually, with the majority being employed for less than three years. Further, OSHC services have the highest proportion of staff (57%) without qualifications in the children’s services sector (Community Services Minister Advisory Council, 2006). This finding is largely owing to poor work conditions wherein staff are unwilling to undergo training. The provision of training is also problematic. While OSHC coordinators have experience in school-aged care, they lack university qualifications that allow them to deliver education and training at higher education institutes.

**Case study**

As part of a larger study investigating young school-aged children’s experiences after school, a mixed-method embedded case study was used to explore different models of OSHC in a set of seven schools in one small geographical area in a regional city in North Queensland. Ethics approval was granted by the university. Eleven schools were invited to join the study, with seven schools—two state, three Catholic and two independent (one Lutheran and one Christian)—agreeing to participate. Schools initially approached were located in adjacent suburbs within one small geographical area of mid to high economic status. Three of the participant schools were primary schools and four were colleges extending from Prep to lower or senior secondary. All seven schools offered OSHC on their premises. Data collection methods included interviews, general observations of services and document analysis.

**Interview participants**

**School principals**

All principals were either responsible for OSHC or in some way connected to it as part of their role. Of the seven principals, three were female and four male. Five of the seven had been in a principal position for approximately 10–15 years; the other two had been in the position even longer. Six of the seven principals participated in the interview, including a head of a junior school (from School 4, a Prep to Year 12 college), as she was responsible for OSHC at her school.

**OSHC coordinators**

Coordinators are responsible for the day-to-day management of OSHC. This involves activity programming and, dependent on the organisational structure, may also include administration and accreditation or licensing tasks. All seven coordinators were female. While three coordinators had been in the position for more than five years, four had coordinated OSHC for three–four years. Five of the seven coordinators were employed full time, the other two part time.

**Area coordinators and QCAN director**

Two area coordinators, whose roles were to assist the OSHC coordinators, participated in the study. The Lutheran and Catholic schools employed full-time area coordinators who each supported approximately 10 or more OSHC services. In the Catholic system, the area coordinator was called a project officer. The QCAN director also participated in the study. The QCAN is the leading body for OSHC, providing training and support services to member services in the state.

**Interview schedule**

Open-ended interviews were used to interview the principals and coordinators. The principals’ interviews comprised questions pertaining to the nature of their involvement in OSHC, weekly time commitment, level of understanding of its day-to-day running, perceptions of the school’s involvement, and recommendations for improved delivery. The coordinators’ interviews included questions relating to support provided by the school, frequency of meetings with the principal, key support in the event of problems, suggestions for improved delivery, and level of job satisfaction. Area coordinators were asked to describe their roles, how often they contact OSHC services, the benefits and disadvantages of their services, and suggestions for improved service delivery. A general interview guide approach was used to interview the director of QCAN. As this interview was conducted after all other data had been collected, it provided an opportunity to check aspects of the dataset.
Interview procedure

First, interviews of approximately 20 minutes duration were conducted with the OSHC coordinators. As follow-up, the OSHC coordinators were asked to forward their latest National Childcare Accreditation Council (NCAC) Quality Profile to the lead researcher. Interviews were then held with the school principals and area coordinators. These interviews were between 30 and 60 minutes duration. The QCAN director was interviewed by phone because of her location in the capital city some distance away from the research site. All interviews were conducted by the lead researcher, audio-recorded and later transcribed. Interview transcripts were read exhaustively to identify key themes. It is important to note that, when reporting data, pseudonyms will be used.

National Childcare Accreditation Council Quality Profiles

The NCAC Quality Profiles were used to compare the participant OSHC services. This external assessment of OSHC enabled a form of triangulation comparing researcher findings with a standard measure of quality. The Quality Profiles rate OSHC services in each of eight areas: (1) respect for children; (2) staff interactions and relationships with children; (3) partnerships with families and community links; (4) programming and evaluation; (5) play and development; (6) health, nutrition and wellbeing; (7) protective care and safety; and (8) managing to support quality.

Analysis of organisational structures

Key roles, responsibilities and relationships in terms of management and delivery of OSHC services were identified from data emanating from interviews with OSHC coordinators and principals. From this data, four distinct models were compiled, representative of the state, Catholic, independent Christian and Lutheran schools of the sample. The models or organisational structures were validated by the QCAN director in her interview. Importantly, these four models were constructed from schools within the sample, so it cannot be assumed that OSHC services within state, Catholic and independent schools in other areas of Australia are managed and delivered in the same way as those of the sample.

Results

Four models of OSHC were identified from data provided by study participants. In Model 1, adopted by the three Catholic schools, the principal was responsible for the management of the service. In Model 2, adopted by the two state schools, the P&C operated the service. In Model 3, adopted by the independent Christian school, the head of the junior school was responsible for the service. In Model 4, adopted by the Lutheran college, OSHC was managed by Queensland Lutheran Early Childhood Services. Figure 1, a graphic representation of the four models, depicts staff involved in management and support of OSHC services both within and external to the school.

<table>
<thead>
<tr>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Catholic schools</strong></td>
<td><strong>State schools</strong></td>
<td><strong>Independent Christian school</strong></td>
<td><strong>Lutheran school</strong></td>
</tr>
<tr>
<td>School-based support</td>
<td>School-based support</td>
<td>School-based support</td>
<td>School-based support</td>
</tr>
<tr>
<td>- Principal</td>
<td>- P&amp;C operate OSHC</td>
<td>- Head of Junior school</td>
<td>- Part-time coordinator</td>
</tr>
<tr>
<td>- Licensee of OSHC</td>
<td>- Full-time coordinator</td>
<td>responsible for</td>
<td>responsible for programming and some</td>
</tr>
<tr>
<td>- Full-time coordinator</td>
<td>responsible for programming, accreditation</td>
<td>OSHC</td>
<td>administration and coordination</td>
</tr>
<tr>
<td>- responsible for programming and accreditation</td>
<td>and some administration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Full-time assistant coordinator</td>
<td>P&amp;C liaison officer (School 2 only)</td>
<td>responsible for</td>
<td>Part-time coordinator</td>
</tr>
<tr>
<td>- responsible for administration</td>
<td>responsible for administration and to liaise between school and OSHC</td>
<td>programming and accreditation</td>
<td>responsible for programming and some administration</td>
</tr>
<tr>
<td>Outside support</td>
<td>Outside support</td>
<td>Outside support</td>
<td>Outside support</td>
</tr>
<tr>
<td>- Diocese OSHC Project Officer, available for support and assistance with accreditation</td>
<td>QCAN provides networking opportunities and professional development</td>
<td>QCAN provides networking opportunities and professional development</td>
<td>QLECS manager responsible for accreditation and some administration, provides support for coordinator</td>
</tr>
<tr>
<td>- QCAN provides networking opportunities and professional development</td>
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</tbody>
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Figure 1. Models of out of school care
Model 1. Schools 3, 6 and 7

Levels of support for service delivery can be seen to vary considerably between models (Figure 1). Model 1 has been collectively adopted by the Catholic diocese in the sample city, which has a total of 14 OSHC services. In this diocese, each school principal is responsible for OSHC. It is important to reiterate that this model is not representative of OSHC services in all Catholic dioceses. In the Brisbane Diocese, for example, OSHC services are managed by Centacare, the Catholic Church’s social services agency. The three Catholic OSHC services of the sample are among the largest and longest-running within their diocese. They are responsible for their own programming, accreditation and administration. These OSHC services are managed as businesses, financially independent of the schools. As they are large enough to employ a coordinator and assistant coordinator in full-time positions, the responsibilities of program direction and administration are shared.

Further, the diocese in the sample city employs an OSHC project officer whose main role is to support quality assurance compliance. She advises of any changes to childcare legislation and offers ideas on how to improve care services. According to the project officer, her role is to ‘guide and assist principals and coordinators’. She is able to network with outside agencies and to open channels of communication. The project officer is also responsible for applying for grants for OSHC services.

Additionally, the project officer in the sample diocese is one of six quality assurance trainers, endorsed by the NCAC in the state. The NCAC works to ensure quality experiences and positive outcomes for all Australian children in child care. It sets standards pertaining to quality care through Child Care Quality Assurance (CCQA) and accredits services that meet the standards. Quality Assurance trainers assist OSHC services, which are new or working towards accreditation, in improving quality of care and progression from registration to validation.

According to principals, OSHC coordinators and the project officer herself, there are many advantages of having a project officer. Importantly, it allows opportunities for collaboration and sharing knowledge and experience between coordinators and the project officer, who explained that:

At the end of the day, the kids are the ones who benefit. The whole sharing of information and resources is really important. I don’t know how all the other organisations are without that because child care is very isolated as it is, let alone not to have a body that is overseeing it and looking after them ... Those small services that don’t get out and don’t have time to read any professional material then have access to me and others. I think it’s valuable, certainly for the smaller ones. They are very much isolated, on their own.

The project officer guarantees the OSHC service ongoing access to accurate information about procedures and policy, legislation and accreditation. According to the project officer, this is especially important when a new coordinator is being trained as it typically takes about one year to become conversant with all aspects of the role. When asked how services would fare without this layer of support, the project officer responded that:

The little ones would all collapse and the larger ones would probably be fine. It is not until a coordinator leaves and takes all the knowledge with them that we would run into problems. Then the licensee, responsible for making sure that the Child Care Act and regulations are followed in the service, is in breach because they don’t know what is going on in their service because that knowledge has just left. So I guess it is the stability of knowledge that is important for a licensee and an organisation. And that is why, in a lot of small organisations run by P&C, the committees run into trouble, because as soon as they have a turnover of staff that knowledge goes with them.

Model 2. Schools 1 and 2

In the two state schools, the OSHC services operate similarly. The P&C Associations are the licensing nominees and responsible for OSHC. This service delivery is typical of state schools in Queensland owing to the Education Department’s stipulation that schools engage an outside provider to deliver OSHC. Education Queensland (2010) prefers that P&Cs, rather than not-for-profit or commercial providers, manage OSHC. Coordinators are employed on a full-time basis and are responsible for programming and accreditation. Assistant coordinators are employed part time and have limited management responsibilities. Both OSHC services have employed an additional person outside of OSHC to handle administrative duties. According to the Queensland Parents and Citizens’ Association, the practice of employing an operations manager is becoming more frequent (personal communication, 27 September, 2011).

OSH in this model is an enterprise of the P&C, like the tuckshop or canteen; both services have their own bank account and there is an unwritten agreement between them and their respective schools that any money they raise is for their use and not to be channelled into P&C funds. Nonetheless, approval from the P&C must be granted for any expenditure other than for general running costs. Each month, the OSHC coordinator reports to the P&C committee, which should have an OSHC sub-committee made up of parents whose children attend. Ordinarily, this sub-committee would make decisions regarding OSHC and support it within the P&C. However, both schools encountered challenges in maintaining an OSHC sub-committee.
According to the two coordinators, there is little contact between the schools and OSHC beyond the principals attending P&C meetings where OSHC reports are presented. The OSHC service at School 2 has somewhat more contact with the school, given a sharing of classrooms on account of an OSHC building that is not large enough to accommodate all children. The classrooms for OSHC use change frequently according to the school’s requirements. In contrast, the OSHC service at School 1 is located in a purpose-built facility, and is very well resourced and able to operate independently from the school.

Despite Education Queensland’s preference that P&Cs manage OSHC services, there are several disadvantages associated with this organisational structure. Given that P&Cs are elected every year, there is potential for a lack of stability in OSHC management. There is also the risk that no-one will volunteer to lead the P&C and take responsibility for OSHC. Further, as P&C committees are made up of volunteers, there is no guarantee that its members have any experience or expertise in the child care area, even though collectively they have substantial decision-making power. The OSHC coordinators identified unsupportive P&Cs as another possible tension. In such a case, neither the OSHC nor the P&C has complete authority to take charge and a third party may be needed to resolve issues. The principal from School 1 reported having to ‘step in and act as a mediator’ when relations are not running smoothly between OSHC and the P&C.

Model 3. School 4

The model adopted by School 4 is somewhat similar to that of the Catholic schools. The head of the junior school is responsible for OSHC and, as a result, the service is incorporated into school administration. However, as an independent Christian school, it is not affiliated with any other schools in the area or larger organisational structures of its religious denomination. Therefore, the OSHC is an isolated service and does not have a project officer or an area coordinator. The school has offered OSHC only over the two years prior to the interview, and the service has undergone its first accreditation. The appointed coordinator is responsible for programming and some administration; the school office for accepting parents’ payments and the staff payroll. The OSHC service is given a budget and any profits go back into the school.

The head of junior school and the OSHC coordinator work together for purposes of accreditation and quality assurance. Both acknowledge that they are still learning about OSHC processes, associated legislation and related services. For instance, at the time of interview, the coordinator had just become aware of Active Communities, a national initiative that provides primary school-aged children with access to free sport and other structured physical activity programs after school. The OSHC service at School 4 is not a member of the Queensland Children’s Activity Network and, as such, the coordinator does not access the Network’s meetings and in-service programs.

Model 4. School 5

The OSHC service in School 5 is managed externally by the Brisbane-based Queensland Lutheran Early Childhood Services (QLECS), an organisation providing professional governance and accountability, service management, and expertise in early childhood and children’s services. The QLECS currently manages eight OSHC services in Queensland, as well as other long day care services, occasional care services and family day care schemes. Any new OSHC services opening in Queensland Lutheran schools will be managed by QLECS, making it the standard service delivery for Lutheran schools. While managed by QLECS, the OSHC operates independently as an enterprise. The Lutheran Church is the licensing nominee of the service and there is a Community Liaison Group (CLG) that meets monthly to provide parental and local community input. The school principal attends these meetings.

In School 5, a coordinator is employed to operate the OSHC service with assistance from the QLECS area manager. The coordinator is responsible for programming, billing parents, employing staff, and the general day-to-day management of the service. The area manager is responsible for licensing, accreditation, budgeting and the payroll. The manager also assists with training and resources and the sharing of information concerning legislation. Additionally, a QLECS Quality Assurance trainer advises the OSHC service. Although the location of the manager in the capital city is not ideal, centralised coordination allows QLECS to offer expertise in children’s services that would otherwise not be available. The area manager explained:

From our point of view, because the church is the overall licensing nominee we can ensure that all the criteria are met. We have the expertise. If it was coordinated here from the school, then the school doesn’t have that expertise … The school has to rely on volunteer work and volunteers don’t have that expertise and the school doesn’t have the time or the money to do that.

Comparative level of support to enable delivery of quality care

In terms of levels of support for delivery of OSHC, the models can be placed on a continuum from most to least supportive, with positioning as follows: Model 1, Model 4, Model 3 and Model 2. In this sample, Model 2, where OSHC is managed by the school P&C, is arguably the least successful. The P&C committee lacks expertise.
and experience in child care and, without an operational sub-committee, potentially has limited motivation to support OSHC. Further, the services are relatively isolated and receive guidance only from QCAN. Model 3, in evidence at the independent Christian school, has advantages over Model 2. Despite its lack of connection to an external authority, the OSHC service of Model 3 has the benefit of being part of the school and supported by the head of the junior school. Model 4, adopted by the Lutheran school, has further benefits. While the service has no ties with or support from the school, the expertise and knowledge offered by the QLECS area manager is valuable in both accreditation and day-to-day operations. The obvious disadvantage in this case is that the manager is located in another city at a distance away, which makes frequent, in-person contact difficult.

The model adopted by the three Catholic schools (Model 1) is most conducive to supporting the delivery of quality care. In this model, the school principal is responsible for OSHC and therefore the service enjoys the support of the school and its community. The diocese project officer provides additional support in terms of childcare advice and access to a professional network for coordinators within the diocese. Even though the project officer expressed regret that the OSHC services had to contribute to her salary rather than use those funds to purchase resources, the benefits of having a project officer or area coordinator far outweigh any costs. Three key benefits of the project officer are: 1) opportunities for collaboration and dissemination of ideas; 2) guarantee that coordinators are aware of available assistance when encountering issues; and 3) an accurate and accessible knowledge base in the event of staff turnover. While the area coordinator in the private Lutheran school is in many ways similar to the project officer in the Catholic diocese, she is located too far away to offer the same level of support. Furthermore, the OSHC coordinators under QLECS do not have an opportunity to meet as they are located in different regions.

**Relationships between OSHC staff and school staff**

The different organisational structures or models shaped, to a large extent, the level of the school’s involvement with OSHC and how OSHC was viewed within the school. Analysis of data emanating from interviews with OSHC coordinators and principals revealed a range of perceptions of whether working relations between key players within schools and OSHC were productive. This data seemingly indicated that work relations in the Catholic schools of the sample were the most productive, with those in the state schools of the sample being least productive.

**Schools 3, 6 and 7**

In all three Catholic schools, there were regular meetings (usually weekly) between the principal and coordinators, as well as an open-door policy at other times. In their respective interviews, principals and coordinators reported that the latter were encouraged to approach their principals at any time in the knowledge that prompt action would be undertaken to address issues or concerns. The principals expressed their commitment to supporting the highest quality care by embracing the OSHC service as an integral part of the school. They made efforts to include OSHC staff in school events, as captured in one coordinator’s response:

Jane always phones me and says, ‘Look we are having a staff meeting, send some of your staff down because they can get a place in there. Keep them going down so that the teachers are reminded that Outside School Hours Care is still part of the school’. And we are. I think the problem is when new teachers come in, they still have an attitude that you are Outside School Hours Care so you are outside their thought processes. They are not into sharing information, sharing equipment. It takes a while to break through that barrier. Jane tries very hard to break that barrier. She always reminds them, at the end of each term, ‘OK, when you’re cleaning out, don’t forget, don’t throw out your glue, don’t throw out your leftover paint, send it to Outside School Hours Care’.

The other two Catholic school principals also reported making efforts to be a visible part of OSHC. One principal shared afternoon tea once a week at the service, sitting with and talking to the children. He believed these interactions were important in building rapport with the children and showing his support for OSHC. The other principal reported intentionally passing by OSHC daily, to make his presence known to the staff and students. While all the Catholic school principals had sound working relationships with their coordinators, one of them also extended his support to other OSHC staff. This principal perceived that OSHC staff had a difficult task in dealing with children at the end of the school day, explaining that when other principals in the diocese asked why he took so much interest in OSHC, he would respond:

*We take a group of children, who probably don’t want to be in after-school care. We put them in the care of the least trained employees … the least professionally developed people, and we give them to them at the worst time of day, after the rules and regulations of school six hours a day. And we then give them another whole lot of rules and regulations. Therefore if you have it working well, it is a good investment to make those staff*
feel happy and content. The worst thing that can happen is they don’t feel that supported and staff are unhappy, then the whole quality comes down.

School 1
Relations between the school and OSHC differed for the two state schools within the sample. The coordinator of OSHC at School 1 perceived her relationship with the principal to be sound despite little contact between them. According to the coordinator, she had met with the principal on only four occasions, beyond P&C meetings, since assuming the role. Nevertheless, she felt the principal was committed to supporting her and the service. And, in fact, this particular OSHC service probably had less need of school support on account of several factors. First, the OSHC was financially viable, which meant it could provide quality resources (including toys, equipment and furniture) for the children. Second, the OSHC was located in a large purpose-built facility. In all, this meant that no rooms, facilities or resources from the school were required. The service also had the full support of the P&C. Perhaps, more importantly, the coordinator was an older, assertive and resourceful teacher who had worked in a variety of education and childcare settings. Owing to her experience and character, she was able to manage OSHC effectively without requiring a lot of support from the principal or a higher authority. While knowledge of other services is limited to this sample, such a coordinator is likely to be atypical, as qualification requirements demand only a TAFE certificate, and often OSHC services share school facilities and resources.

Schools 4 and 5
Working relationships between staff at Schools 4 and 5 and their OSHC services were not perceived as productive. The coordinator from School 4 felt supported by the junior school principal responsible for OSHC but not by school staff as a whole. The coordinator reported a desire for more communication with school staff, given that the school office had at times failed to notify her of student attendance when parents had phoned to place their children in care. School 5 had very little contact with OSHC, as was the case in School 1. This did not overly concern the coordinator, as she was a qualified teacher who was assertive and enjoyed autonomy. Yet while she was confident in handling daily problems that arose, and had access to the services of the area coordinator if necessary, she identified ways in which the school could have been more supportive:

Over the last couple of months we have had a bit of a challenge. The school has taken on three more buses [to transport children to and from school] and that has affected a lot of our usage. We have been in the fall financially and one of the licensing requirements is to have more toys, more resources to keep up. We haven’t had money to buy any more toys than we normally would. When we mentioned this to the school, it would have been great if they could have said ‘We will do a fund raising drive’ or ‘We will lend you some toys and you can borrow them in the afternoon if you return them afterwards’.

It is possible in this case that the principal and other school staff were not aware of the situation faced by the OSHC, as the service is managed by QLECS from the capital city. The model itself is not conducive to fostering close communication between OSHC and school administrators.

School 2
Working relations between OSHC and school staff were seen as unproductive at School 2 (the other state school). The coordinator reported limited communication between them, and perceived the P&C to be obstructive at times. The coordinator commented that certain members of the administrative staff who had been there for a very long time were resistant to after-school care. She recounted how she faced challenges when asking to use school resources:

It really is upsetting sometimes. The library, half the time, won’t let me borrow things. Every time I want something from the library, there is a new person on. ‘I want some books this week, please look it up on the computer, I do have an account.’ They will look it up and say, ‘I’m sorry, I’m going to have to refer you onto my supervisor.’ The supervisor comes out, ‘Have you borrowed here before?’ ‘Yes, it is on your computer.’ It is always attitude. It is always mistrust. I borrowed a projector and they said, ‘You are not allowed to take that home. You had better lock that up— not in after-school care, in the proper school buildings.’

When asked about relationships with other staff members, she responded:

We have two extremes. About half of them are so nice. The other half don’t know me at all. I went down to a pupil-free day last Monday. The school still hasn’t given me a key to one of the buildings that we are using. I needed to get in. It was raining. We couldn’t fit the children into this tiny room. I wanted to take half back [to the centre] but the teachers weren’t in their classrooms. I found a group of teachers sitting around drinking coffee and I came in and I said, ‘Hey guys, look I’m really sorry to interrupt, I’m Michelle from after-school care, I was hoping someone has an A block key’. The looks I got. ‘Who are you? What, you want my key?’ One of the ladies looked over to the man who had the key in his hand, who was looking at me like, ‘Am I allowed to give it to you? Can I trust you?’ It was this real looking down thing.
That is really difficult. ... It is like there’s the principal, deputy, teachers, teacher aides, support staff and then after-school care. Even the support staff, like the groundsman and the cleaners, contribute to the actual school. We are not school, so we are the lowest. That is how I get treated.

The principal gave no indication that he was aware of the coordinator’s dissatisfaction with her relations within the school. His lack of awareness may have been because of the minimal communication between him and the coordinator. Across the sample, regular and open channels of communication were important in establishing and maintaining good working relationships between school and OSHC staff. Principals who were seen to support and value OSHC instilled greater acceptance of OSHC among other school staff. In part, the quality of relations was shaped by the organisational structure.

**Triangulation and validation of findings**

The Quality Profiles awarded by the NCAC were used to validate findings. In order to be accredited, services must be awarded a satisfactory level of quality in each of eight aforementioned areas (see Figure 2 as an example of a Quality Profile awarded to an OSHC service). Services that are not accredited have opportunity to continue operation and improve practice and submit a self-study report within six months (NCAC, 2006).

![Figure 2. Graph comparing the seven OSHC services according to Quality Profile raw scores.](image)

![Figure 3. Example of Quality Profile given to OSHC service.](image)

![Figure 3. Example of Quality Profile given to OSHC service.](image)

Based on the overall scores from the Quality Profile data, the services were ranked from highest to lowest as follows: OSHC 6, 7, 3, 1, 5, 4 and 2. Table 1 compares this ranking with that broadly assigned earlier to the
models, according to the level of support evidenced within each. As can be seen in Table 1, the two rankings are matched with the exception of the OSHC service at School 1 (Model 2). Despite a relatively unsupportive organisational structure, the OSHC coordinator at School 1 was highly qualified, which enabled quality care delivery. The model adopted by the state schools (Schools 1 and 2), where OSHC is managed by the P&C, least supports provision of quality care. The services are isolated and may not be supported by the school or even the P&C. The quality of service provision is determined by the individual strengths of the coordinator rather than an enabling model per se.

Table 1. Comparison of models of OSHC based on amount of support they receive and overall Quality Profiles rankings

<table>
<thead>
<tr>
<th>Amount of support available to OSHC services from most to least support</th>
<th>Overall Quality Profile ranking from highest to lowest</th>
</tr>
</thead>
</table>
| Model 1                                                                | School 6  
                                    School 7  
                                    School 3 |
| Catholic schools  
                                    Schools 3, 6 & 7 | |
| Model 4                                                                | School 1*  
                                    School 5 |
| Lutheran school  
                                    School 5 | |
| Model 3                                                                | School 4 |
| Independent Christian school  
                                    School 4 | |
| Model 2                                                                | School 2 |
| State schools  
                                    Schools 1 & 2 | |
| *Only anomaly where models don’t match Quality Profiles. |

As established, OSHC services at the Catholic schools (Schools 3, 6 and 7) had the full support of the diocese project officer and the principal, and were incorporated with the school community. These elements allow for the delivery of the highest quality of care. The OSHC service at School 5—Model 4 involving QLECS management—scored relatively highly given that it was small and had a part-time coordinator and little support and involvement from the school. Despite these limitations, support from higher management provides important quality control.

The last two services were not accredited. The service at School 4 (Model 3 where the head of junior school was responsible for OSHC) scored higher than that of School 2 (Model 2 where OSHC was managed by the P&C). While the OSHC service at School 4 had the support of the junior school principal and, to a lesser degree, school support, it was isolated given the absence of a higher authority that could assist with accreditation or offer suggestions on how to improve care. The OSHC at School 2 had the lowest quality ranking; as for the OSHC at School 1, there was no real support from the school or from a higher authority.

The other source of evidence for possible triangulation of findings is an interview with the director of QCAN. As director of the leading body for OSHC, she was fully conversant with the different models of OSHC in the sample, as well as the strengths and weaknesses associated with these different organisational structures. In addition to providing evidence that could be compared to study findings and the Quality Profiles, the interview with the QCAN director can also be considered as a type of member checking, as it was held after all other data had been collected and overall findings and conclusions, in the large part, were arrived at. During the interview, the director made the following four key points:

1. The school principal is a key player regardless of who manages the OSHC service.
2. The OSHC service is a business, not just a community service.
3. Stand-alone services, such as those operated by school P&Cs, need coordinators with skill sets above those required by coordinators who have line management support (such as in the Catholic and Lutheran systems).
4. The ideal situation is that all OSHC services, irrespective of the sector (state, Catholic or independent), have area coordinators/managers or what are referred to as project officers in the Catholic model of the sample.

The director’s key points support findings from this research. In terms of the skills required by OSHC coordinators in P&C-managed services (Model 2), the director said:

If you have a coordinator who has excellent communication skills and is able to clearly articulate operational aspects about a service to the principal and to their P&C (and really understands them well), things seem to work a lot better. But it is when you get that person who is not such an effective communicator and has difficulty communicating on the same level as the principal, that I have noticed a lot of issues with services. A coordinator of a P&C-operated service, kind of being a stand-alone service, needs an over and above skill set to that of one who is in a service that has that line management support, like you see with QLECS and Cath. Ed. and all of those sort of services.

According to the QCAN director, initial meetings between QCAN, the Queensland Association of State School Principals, the Department of Communities,
and the Queensland Council of Parents and Citizens’ Associations were held several years ago in an attempt to establish a model where one person could support 10 to 15 services run by P&Cs within a region. While all stakeholders endorsed the idea, it was not realised owing to difficulties in coordination across departments. Further, P&C Associations refused to pay for the service and could not be made to do so. This may be easier to realise now with federal government initiatives, including the Office of Early Childhood Education and Child Care (OECECC), which aim to achieve a nationally consistent, accessible, affordable and high-quality early childhood education and child care system. Nonetheless, the challenges to compel P&C participation still exist.

Discussion

Different organisational structures emerged from the data, with varying levels of support for OSHC coordinators from within and outside the school. Those services with higher levels of support in the form of principals and, more importantly, area coordinators provided the highest quality of care, according to Quality Profiles awarded by the National Childcare Accreditation Council. While the Catholic and Lutheran OSHC services benefitted from the knowledge and assistance of area coordinators, the state and independent school services had no such support.

Within the sample, there was one exception to this general finding. One OSHC service provided high-quality care, according to the NCAC Quality Profile, without support from the principal or area coordinator. However, the coordinator was a qualified teacher who was both assertive and competent. Given OSC working conditions and qualification requirements, coordinators with such qualifications and skills are likely to be atypical.

Since employment in OSHC is characterised by high staff turnover, low staff qualifications and casual working hours, additional support is essential to delivery of high-quality care. While support from the principal is important in fostering a sense of community between the school and OSHC and addressing issues and concerns, outside support in the form of the area coordinator is vital in providing assistance with accreditation, professional development and networking.

Even though QCAN does provide this service to a degree, it is not at the level of support given to the large number of OSHC services in the state school sector, providing care for thousands of children. Area coordinators could provide OSHC coordinators with pro-formas for setting up and accrediting services and other procedures. They could visit the centres regularly to provide support and implement quality assurance mechanisms, especially during staff turnover transitions. Area coordinators could facilitate meetings between coordinators from different services, providing opportunities for networking and sharing.

The services of area coordinators may alleviate feelings of isolation experienced by some OSHC services. Out of School Hours Care services, operating as stand-alone services, have no affiliation or link to other services. There is no opportunity to share ideas and experiences or ask questions with direct line managers other than contacting anonymous personnel within different government agencies and organisations. Out of School Hours Care coordinators have a vitally important role in OSHC, and performance on Quality Profiles seems to indicate that they can facilitate higher-quality care through their leadership and management when they are supported by line managers.

Additionally, study findings revealed that, where principals are directly involved in the management of OSHC, there is greater communication between OSHC and the school. There is also seemingly greater acceptance of OSHC within the school. If the principal is seen by the school community to support and value OSHC, it encourages others to give similar support lessening the likelihood of negative interactions, such as the one related by the coordinator from School 1. In the case of the four schools in this study where principals were responsible for OSHC, the coordinators said they could turn to their principals for assistance at any time with the confidence that issues would be dealt with promptly and competently.

For principals, involvement with OSHC demands additional time when they are already very busy with school responsibilities. There are, however, effective ways they can support OSHC that involve little time and effort. Principals can raise the profile of OSHC by featuring it on the school website and in the school newsletter. They can also strengthen the positioning of OSHC within the school by promoting its importance and the sharing of school resources and facilities among staff members. Triangulation of interview data with services’ Quality Profiles showed that coordinators’ perceptions of working productively with schools and within overall supportive organisational structures did translate to delivery of quality care.

Conclusions and future directions

The findings from this study add to the small body of research on OSHC in Australia. Very few studies have investigated OSHC despite increasing numbers of families accessing their services. There is a burgeoning research base in the US; however, findings are not readily transferable to the Australian context owing to differences in purpose and clientele. In Australia, OSHC is a service for working parents to care for their children until they can pick them up. In contrast, OSHC in the US serves as an opportunity for academic enrichment and caters heavily for low-SES children.
The obvious limitation of this study is that it is a case study and therefore generalisations cannot be made. The OSHC services and models examined here are not representative of those operating within Queensland and Australia. However, important findings regarding levels of support within differing organisational structures have been illustrated, which may well translate to other OSHC contexts. The findings are particularly relevant to OSHC services that operate on school grounds and are in some way affiliated with schools.

Future research should investigate other models of OSHC. Many OSHC services operate beyond school grounds and are managed by councils or for-profit companies. A more complete picture of the different organisational structures will assist in determining elements and processes that enable quality care. Other research could explore the behavioural, social and emotional outcomes of attending OSHC. Developmental outcomes are likely to be influenced by regular OSHC attendance over time. Behavioural outcomes of attending the services in this study are explored by the authors in another paper (Simoncini, Caltabiano & Lasen, 2012).

As families will continue to require non-parental care for their children during the hours after school, it is important that OSHC services be of high quality. One way to improve the quality of care is to provide coordinators with support so they can focus their energies on programming and building relationships with the children. Support is needed from the principal, to facilitate productive working relationships between the school and OSHC, as well as from an area coordinator to assist with accreditation and provide networking and professional development opportunities.

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Chinese parents’ perspectives on home–kindergarten partnership: A narrative research

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This paper presents a study on what it means to practise home–kindergarten partnership differently. Using Bronfenbrenner’s bio-ecological theory, this study draws on the narratives of six Chinese parents’ successful involvement in home–kindergarten partnerships. Data was gathered through semi-structured in-depth interviews with parents whose children attend three different kindergartens in Zhejiang, China. Narrative analysis was employed to analyse the data. Critical to the findings is the parents’ willingness to grapple with initial complexities and educationally constructed borders and boundaries and to move beyond simplistic partnership with the kindergartens.

Introduction

The purpose of this study was to investigate Chinese parents’ views on home–kindergarten partnership. Specifically, it was to explore parents’ perceptions of their roles in such a partnership—their expectations, involvement and communication. Partnerships among parents, early childhood settings, and communities have gained increasing attention worldwide (DEEWR, 2009). Research indicates that successful partnerships conceptualise themselves as a collective entity, with collective expertise (Leu, 2008; Li, 2006). They do not simplify focus on their own expertise, but consider their contributions in relation to others within the partnerships.

This study focuses on the partnership between home and kindergartens in Zhejiang, China. It is concerned with the collaborative relationship between parents and kindergarten educators. In the Chinese context, home–kindergarten collaboration/cooperation is a widely used alternative term for home–kindergarten partnership (Leu, 2008). The term kindergarten in this study refers to an early childhood educational setting for children aged from two to six, which is different from what pertains in the Australian context. Home–kindergarten activities in this study refer to diverse forms of activity which involve children, parents, and teachers and can be organised in various settings, including scenic spots outdoors (for example, the activity of parent-as-teacher and weekend group excursions).

Literature review

Benefits of home–kindergarten partnership

Home–kindergarten partnership contributes to improving the quality of early childhood education and care (ECEC) (Leu, 2008; Li, 2006). It benefits children, parents, educators, the program and the community (Davies, 1997; Keyser, 2006; Li, 2006; NSW DoCS, 2002) by tapping into the different expertise of partnership members to enhance children’s confidence, independence, physical health, and their capability to acquire language, as well as to promote creativity (Li, 2006). The continuity of learning between home and kindergartens can also be formed by partnership activities (Elliott, 2005). This advantage is further emphasised in New South Wales Department of Community Services (2002), where it is claimed that a good partnership enables parents to extend their children’s knowledge and allows teachers to get feedback from parents on children’s home activities. This feedback can be used in expert planning for children’s activities. Home–kindergarten partnership
not only creates a safe emotional environment for children but also provides them with a healthy social relationship model which guides them to building trusting relationships with others, such as educators and peers (Keyser, 2006; NSW DoCS, 2002). Further, home–kindergarten partnership creates sufficient opportunities for parents to better understand their children, educators’ roles and educational processes in the early childhood settings, and to gain child-rearing knowledge and skills, self-confidence, and diverse support from kindergartens (Davies, 1997; Li, 2006).

Barriers to home–kindergarten partnership

Research studies state that a prevailing inhibitor of home–kindergarten partnership is parents’ and teachers’ confusion in understanding it (Pinkus, 2003; Rodd, 2006). Parents and educators are confused about what the term ‘partnership’ means, what its processes should be, and how it should be monitored and assessed in practice (ibid). Additionally, Hodge and Runswick-Cole (2008) highlight the hierarchy of knowledge as a problem in creating partnership. Parents perceive that their anecdotal knowledge of children has been valued as less important than educators’ professional knowledge (Dale, 1996). A study by Hughes and MacNaughton (2002) shares a similar view. It states that the relationship between parents and staff often remains tense owing to ‘the particular politics of knowledge—the competition between social groups to get their knowledge accepted as truth’ (Foucault, 1977, cited in Hughes & MacNaughton, 2002, p. 18). Parents and early childhood staff try to claim their own knowledge of children as ‘the truth’ (ibid). Furthermore, parents’ attitudes perhaps inhibit effective home–kindergarten partnership (NSW DoCS, 2002; Rodd, 2006). Similar findings are further supported by Peng and Guo’s (2001) study which points out that parents’ attitudes can hinder the formation of effective home–kindergarten partnership. On the other hand, Billman, Geddes and Hedges (2005) argue that parents have strong and positive willingness to form partnerships. Other barriers include a lack of parents’ professional knowledge, insufficient time (Chambers & Childre, 2005; Rodd, 2006), power imbalances (Mcgrath, 2007; Ryburn, 1997), issues of trust, parents’ feeling of not being welcome (Swick, 2006), and poor staff–director relationships (Mcgrath, 2007).

Facilitators to effective home–kindergarten partnership

Many research studies have recognised effective communication as a key approach to forming home–kindergarten partnership (Crump & Eltis, 1996; Davies, 1997; Lv, 2005; Swick, 2003). Communication includes face-to-face conversations, telephone calls, orientation visits, everyday information contacts, sending photo albums and newsletters, and parent–educator conferences (Huber, 2003; Porter, 2008). Communication skills (Winton, Brotherson & Summers, 2008; Lv, 2005) and behaviours (Swick, 2003) are also vital aspects of quality communication. Developing policies for partnership is a powerful approach to supporting the development of home–kindergarten partnership (Paik, 2004; Peng & Guo, 2001; Zheng, 2002) as well as providing training for both parents and educators (Berger, 2000; Bojuwoye, 2009; Mcgrath, 2007; Swick et al., 1997). Moreover, fathers’ involvement has been highly recommended by recent research as a gateway to effective home–kindergarten partnership (Carlisle, Stanley & Kemple, 2005; Downer & Mendez, 2005; McBride, Dyer & Rane, 2008). In addition, many different research studies emphasise the importance of developing parents’ self-efficacy, which refers to parents’ confidence in their own ability to impact on children’s development (Lamb-Parker et al., 2001; Porter, 2008).

Theoretical framework: Ecological theory

This study is based on Urie Bronfenbrenner’s (1917–2005) ecological theory, which indicates that children’s development occurs in complicated relationships and is profoundly influenced by five environmental systems: the microsystem, the mesosystem, the exosystem, the macrosystem, and the chronosystem (Berk, 2006; Morrison, 2008). Since the ecological model has shortcomings in ‘capturing the dynamic nature of interactions between the developing individual and the surrounding environment’ (p. 14), Bronfenbrenner developed it into a more detailed model, renamed as a bio-ecological model (White, Hayes & Livesey, 2005). This model looks at the relationships among the developmental procedure, context, time, and features of the individual person (White et al., 2005). According to Bronfenbrenner and Evans (2000), the bio-ecological model focuses on the joint function of children’s biology and their ecology (see Figure 1) that operate in reciprocal relationships between and among systems. In this theoretical view, children’s development depends on both their interior disposition and the environmental circumstances. This study applies the concept of the mesosystem and how its elements are implicated in home–kindergarten partnership. According to Bronfenbrenner (1979), the mesosystem refers to the linkages between two or more settings in the microsystem (the child’s immediate surroundings). Swick and Williams (2006) describe the mesosystem as a community where each part is correlated with the other. In the current study, the mesosystem is the relationship between home and kindergartens.
As can be seen from the conceptual diagram in Figure 1, the Mesosystem refers to those situations or events in which two Microsystems come together in some respect. The activities from individual Microsystems interact to form a new experience for the child (Bronfenbrenner, 1994, 1995). Mesosystem activities can be long-term and recurrent, such as family participation in kindergarten meetings, or a one-time occurrence such as accompanying children on school excursions.

Mesosystems are very important to a child’s development because, as parents participate in the child’s kindergarten activities through partnership, they build bridges between two settings—the child’s home culture and that of the kindergarten (Bronfenbrenner & Ceci, 1994). Although parents live with their children in the microsystem, their partnership with kindergartens creates a Mesosystem for the child by bringing part of two different Microsystems together (Bronfenbrenner, 1977, 1994, 1995). Although parental partnership with kindergartens creates Mesosystems that may benefit the child’s development activity, it can also lead to significant stress for children if the two systems that combine to create the Mesosystem differ significantly in terms of values and cultures. It is therefore important to contemplate how Mesosystems can be created so that parents, together with kindergartens, maximise the opportunities for support and reduce the prospects for tension.
Context of the research

Home–kindergarten partnership in China

In 2001, the Ministry of Education of the People’s Republic of China released an ECEC policy document, *The Guideline Framework of Kindergarten Education (Trial)*. One of its key principles states that ‘kindergartens should closely work together with families and communities to create a good learning environment for children’ (Ministry of Education of the People’s Republic of China, 2001, p. 23). In response to this policy, attention is being broadly directed to building a collaborative home–kindergarten relationship (Liu, 2003; Sun & Liu, 2006). The majority of kindergartens in China have a structured system of such collaboration (Ge, 2008; Wang, 2003). According to Ge (2008), these collaborations are demonstrated in a range of ways:

- 90 per cent of kindergartens have a Kindergarten Service Committee composed of directors, coordinators and parents, functioning as a key decision-maker, an advisor, a consultant, and a supervisor, as well as Parent Schools.
- 83 per cent have established Parent Committees and hold parent–teacher meetings.
- 52 per cent have open-to-parents days and a reception room especially for meeting with parents.

Further, other forms of home–kindergarten collaboration include communication through the internet with a bulletin board system, and face-to-face conversations, parent–child activity sessions, parent-as-teacher, home visits, kindergarten visit days, and internal and external parenting activities (Chen, 2006; Chen, 2001; Jin, 2003; Liao, 2003; Shan & Yang, 2008; Xu, 2008).

However, many studies, such as Dong (2003), Hu (2009), Wang (2003), Yue (2002) and Zhou (2005), point out that the Chinese home–kindergarten partnership is at the very beginning stage of development. Levels of collaboration are low and partnerships are characterised by poor communication, low levels of parent participation, problematic home–kindergarten activities, and immaturity in the leadership and management (Dong, 2003; Hu, 2009; Li & Zhang, 2005; Liu, 2003; Yang, 2006; Zhang, 2004; Zhou, 2005). According to Hu (2009) and Liu (2003), the roles of educators and parents in these partnerships are unequal. For example, parents are mainly bystanders and helpers/supporters (Hu, 2009). They rarely have the opportunity to make decisions relating to curriculum, kindergarten management and other matters (Dong, 2003). Further, Zhou (2005) states that kindergarten activities are not linked to family activities and are mostly based on kindergartens’ needs rather than parents’ needs. Yue (2002) adds that the power of management is centralised and parents’ rights have not been sufficiently respected. Factors leading to these problems include parents’ and educators’ separate responsibilities, different educational beliefs, and insufficient competence in establishing the partnership (Liu, 2003; Peng & Guo, 2001; Zhou, 2005).

Therefore the aim of this study was to examine parents’ perceptions of parent–kindergarten partnerships. A better understanding of parents’ perceptions will enable early childhood services to develop more appropriate strategies to improve partnerships.

Method

Settings

The study was conducted in three different public kindergartens (with children aged two–six years) in Zhejiang province, located on the south-east coast of China. The kindergartens were selected mainly on the basis of convenience, their location, and because they were ranked as high-quality ECEC programs. The quality ranking was established in 2008 by the Education Department of Zhejiang, with kindergartens on three different levels. The three kindergartens selected, in addition to being ranked as high-quality, were respectively located in a capital city, a county, and a small town in order to represent the range of locations in the district. Each kindergarten was the first-ranked in its area (Education Department of Zhejiang, 2009).

<table>
<thead>
<tr>
<th>Kindergartens Locations</th>
<th>Scales</th>
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<tbody>
<tr>
<td>A</td>
<td>A big capital city, Hangzhou</td>
</tr>
<tr>
<td>B</td>
<td>A county, Jinyun</td>
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<tr>
<td>C</td>
<td>A rural area, Xinjian</td>
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</tbody>
</table>

Participants

Information about the study (a letter of invitation including explanatory statements, consent forms and the researchers’ contact details) was sent to 12 randomly selected parents with the permission of kindergartens. Six of the 12 parents agreed to participate (see Table 2 for detailed background information of participants). All forms were translated (by a certified translator) from English to Chinese (Mandarin).
Data collection and analysis

A semi-structured, in-depth interview was employed to collect the data. Individual interviews were conducted in different venues, chosen by the participants. Each interview lasted for approximately 30–45 minutes. Prior to the interviews, eight basic questions were prepared. For example, participants were asked: ‘What role do you play in home–kindergarten activities?; Why?; ’ ‘What is your focus on the home–kindergarten activities?’

Interviews were recorded by a digital recorder with the permission of participants, and two researchers also took notes. All six interviews were transcribed by the two researchers separately, then compared. Transcripts were analysed using narrative analysis. Parents’ stories were outlined individually, then compared with the other stories. We used narrative analysis because the participating parents, like all humans, are storytelling beings (Abell, 2004; Connelly & Clandinin, 1990). We approached the analysis with an organisational structure designed to focus on the core issues through four categories (Mishler, 1986, pp. 236–237):

- **Orientation**—describing the setting and character.
- **Abstract**—summarising the events or incidents of the participants’ stories.
- **Complicating action**—offering an evaluative commentary on events, conflicts and themes.
- **Resolution**—describing the outcomes of the story or conflict.

Findings

P1’s perspective

P1 was a full-time public servant whose four-year-old son attended Kindergarten A located in a capital city, Hangzhou. The interview was conducted in a small meeting room in the kindergarten after P1 took her son there in the morning. She was willing to participate in home–kindergarten activities because they provided opportunities for social interaction for both children and parents, and she was mainly concerned about her son’s social development through these activities.

In China nowadays, children hardly have peers to play with because we have only one child … I want to give my son more social opportunities through home–kindergarten activities … social interpersonal skills are very important for children nowadays …

Although she was delighted to attend home–kindergarten activities, P1 felt sorry about her rare involvement on account of her full-time job. However, she mentioned that her husband was very enthusiastic about participating in the activities because they gave him an opportunity to show his interest and expertise:

… because my husband is interested in photography, I remember in the first excursion, my husband took a lot of pictures of my son when he was playing. Those pictures were appreciated by the teachers. So they published them on the website of the kindergarten [smile with pride]. Look, every picture was very interesting [excited]. He then created many correlated themes to interestingly organise those pictures [appreciative] … He also took pictures for other children in my son’s room and wrote simple and vivid descriptions for each picture. It was fantastic [excited] … Afterwards, he got lots of praise from other parents [smile with pride]. It made him feel a strong sense of success …

Regarding the parents’ role in home–kindergarten partnership, P1 stated that parents should be supporters and followers of teachers:

I think the ideal status is that from the beginning the teachers lead the interaction and parents are as followers. Then, the parents gradually take the main role in the interaction and finally achieve that parents can spontaneously organise activities in establishing home–kindergarten partnership … both parents and teachers take the equal role. However, in reality, it’s hard for parents … because of … like insufficient energy, busy working … and even the limitation of awareness. So I think the quite common situation at the moment is teachers lead us, we follow and … also support them; for example, we can provide some resource for the curriculum and activities.
When we asked about participating in decision making, P1 looked confused. The role of a decision maker was an unfamiliar concept to her. She had not yet experienced it and did not know if she would like to take on such a role in the partnership.

She said she felt the role of parent–teacher oral communication was to inform her about her son’s wellbeing, his daily experience and personal development:

_The teacher talks to me about my son’s positive and negative sides of development. That’s what I would like to know. But firstly, I am concerned whether my son is happy in the kindergarten._

Parent-as-teacher, which is one form of home–kindergarten activity was highly recommended by P1. She also suggested that some home–kindergarten activities, such as weekend group excursions, needed to be organised once a month; she was too busy to attend more than once in a month. She requested that activities be planned well in advance and parents informed about them at the beginning of each semester so they could set aside time for them.

**P2’s perspective**

P2 was a full-time housewife whose four-year-old daughter was in kindergarten A. The interview was conducted in a small meeting room in the kindergarten before she picked up her daughter in the afternoon. She was the member of the Parent Committee (one or two parents were selected from each room to become members). Committee members are responsible for devising, planning, deciding, preparing, and organising parent–child outing activities with teachers. As a member of the Parent Committee, P2 said she was delighted to attend home–kindergarten activities and would like to be an active participant and supporter. However, she complained that her time was very tight and the kindergarten organised too many activities:

_P2 described her daughter’s happiness as a motivation for participating in the partnership. She identified face-to-face talks with teachers during pick-up and drop-off periods as her favourite experience and the most effective form of communication. She would like to know her daughter’s daily routine (such as eating and sleeping times), experiences and development in the kindergarten through this communication process._

**P3’s perspective**

P3 was delighted to attend home–kindergarten activities and to communicate with teachers. She expected that the home–kindergarten activities could provide more opportunities for social interaction for children and parents. The reason for her expectation was that she had only one child and she worried about her daughter’s social development:

_Actually, you know, only one child, put her in the kindergarten … create a collective and social environment for her … she can interactive with peers. So I ask always ask teachers ‘how’s her relationship with peers?’ specifically, for example, if she wants to play other children’s toy, how can she communicate with them? Or, when there is argument with others, how does she deal with it? In addition, P3 expected the teachers to offer more opportunities for quality communication. She stated that, while face-to-face conversations during pick-up and drop-off periods were her favourite form of communication, the opportunities for these were insufficient because of the teachers’ unavailability. She also complained that teachers did not give her detailed information about her child’s daily experiences, and failed to help her solve her parenting problems. As well, she wanted teachers to pay more attention to individual children. However, that seemed difficult because of the large numbers of children in each classroom:*

*>Too many children in one room, can you imagine about 30 two-year-old children in one room with two teachers and one assistant?*

She would like to be a supporter who did what the teacher and the curriculum required, as well as a learner in home–kindergarten partnership. She said she was happy to make decisions in partnership with teachers if the school thought she was sufficiently knowledgeable to do so. However, such opportunities had not yet been provided for her. She also stated that many other parents would not like to be decision makers because they perceived themselves lacking professional knowledge in comparison to the ECEC teachers:

_I mean parents think teachers know more about education than us, they are more experienced so we can’t tell them what to do._
**P4’s perspective**

P4 said she was happy to participate in home–kindergarten activities:

*These activities are quite good. I like to attend ...*

However, she emphasised that limiting home–kindergarten activities was very important because she was busy at work and did not have much time for involvement. She preferred the activities that involve parents to be organised once or twice a year:

*There are too many activities. You know we have to work, we are busy ... roughly once or twice each year will do.*

P4 also said she looked at how much attention teachers paid to her daughter in the activities. She valued this attention because she felt it could positively change the child’s behaviour.

*I am involved because ... I want know whether she is happy in play. At this stage, being happy is more important than what knowledge she learns. Being happy can help her behaviour.*

She said she would rather be a supporter, a learner and a bystander rather than a decision maker in school matters, adding that one needed to demonstrate professional knowledge to be taken seriously, so she would like to learn more about ECEC:

*It’s more like teachers guide us, telling us what we need to do ... what they want us to do for them. I have not heard of parents making decisions in participation. I think teachers should do that. We are not the professionals ... we cannot make proper decisions in ECEC. I prefer watching what they are doing ... I can support my child by just watching. I don’t like playing game with my child in these activities ... because I feel nervous and tired.*

Data also showed another reason for this parent’s participation in home–kindergarten activities to be related to her daughter’s daily routines, experiences and development:

*I would like to know how’s my daughter’s eating and sleeping ... also what’s she’s been doing during the day ...*

During the interview, although she expressed some appreciation of the teachers’ provision of information on her daughter’s daily performance in the kindergarten, she complained that the information lacked detail. She requested that more detailed information about the children be documented and sent to parents:

*In communicating with teachers, they gave me information about my child, but it was too general. I think teachers have not paid enough attention to every child ... also face-to-face conversation is not enough ... because the room leader is always not there during pick-up and drop-off time.*

P4 also expected more opportunity for face-to-face conversations with teachers during pick-up and drop-off periods. According to her, this form of communication is direct and effective. In addition, she suggested that kindergartens need to give more attention to parents during pick-up and drop-off times.

**P5’s perspective**

P5 described her energetic role in the partnership as a supporter; however, she did not want to be a decision maker because she perceived herself as lacking the necessary ability:

*I think ... parents’ active response to the kindergarten or teachers is very important. If teachers ask me to do something ... like sometimes, they need us to prepare some materials for activities, I am happy to do things like that. Making decision? I don’t know that. We cannot make decision ... we don’t know about teaching this sort of stuff, teachers are professionals ... we are not.*

Her child’s wellbeing and social-emotional development seemed to be the motivation for P5’s involvement in home–kindergarten activities, and she valued the social opportunities she experienced in the partnership:

*... I look at if my child is happy in the activities ... I would like my child to get along with other children in the activities ... it’s very important, because we only have one child ... so she doesn’t have this opportunity to practise social skills at home ... but she can do that in the home–kindergarten activities.*

Nevertheless, she was discontented with the child–staff ratio:

*Too many children in one room ... but ... only two teachers, how can teachers pay enough attention to so many children? Too many children!*

In addition, her daughter’s daily routines and development were the main topics of her conversation with teachers, so she expected more information on her daughter:

*I ask teachers about what my daughter does every day. Is she being good? Also, like ... how’s lunch? Does she have good appetite? How’s sleep? ... this kind of thing.*

**P6’s perspective**

P6 described herself as an active participant and supporter in home–kindergarten activities:

*I am quite responsive ... happy to do what the teachers or the kindergarten wants me to do, like help teachers.*
However, she perceived herself having little knowledge of ECEC and felt that limited her ability to be a decision maker. Instead, she would like to be a learner, learning more about ECEC through home–kindergarten activities such as accompanying children on school outdoor programs. She thought that, because of her limited knowledge, she had not been given the opportunity to suggest any programs for the kindergarten:

Actually, I would like to know more about how to help children learn … if the kindergarten can provide more opportunities; it would be good … like Parent School circle times. I don’t really take part in decision making … I think … I haven’t been asked to make decision in any meeting … and I don’t want to be a decision maker … because I think I am unable to do that, without some knowledge of ECEC.

This parent reported that her son’s wellbeing was her reason for taking part in the kindergarten meetings and activities, and she expected that diverse forms of home–kindergarten activities could enrich her son’s experiences and help her find out about his son’s interest and strengths:

Well, being happy is very important in the activities [smiling]. I expect him to experience everything, attend different activities … then find out what he is good at and what he likes … to be honest, as a mother of a three-year-old boy, I still don’t really know him.

In addition, P6 expressed some satisfaction with the conversations she had had with the teachers concerning her son’s daily routines, experiences and development:

The teachers are quite good. They tell me many things about my child in the kindergarten … things I would like to know most are, eating, sleep … and … how my child is learning …

**Discussion**

**Supporter and learner instead of decision maker**

Findings showed that all parents shared similar views of being a supporter of home–kindergarten partnership. Three would like to be learners, learning more about ECEC. However, most of them, particularly the parents from the kindergarten located in a rural area, were unfamiliar with the term ‘decision maker’ and had not yet realised that it was another role they could take on. It appears that the parents lack the understanding that home–kindergarten partnership requires that parents and teachers co-produce programs to benefit all children. Pinkus (2003) and Rodd (2006) argue that, when home–kindergarten partnership has not been sufficiently understood by parents, this hampers the effectiveness of their involvement.

The results showed that only one of the participating parents was willing to be a decision maker, which implies that kindergarten teachers would need to be open and transparent about the specific roles they wanted parents to play in the partnership and to provide support to enable parents to participate in this manner.

Shared decision making, exemplifying the processes of shared power, is a key component of effective home–kindergarten partnership (Arthur, Beecher, Death, Dockett & Farmer, 2008; Keen, 2007; Keyser, 2006). Therefore, to build strong and effective partnerships with families, kindergartens need to formally encourage and invite parents to take active part in decision making.

The findings also revealed that the main reason for parents’ unwillingness to be decision makers was that they perceived themselves as lacking adequate professional knowledge and were unqualified to make decisions. It appears that these parents value teachers’ professional knowledge but have not yet realised that their own knowledge of raising and educating children at home are valued assets. Parents’ views pertaining to the hierarchy of knowledge, if not addressed, could hinder the formation of home–kindergarten partnership (Dale, 1996; Hodge & Runswick-Cole, 2008).

**Quantity and quality**

The findings revealed that all parents were delighted to attend home–kindergarten activities and most of them were active participants. By participating in home–kindergarten partnership, the parents bring a Microsystem from home that combines with that of the kindergarten in producing a Mesosystem that facilitates quality programs for children. Many parents offered suggestions and expectations about home–kindergarten activities and communication. Four parents (P1, P2, P3 & P4) pointed out the importance of the appropriate quantity of activities, and two (P2 & P4) perceived that running too many activities was inappropriate because of the stress and time limitations imposed by being busy with work. Work was also mentioned by P1 as a major reason inhibiting her participation. As mentioned in the explanation of the conceptual framework in Figure 1, Mesosystems can create tensions, therefore it is important to contemplate how kindergartens partner with parents to maximise the opportunities to reduce pressure. If parents’ workplace issues are negatively influencing home–kindergarten partnership, there is the need to reorganise the timing of activities.

One parent’s (P1) suggestion that the kindergartens organise more weekend group excursions may provide opportunities for parents to engage, but at the same time may not be suitable for the teachers. Two parents’ (P3 and P4) suggestions of opportunities for face-to-face conversation during pick-up and drop-off times is a relevant point for consideration to mutually progress the partnership.
Although all the parents in this study expected teachers to pay more attention to their children, they thought the current situation of too many children and insufficient staff prevented this.

According to the current Regulations for Kindergartens in China (National Education Committee, 1996) and Staffing Standards in Full-Time and Boarding Kindergartens (Trial) (National Education Committee & Ministry of Labour and Personnel, 1987), the maximum number of children in each three–four age group should be 25, four–five age group should be 30, and five–seven age group should be 35, with 2–2.5 teachers and 0.8–1 assistants (the policy does not clarify if this is the number of staff who should be with children all the time). However, the average numbers of children in each room in kindergarten A, B and C were approximately 25, 31 and 50 respectively, with two teachers (one working with children in the morning, the other in the afternoon) and one assistant. It appears that some kindergartens did not rigorously abide by the regulations. Theorising from Bronfenbrenner’s (1979) bio-ecological perspective, external factors such as the national policy context is important for effective home–kindergarten partnership if the policy is consistently implemented. On the other hand, if the policy is not implemented effectively, as in the case of child–staff ratios in the kindergartens in this study, it invariably hampers the development of effective home–kindergarten partnership.

Wellbeing and social-emotional development

Findings uncovered that all six parents prioritised their children’s wellbeing (health and happiness) and socio-emotional development in their involvement in home–kindergarten activities and communication. Three of the parents (P1, P3 & P5), emphasised their children’s social-emotional development as the important reason for their involvement. Since they each had only one child who did not have siblings to play with, social opportunities were considered especially vital to their children’s development. The 1979 One-Child Policy (also known as the Family Plan Policy) in China for controlling population growth means parents often feel vulnerable about their ‘only’ child when s/he leaves home for kindergarten, and need home–kindergarten activities which can provide their children with social opportunities.

Conclusion

The results of this study suggest that an effective home–kindergarten partnership depends on three important factors. First, when the program of activities is relevant to family’s needs they are motivated to get involved. Second, when there are clearly defined roles and the communication patterns are well-understood by families, they take ownership of the program. Finally, careful planning is needed when bringing two Microsystems together to form a Mesosystem. Because school and family cultures, beliefs, values, knowledge and aspirations differ, care needs to be taken in forming a Mesosystem so that it does not become a depressing experience for either parents or teachers. Mutually agreed plans and collaborative leadership are therefore important for effective and progressive home–kindergarten partnership (McBride et al., 2008; Potter & Carpenter, 2008).

References


Building foundations for numeracy: A qualitative analysis of the basic concept knowledge demonstrated by young deaf children

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**THE QUALITATIVE STUDY DESCRIBED** in this article examines the knowledge of basic concepts demonstrated by six young deaf children* with high/low levels of mathematical ability as measured by performance on a formal (i.e. Bracken Basic Concept Scale) and informal (i.e. classification/sorting task) assessment. Findings indicate that children with lower mathematics ability, as measured by the Test of Early Mathematics Ability (TEMA-3), also demonstrated limited understanding of basic concepts and weaker thinking skills as evidenced by a lack of ability to categorise or classify at a level comparable to their more mathematically able peers. Such performance suggests that a foundation in basic concept knowledge and thinking skills may be critical to the development of early numeracy skills.

Introduction

Numeracy has been defined as ‘a social and cultural perspective for discovering and thinking about mathematical knowledge when applied for fulfilling the purposes of our everyday lives or in other meaningful contexts’ (Macmillan, 2009, p. 268). As such, numeracy involves more than just numbers and counting but includes concepts such as measurement, geometry, spatial sense and thinking skills, developed initially through social interactions rather than formally in a school setting. For hearing children, early numeracy skills may develop naturally as they interact with the world around them and overhear, for example, incidental conversations related to size (e.g. ‘Look at how big you are!’), time (e.g. ‘10 minutes until bedtime’), and quantity (e.g. ‘You are sleeping with three dolls tonight’). For young deaf children, however, the majority of whom are born to hearing parents (Mitchell & Karchmer, 2004) who may or may not use sign language, access to incidental learning experiences may be limited (Gregory, 1998).

Research indicates that the academic delays demonstrated by deaf students in subjects such as mathematics throughout their school years (Allen, 1995; Marschark & Everhart, 1999; Traxler, 2000; Wood, Wood, Griffiths & Howarth, 1986) may have their onset during the early childhood years (Kritzer, 2009) and, at least in part, reflect a lack of incidental references to early numeracy concepts in natural interactions between parents and their young deaf children (Kritzer, 2008). Documents published by the National Council for Teachers of Mathematics (NCTM) and the National Association for the Education of Young Children (NAEYC) (NAEYC & NCTM 2002), as well as others (Clements & Sarama, 2009; Macmillan, 2009), state the importance of incorporating reasoning, problem solving, and overall thinking skills with mathematics education for children of all ages. The ability to think mathematically, however, may require a foundation in basic conceptual knowledge and use of numeracy-related vocabulary acquired through incidental learning experiences that young deaf children may not have had access to. The purpose of the study described in this article was to investigate the understanding of basic concepts and early thinking skills demonstrated by young deaf children who showed high and low levels of early mathematical ability.

Background

Since early concept learning—the early learning of mathematics concepts specifically—is rarely formally taught (Tudge & Doucet, 2004), what young children

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*Footnote: Believing that hearing loss refers to a potential cultural difference rather than a disability, the author has elected not to use ‘person-first’ language in this manuscript. Much in the way that cultural labels are used to denote national/international differences (e.g. ‘American children’), throughout the text, the term ‘deaf children’ is used rather than ‘children who are deaf’ to reference cultural difference rather than disability.*
know, or do not know, regarding early mathematics may be linked to their more general knowledge and experience, including the use of language and basic concepts, knowledge that was likely obtained incidentally. Research indicates that high performance on tests measuring basic concept knowledge correlate with academic achievement (Zucker & Riordan, 1990), intelligence (Howell & Bracken, 1992; Laughlin, 1995) and early vocabulary development (Breen, 1985).

Deaf children and the understanding of basic concepts

Research related to deaf children’s understanding of basic concepts is limited. While hearing children with learning problems have also demonstrated difficulty with basic concepts (Bracken, 1998; Kavale, 1982; Nelson & Cummings, 1981; Spector, 1979), only one study was found specifically related to deaf children. Findings from a study by Bracken and Cato (1986) indicate that deaf children experience delays in basic concept development. In the Bracken and Cato (1986) study, the scores of a group of 17 deaf children and 17 hearing children, all approximately six years old and matched for gender and race, were compared for their understanding of basic concepts (i.e. colour, letter identification, numbers/counting, comparisons, shapes, direction/position, social/emotional knowledge, size, texture/material, quantity, time/sequence) as measured by the Bracken Basic Concept Scale (BBSC). Results showed that the deaf children performed conceptually at a level equivalent to mental retardation on all subtests. These scores were approximately two standard deviations below those of their hearing peers across all basic concepts measured by the test. While the deaf children received the highest score in the ‘School Readiness Component’ of the test (i.e. the first five concepts measured: colour, letters, numbers/counting, comparisons, shapes), their scores did not significantly differ between these and more abstract concepts measured by the test.

While these findings are disheartening, it is important to note a critical issue that could have impacted on the findings. The language skills of the deaf children who participated in this study are not specifically stated. The authors reported that the deaf children used either oral methods (i.e. a focus on the development of spoken language) or total communication (i.e. philosophically defined as the communication that best matches the needs of the child). However, the children’s background or experience with a system of signed communication or visual-spatial language is not described. Despite the examiner being a sign language interpreter, it is possible that the deaf students did not fully understand the directions of the test and that this resulted in decreased performance. In addition, this study did not consider the performance of deaf children from deaf families. If given natural language exposure from birth, it is possible that the scores of these children would have been higher.

Research studies have typically used formal assessments to measure young children’s understanding of basic concepts. While a test such as the Bracken Basic Concept Scale (BBSC) is useful measure for obtaining this information, since it is normed on a hearing population, it may be limited in its ability to accurately assess the basic concept knowledge of young deaf children. Informal tasks that are more natural and play-based provide another means of accessing this information. Since basic concepts such as those measured by the School Readiness and additional components of the BBSC (i.e. colour, letters, numbers/counting, sizes, comparisons, direction/position, self-social awareness, texture/material, quantity, and time/sequence) are observable, tasks that provide opportunities for sorting and categorisation may be particularly useful in obtaining information regarding receptive and expressive understanding.

Defining classification

Classification is one of the early mathematical principles that early childhood educators need to be aware of (Macmillan, 2009). Classification and the ability to make comparisons is a cognitive skill that develops in stages, with elements of this skill being present from an early age. According to a trajectory developed by Clements and Sarama (2009) for hearing children, children as young as two years are already beginning to create sets based on shared properties; by the preschool years they are beginning to follow verbal rules for sorting, and by age five to six years they can consistently sort by a single attribute and re-sort by a different attribute. According to Piaget (1962), since young children are not yet able to separate out one attribute to unite a group, they are not capable of true classification but they do demonstrate an ability to make collections, that is a set of items grouped together based on visual or spatial perception (Phillips & Phillips, 1996). Piaget described an early pre-classification stage as the making of graphic collections; children in this stage view each item in a set individually and will arrange items to be sorted into careful spatial configurations (i.e. pictures). The child at this stage will note the similarities between items but is only capable of viewing two items at a time; s/he is not yet able to make a comparison to a group (Phillips & Phillips, 1996). At the next stage, children begin to create non-graphic collections; putting items into piles. However, all items belonging to a group must be physically observable and in proximity to one another. The child is not yet able to think universally (e.g. mammals) and therefore can only create groups
of items that are physically present (Phillips & Phillips, 1996). Following Piaget’s definition of classification, the ability to truly classify is achieved at the class inclusion level. At this level children are able to consider hierarchical and subordinate relationships; for example, they can consider that shirts and socks can both be classified as clothing. They can also take parts and wholes into consideration, perhaps by recognising that they have more clothing than shirts or socks considered exclusively. In a study by Sophian and McCorgray (1994) examining young children’s understanding of part–whole relations, five-and six-year-old hearing children were found to be able to demonstrate understanding of class-inclusion, but four-year-olds could not.

**Deaf children and classification**

There has been limited research into the classification skills of young deaf children. Two studies have been done regarding pre-school deaf children’s ability to classify based on verbal rather than perceptual characteristics. Findings from studies by Best (1972; Best & Roberts, 1975) indicated that a slight lag between deaf and hearing children was already evident at age three–four years. Another study (Kritzer, 2007) indicated a possible weakness in deaf children’s ability to classify using materials that were perceptual in nature.

A prerequisite to the ability to make perceptual classifications that are tied by a common attribute is the ability to recognise attributes. Perceptual attributes are directly observable and are frequently expressed as basic concepts (e.g. colour, shape, etc.). The purpose of the current study was to examine the basic concept knowledge and early cognitive skills of young deaf children.

**Method**

**Participants**

Twenty-nine deaf children from seven schools for the deaf around the United States participated in the larger study on which this study is based. All children were between the ages of four and six years, from homes where American Sign Language (ASL) or spoken English were the primary language used. The Test of Early Mathematical Ability (TEMA-3; Ginsburg & Baroody, 2003) was administered to all 29 children who participated, and used to evaluate the level of mathematical success (i.e. high or low). Based on the test scores, children were divided into groups.

Of the groups of children who fell into the ‘high’ and ‘low’ categories, three from each group were chosen randomly to participate in a subsequent level of the study. While data related to other aspects of the larger study has been published elsewhere, an analysis of data related to the children’s understanding of Basic Concepts (i.e. colour, letter identification, numbers/counting, comparisons, shapes, direction/position, social/emotional awareness, size, texture/material, quantity, time/sequence) is presented here.

All three children from the ‘high’ group wore hearing aids in school but not necessarily at home. All three were from deaf families, with American Sign Language (ASL) reported by the parents as being the primary language spoken in the home. Two girls and one boy were in this group; their ages ranged from four years eight months to five years 10 months. The remaining three children demonstrated relatively low mathematical ability according to test scores on the TEMA-3. All three children were from hearing families, with spoken English (with limited sign support) reported by the parents as the primary language of the home. Two of the three children in this group had cochlear implants; the third wore hearing aids. Two boys and one girl were in this group, their ages ranging from four years seven months to five years 10 months.

**Instrumentation**

**Bracken Basic Concept Scale-Revised (BBCS-R)**

The Bracken Basic Concept Scale – Revised (BBCS-R) was administered to the six children who participated in the study. Based on the numerical scores on the ‘School Readiness Component’ (SRC) and the remaining subtests, a normative conceptual classification based on BBCS-R norms was obtained. The BBCS-R normative conceptual classification for the test has established score ranges from ‘very delayed’ to ‘very advanced’, with ‘average’ referring to scores within one standard deviation of the normative mean score. Scores of one and two standard deviations above the normative mean represent ‘advanced’ and ‘very advanced’ levels of understanding respectively; scores of one and two standard deviations below the mean represent ‘delayed’ and ‘very delayed’ levels of understanding. The administration of the BBCS-R was videotaped. Children’s scores were evaluated in terms of the norms developed by the test.

**Sorting task with researcher**

In consideration of the possibility that children might demonstrate a more developed understanding of basic concepts in tasks that were more informal and play-based, the researcher conducted a mathematically based activity, ‘My rule, your rule’ from the book *Family math for young children* (Coates & Stenmark, 1997) with each of the six participants. The educational purpose of the activity was to observe, describe, and sort into categories. The written description of the activity directs adults to collect a variety of small items...
for sorting, to be used during the activity. Adults are then directed to designate sorting spaces. The game takes place as adult and child take turns sorting items then asking their partner to figure out the rule that was used to create the sorting task. For example, the adult might begin by putting a variety of ‘blue’ things together, then say, ‘I’m thinking of a rule. Try to read my mind as I put something else in the sorting space that matches my rule. What do you think my rule is?’ In order to provide children with every possible opportunity to demonstrate their awareness/understanding of basic concepts, three types of materials were used for the sorting task: buttons that varied in colour (i.e. seven translucent colours: pink, red, blue, orange, yellow, green, purple), shape (i.e. 10 shapes: circle, oval, square, triangle, heart, flower, star, star in circle, flower in circle, flower in square) and texture (i.e. rough and smooth); paper shapes that varied in colour (i.e. four colours: red, blue, yellow, green), shape (i.e. four shapes: square, rectangle, curve, triangle (equilateral and scalene)) and size (i.e. small and large); and a variety of small toys that lent themselves to functional categorisation.

**Results**

**Knowledge of basic concepts**

On the School Readiness Component, which includes the concepts of colour, letters, numbers/counting, sizes and comparisons, all participants in the ‘high’ group scored at a level above average, while two of the three participants in the ‘low’ group scored in the ‘average’ range and one scored in the ‘delayed’ range. These rankings held for subsequent sections of the test. Viewed collectively, in the areas of direction/position, self-social awareness, texture/material, quantity and time/sequence, all three participants in the ‘high’ group scored at levels of ‘average’ or above, with the predominant score being ‘advanced’. Only one participant in the ‘low’ group received a score of ‘average’ on one of the subtests (i.e. time/sequence); all other scores were in the ‘delayed’ range, with ‘very delayed’ being predominant.

All six children used expressive language to demonstrate understanding of between one (i.e. one child, low group) and seven (i.e. five children; three high group, two low group) colours during the play-based activity. All six children also used verbal labels to describe the variety of shapes used during the activity. Children in the ‘high’ group accurately named all shapes used, including: ‘hearts’, ‘flowers’, ‘stars’, ‘circles’, ‘squares’, ‘triangles’, and ‘rectangles’, the latter four shapes being named through use of ASL classifiers (i.e. a physical description of the shape drawn in the air). A ‘curved’ shape was also used. Not having a common word to refer to this shape, children in the high group tended to create labels, one referring to the shape as a rainbow, another referring to it as a ‘c’. All three children in the low group accurately labelled star and heart shapes consistently. One child also referred to circles, squares and triangles, although the last two shape names were not used correctly.

Understanding of quantity is a basic concept tied to early mathematics. During the sorting task, children from the high group demonstrated an ability to reference and compare quantities. In response to a question about which group had more, one child from the high group asked, ‘You mean the most?’; another child explained that one group had a ‘lot’ in comparison to the other, then reinforced this explanation, saying, ‘10 and nothing’, with ‘10’ being used to represent the greater quantity rather than a numerical value. Children in the high group also used the sign for BEAT to describe the relative difference between quantities. Children in the low group rarely referred to quantity; one child used numbers (e.g. ‘Two pink!’) but did not use other language to make quantitative comparisons.

Comparison is another basic concept recognised by the School Readiness Component of the BBCS-R. The sorting activity gave children the opportunity to use vocabulary such as ‘same’, ‘match’, ‘group’, or ‘rule’ as they made comparisons. For children in the high group, these words indicated a developing understanding of classification. Children from the high group were observed to use comparison vocabulary meaningfully to note commonalities between entities; for example, when asked what was the same about a group of buttons, one child responded, ‘They match’; another referred to ‘my rule’ when describing a group she made, a third child asked, ‘What connects?’ when looking to add items to the group he was making. Only one child in the low group used similar vocabulary and only in imitation; in response to the researcher’s question ‘What’s the same about these?’ The child replied, ‘Same about?’ The same child made comments such as ‘I think group’, but to this child the term ‘group’ appeared to simply refer to the physical proximity of items arranged in a collection. She did not appear to consider the attribute binding the group together.

**Thinking skills**

Children in the high group demonstrated a more advanced level of categorisation skills throughout the activity. To some extent, most children demonstrated an ability to sort by colour. All three children in the high group successfully added items to a group of same-coloured buttons established by the researcher, labelled the group by the attribute the items had in common (e.g. ‘they’re blue’ to describe a group of buttons made by the researcher), and created/accurately labelled their own groups sorted by colour.
All three children in the low group demonstrated some ability to sort by colour. Two of the three successfully matched buttons to the researcher’s colour group; with prompts, one of the three also labelled this group accurately with a colour word. While an additional child from the low group would not group by colour when requested, she arranged them into a circular shape while playing, with buttons of the same colour placed next to one another. Another child began to sort a group of orange buttons, but his rule for sorting changed midway. After placing four orange buttons together, the fourth being a square, the next two buttons added to his group followed the rule of ‘square’ rather than colour. The third child sorted the paper shapes by colour, although he did not demonstrate an ability to do this with the buttons.

In terms of shape, all three children in the high group successfully matched items to the researcher’s shape group (e.g. star-shaped buttons). Given coloured shapes to sort independently, two children from the high group sorted the shapes by colour and then re-sorted according to shape. The third child in the high group sorted the shapes by colour and was able to re-sort a group of triangles. When asked to describe this group, he unassembled it and created a picture out of the shapes to be sorted.

Similar to children in the high group, all three children in the low group were able to add star-shaped buttons to the researcher’s shape group. When asked to sort the shapes independently, however, all three children in the low group treated the materials as a graphic collection and created a picture out of the shapes.

All three children in the high group demonstrated an ability to sort buttons by texture. This sort may have been more visual than tactile in nature, as the textured buttons were described as, ‘have lines’. Given the opportunity to create her own group, however, one of the three children from the high group created a group of buttons without lines that she referred to as ‘smooth’. No child in the low group appeared to recognise texture as a characteristic by which materials could be sorted.

Sorting the toys posed little difficulty for children in the high group. All three successfully labelled groups of food items created by the researcher, using some variation of ‘eat and drink’ to describe them. All three also labelled a group of things that included the colour ‘white’ (e.g. a soccer ball was white and black; it belonged in the group because there was some white on it). All three children demonstrated an ability to create groups such as ‘vehicles’ (labelled in ASL using a 3-handshape classifier), ‘living things’ (e.g. labelled as ‘live’), and ‘things to play with’.

Children in the low group were more likely to play with the toys than to sort them. One of the three children labelled the group of food items created by the researcher as ‘They eat the food’. No other groups were labelled or created by children from this group. Beyond the type of attribute that children in each group were able to recognise and sort, however, it is worth noting how the children used language to describe the groups made. Children from the high group used words as labels to describe the collective attribute the items had in common (e.g. ‘blue’). Children in the low group appeared to have difficulty focusing on the attribute the items were sorted by. For example, although able to add items to a group of star-shaped buttons created by the researcher, one child in the low group, when asked to describe the group, pointed to each button, labelling them individually as, ‘purple, red, blue, pink’. Another child from this group initially described a group of yellow buttons arranged by the researcher as ‘star, triangle’.

Thinking skills were also articulated in the language that children in the high group used to explain the groups they made. When a child from the high group sorted the shapes she was given, she initially had two groups of rectangles and two groups of triangles. The researcher inquired about this:

Researcher: Tell me about these groups.
Child: I made them myself.

Researcher: Right, you made them yourself, but why are they together this way? This group here [points to squares] why is it together? What is the same about them?
Child: Those are squares, these are triangles, these are rectangles, these are rainbows [reference to curved shape], these are different rectangles, those are really small rectangles [pointing to group of small rectangles].

Researcher: [pointing to the two groups of rectangles] These aren’t together. Why?
Child: They can be [takes group of small rectangles and puts them on top of larger rectangles].

Researcher: They can go together?
Child: Yes.

Researcher: Why are they together now but before they were separate?
Child: Because they’re the parents [points to large rectangles].

Researcher: Oh, they’re the parents, okay [points to the two groups of triangles]. Can these go together?
Child: No.

Researcher: Why not?
Child: They don’t match.
In this example, the child appears to make use of her existing schema to explain why large and small rectangles can be in the same category. Using classifiers, she described each group of shapes as a ‘large’ and ‘small’ version of a shape with two long sides and two shorter sides. It is possible that she did not understand that the word/label ‘rectangle’ could apply to both. However, by referencing the large rectangles as ‘They’re the parents’, she developed an explanation for why the shapes all fitted together based on what she did know. She demonstrated an understanding that the group of shapes shared properties that allowed them to fit together in one group.

Another child in the high group also described the triangles as two separate groups. She used classifiers to describe the difference; the triangles in one group included a right angle, the others did not.

In the way they sorted and described their groupings of shapes, both children seemed to be developing an understanding of the properties of shapes as related to number of sides and angles. Although the shapes were described using classifiers, number of sides and angles were held constant. Type of angle in the triangle caused some confusion, indicating that the children were beginning to consider properties that held and those that did not when considering the attributes that bind a group together.

**Discussion**

This study was designed to be exploratory in nature; as such, it included several limitations, first and foremost being the small number of participants. Nevertheless, there are several findings worthy of consideration. While children with demonstrated low levels of mathematics ability did exhibit some understanding of basic concepts during the classification task, this understanding was at a lower level than that of their more mathematically able peers. For example, while all children in this study were able to label some shapes accurately, children with high mathematical ability were able to label shapes such as squares, rectangles and triangles—albeit using classifiers—while children with lower mathematical ability were only able to accurately label stars and hearts. The rationale for this could be that shapes such as squares, triangles and rectangles are defined by their properties (e.g., number of sides, type of angle), so their appearance may be more variable, dependent upon size, orientation, and type of angle, while shapes such as stars and hearts are less variable in appearance.

When sorting items by shape, children with high mathematical ability were more likely to create groups. These groups were not perfect—for one child, only one group of shapes was made; for the other two children rectangles and triangles were sorted into multiple groups—but such sortings do indicate that the children were beginning to consider the shapes’ shared properties. Children with low mathematical ability were more likely to arrange the shapes into a picture. While this indicates that the children were able to make comparisons, they were considering only two items at a time to determine how they should be arranged in the picture they were making (e.g., house).

Children with low mathematical ability did not appear to understand the value of attributes beyond that which was directly observable and non-variable (e.g., colour) in uniting a group. The children appeared to perceive the items they were given to classify as individual entities, at best they could compare two items (i.e., the shapes). While comparison is a good place to start in terms of cognitive growth—at the age of five years—this already indicates a delay when compared not only with skills on a trajectory developed for young hearing children (Clements & Sarama, 2009) but also when compared with their more mathematically able peers in this study.

Lack of an ability to classify could have ramifications beyond early mathematics. The world is full of many entities that are understood in terms of their commonalities; for example, we can cognitively bring up a conceptual category for ‘animals’ without needing to recall every animal we have ever encountered. If one’s environment is viewed as a collection of individual entities, lacking conceptual categories, stimuli are likely to be overwhelming and limit learning potential, perhaps restricting children from being able to make sense of their environment. This could have a substantial impact on the children’s ability to develop a cognitive framework that they can use to explain the world around them and develop language concepts to communicate what they know.

**Implications**

Findings from this study have implications for researchers, teachers, and parents of young deaf children. While children with high mathematical ability demonstrated an understanding of basic concepts that will support them as they enter formal schooling, children with low mathematical ability were already exhibiting signs of delay, suggesting that young deaf children may not be starting school with a strong enough foundation to support the learning of early numeracy skills. For such children, early school experiences may need to focus on learning basic concepts (i.e. colour, letter identification, numbers/counting, comparisons, shapes, direction/position, social/emotional knowledge, size, texture/material, quantity, time/sequence) that hearing children are more likely to pick up naturally and incidentally. If not provided prior to school entry, early learning will need to include an explicit emphasis on exposure to basic concepts and a focus on the development of thinking skills in order to support numeracy development.
References


Introduction

While child-created photographs can allow us to see the world quite directly from the child’s vantage point (e.g. DeMarie, 2001; Einarsdottir, 2005; Ewald, 2001), teacher-created photographs can also structure and frame units of work across the early childhood curriculum, both in terms of content learning and language learning for English Language Learners (ELLs). In fact, in today’s highly visual culture, ‘increasingly it is the image that provides the starting point’ for a unit, lesson, or activity (Jewitt, 2008, p. 210). This relies upon the teacher’s knowledge of developmentally and cognitively appropriate content as well as an understanding of visual literacy as related to the language patterns needed to comprehend and discuss the content, using academic English (Wong Fillmore & Snow, 2000). To exemplify the coordination of the conceptual with the visual and the verbal, this article presents a selection of photographs as starting points for learning in social studies, geometry and science.

Background

Language is not learned through words alone. In fact, words—both oral and written—constitute highly abstract systems of representation (Dondis, 1973) composed of arbitrary oral and written signs. As a code, then, language requires association with perceptual experience. Scholars in linguistics as well as the developmental psychology of art echo this view. It was the linguist Edward Sapir who noted that “… the essence of language consists in the assigning of conventional, voluntarily articulated sounds, or of their equivalents, to the diverse elements of experience’ (1921, p. 11). On this view, a word such as ‘house’ becomes a linguistic reality only when visual, kinesthetic, and auditory experiences ‘… are automatically associated with the image of a house’ (1921, pp. 11–12). Arnheim, too, asserted that concepts derive from ‘perceptual images’ while thought operations constitute ‘the handling of these images’ (Arnheim, 1969, p. 227). Thus, language is not an isolated system but ‘the play of verbal symbols that are based in imagery … Our imaginations dwell on experiences obtained through all the sensory modes, and then we talk’ (Palmer, 1996, p. 3).

Language, however, is not essential to thought although it does allow us to abstract thought from experience (McCarthy & Houston, 1980). We do, in fact, utilise visual images to think, as Barry (1997) has noted. Because vision developed before words, the images and symbols of language:
… are rooted in the visual domain of experience, and the logic of its reasoning not only exists side by side with perceptual logic but is continually mixed with it because it is essentially inseparable from it (Barry, 1997, p. 70).

Traditionally, however, curriculum content has been conveyed primarily through language as written text, while images have provided ‘illustration’ that reiterates this text (Kress, 2003a, p. 156). Although a reliance on language has long been critiqued as the central mode for learning as well as for demonstrating and communicating knowledge (e.g. Halliday, 1980), and, despite the burgeoning role of images across the curriculum at all levels of schooling, the primacy of language has often been maintained in classrooms (Kress & Van Leeuwen, 2006). In the twenty-first century, however, both screens and pages are repositioning the image. No longer ‘subservient to language’ (Kress & Van Leeuwen, 2006, p. 23), the image is increasingly used to represent ‘the core of the curricular issue’ (Kress, 2003a, p. 155).

Nonetheless, the primal nature of the image (Barry, 1997) does not sanction a reliance on this mode alone for either learning or communication when it comes to meeting the needs of English Language Learners in mainstream classrooms. As Wong Fillmore has pointed out, ‘In the most effective instances of language instruction, the subject matter determines what language will be taught rather than the other way around’ (1989, p. 133). The language must, however, be used ‘in ways that allow learners to figure out what is being talked about, and to take notice of the English language itself’ (Wong Fillmore, 1989, p. 132). This means that, as students learn to read visual images, they also need to talk about them, using language patterns related to the purposes of the images themselves. The prompts and questions from teachers will create contexts in which particular language patterns are likely to recur.

Teacher prompts and questions can be designed to invite participation and response at each of the levels of language proficiency represented in a classroom (Herrell & Jordan, 2008; Meyer, 1987). This tailors the interactional routine to the existing capabilities of individual learners (Wong Fillmore, 1989) even as it extends the Zone of Proximal Development (Vygotsky, 1978) to include the reading of images that can be associated with new language functions and structures (Gibbons, 1999). This, in turn,bases content understanding on the association of language with image in context.

**Image and language across the curriculum**

I begin with central questions undergirding the general use of teacher-created digital photography in the early childhood classroom. The next section suggests three essential guidelines for teachers as they create and use photographs to initiate experiences in content learning for language development and image reading. Because ELLs need access to the entire curriculum—even mathematics is taught through language (Wong Fillmore, personal communication)—each guideline is exemplified with reference to images and curricular content in social studies, geometry and science.

**Why photography?**

Photographs provide a direct link to contexts, especially to those that cannot be directly experienced. Photographs even enable us to perceive detail, perspective, and time in a way that immediate experience cannot. This permits in-depth examination and focused communication about photographed contexts as well as extrapolation to related contexts.

Photography has a history of use in classrooms as an accessible means of image production, both digitally and in the darkroom (e.g. Britsch, 2009; Dragan, 2008; Ewald, 2001, 2006; Laycock, 1979; Way, 2006). Digital point-and-shoot cameras or digital single lens reflex cameras offer easily used tools for image production. The resulting images can be colour-corrected and manipulated in Photoshop® or Photoshop Elements® and easily projected using PowerPoint®. Digital images can also be replicated and stored so they can be used either as on-screen interactive booklets to which children may add written language, or as printed matter for the classroom library. Digital or printed photographs or photo-booklets (Britsch, 2010) can also be taken out of the classroom, transforming photographs into ‘objects in the world’ (Kress, 2003b, p. 157). In this way, visual and print literacy reach from the classroom to the home and back again.

**Why teacher-produced photographs instead of child-produced images?**

The assertion of the child’s voice through photography is the focus of a growing body of research. Wendy Ewald’s (2001, 2006) work with child photographers has effectively documented the power of photography to voice life issues that face children around the world. In terms of classroom-focused work, photography fits well into contexts for content learning. For example, DeMarie (2001) found that the photographs of a zoo field trip taken by nine- to 12-year-olds helped them to relate new information to what they already knew; in contrast, three- to five-year-olds tended to capture the familiar rather than the unique elements of the context. Similarly, Schiller and Tillet (2004) asked seven- and eight-year-olds to digitally image their perceptions of their school. They found that photography functioned as a means for the children to plan and present what was important to them in a medium that was ‘taken seriously’ by both adults and older children (2004, p. 143).
The suggestions offered below certainly do not exclude the incorporation of child-produced images. In fact, children can and should add to the teacher’s visual and verbal initiation of content area explorations via all modes that are available for expression. In general, however, just as image creation tends to give way to written text after the first two years of schooling (Kress & Van Leeuwen, 2006), so has teacher training devoted insufficient attention either to visual literacy as ‘the ability to understand and use images, including the ability to think, learn, and express oneself in terms of images’ (Braden & Hortin, 1983 cited in Seels, 1994, p. 109) or to visual communication as the use of ‘visual symbols to express ideas and convey meaning’ (Seels, 1994, p. 109). What is needed is in-depth exploration of the planned use of language along with the informed use of image for content, visual, and language learning by ELLs in diverse early childhood classrooms.

In terms of teacher-taken photographs, several teacher resources focus on the use of such images for classroom purposes such as management or record-keeping (e.g. Byrnes & Wasik, 2009; Good, 2009; Hoisington, 2002); however, another strand of work investigates the use of teacher-taken photographs for social development (e.g. Serriere, 2010), narrative development (Cortazzi & Jin, 2007), and awareness of diversity (e.g. Lintner, 2005; Serriere, 2010). Serriere (2010), for example, conducted a three-year study in which she took photographs of the children as they interacted with each other in a university preschool classroom. She uploaded these daily and projected them to individual children as a slide show in one to three ‘photo-talks’ each day (Serriere, 2010, p. 62). She found that photo-talks enabled children to observe and reconsider their social lives with reference to their understandings of notions such as fairness or equality. The diverse enrolment of the classroom included six international children who were ELLs. One of the ELL children, often positioned as the ‘bad guy’ in play with a group of boys, left a photo-talk smiling after he had declared that, ‘I’m just me’ (i.e. not a bad guy). Thus, based on a teacher’s assessment of the social needs of the children in a particular group, teacher-taken photographs can facilitate the exploration of self-identity.

Lintner (2005) used images from the World Wide Web, portraying cultural, physical and economic differences, in 30-minute social studies lessons for grades one, three and four. Across a four-month period, children viewed several series of such photographs and wrote their impressions. Lintner then combined the subjects in the photographs with narratives that accentuated similarities among children. When the students responded again, Lintner found that the combination of image and narrative helped students to link their lives, or the lives of friends, with those of the children in the photographs. Similarly, Stephenson (2009) found that the use of both teacher- and child-produced photographs enabled two-four-year-olds in a New Zealand early childhood centre to express and share their ideas. She emphasises the need to combine visual images with verbal language, particularly in research with young children who have limited language. The aim is neither to substitute visual for verbal expression nor to equate ‘verbal facility with competence’ (Stephenson, 2009, p. 139). While the two modes are not mutually exclusive, neither do they replicate each other (Kress, 2003b). Nonetheless, verbal language use can also reflect visual language, each enhancing the other’s purpose (see discussion of Figure 1 below).

Cortazzi and Jin (2007) studied the use of images in narrative learning by seven-eight-year-old students who were developing English as an additional language (EAL) in a UK primary school. The children heard a story in English and then in Gujarati (their first language). The story was then retold using large pictures as prompts. This led to better story organisation in the children’s English retellings than did the use of key words alone; however, when cards showing key words were made into story ‘maps’ (2007, p. 654), photographs of these maps enabled the children to reflect on their past activity and to write about this with the maps as metacognitive prompts. Cortazzi and Jin report that the use of such narrative-based activities by speech and language therapists helped to develop both syntactic structures and narrative sequencing.

Why not use commercially produced photographs?

One advantage of using photographs produced by the classroom teacher instead of professionally produced photographs is that the teacher’s images can immediately relate to the children’s interests (Jones, 2010; Serriere, 2010). This permits the teacher to tailor the curriculum through a unique portfolio of images that can (and should) change from year to year, month to month, and even week to week. The following sections offer guidelines for initiating content learning with teacher-taken photographs. Each guideline is paired with an exemplar from a particular content area along with possible content, visual literacy and language objectives. These objectives are stated in terms of receptive language (i.e. language for children to comprehend) and productive language (i.e. language for children to use). Sets of possible ‘leveled questions’ (Herrell and Jordan, 2008, p. 79) incorporate the target language. Teachers need to plan these sorts of questions and prompts in advance for each level of language proficiency represented in the classroom (Wong Fillmore, 1989).

While planned prompts provide the teacher with a structure for shaping the interaction in ways that provide comprehensible input, they also enable the teacher to respond to children’s interests in-the-moment. Language development seems to require experiences that repeatedly associate particular linguistic symbols (either oral or written) with salient contexts and routines that...
maintain a ‘regularity’ even as they continually seek the learner’s Zone of Proximal Development (Bruner, 1986, p. 77). This creates interactions that address much more than what the children liked or disliked about the photographs. This can result in the over-use of conversational English at the expense of the kind of academic English that allows children to comprehend and express inductions, descriptions, and generalisations, for example, as related to core content.

**Guidelines for teachers**

The guidelines in this section generally revolve around the question: What role can photography play in both visual and verbal learning in the early childhood classroom?

- Ask questions and use prompts that allow children to read photographs as a way of thinking about the content being introduced.

Photographers carefully select what they wish to contain within the frame of the image. In choosing one bit of the world to photograph over another bit, one element they look for is detail (Szarkowski, 2007). The reading of such a photograph begins with time for children to explore the image, commenting on the details they notice (Ewald, 2001). Teacher-guided interaction can then expand upon this reading; for example, the object and detail framed in Figure 1 might suggest a social studies context, such as community workers and the tools they use. Because the tool cart in Figure 1 was photographed up close, surrounded by a small visual field, viewers can centre their attention (Way, 2006) on detail (Lohr, 2003). For this reason, the image lends itself to the description of (and inferences about) the use of these tools through conjectures that employ modal + verb constructions. Table 1 suggests key content understandings, along with visual literacy and verbal objectives that might undergird a unit focusing on community workers. Such a unit could help children to visually and verbally explore photographs such as the one shown in Figure 1. The language patterns are levelled to Non-English Speaking (NES), Limited English Proficiency (LEP), and Fluent English Proficiency (FEP) learners.

**Figure 1. A tool cart**

<table>
<thead>
<tr>
<th>Table 1. Objectives for ‘Community Workers’ unit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Content area</strong></td>
</tr>
</tbody>
</table>
| **Key content Understandings** | • Community workers perform different functions to care for the environment  
• Different workers require a selection of tools and equipment that is necessary to the tasks they perform. |
| **Key visual literacy elements** | Closure, framing, foregrounding/backgrounding |
| **Language functions** | Describing objects and inferring their use |
| **Key receptive language pattern** | Modal + verb forms to express conjectures |
| **Key productive language patterns** | NES: nonverbal or single word responses using nouns (carpenter), numerals (five), and verbs (climb)  
LEP: simple conjecture sentences using maybe or might + verb.  
FEP: complex sentences including might + verb; relative clauses, conjunctions that indicate inferred purpose or reason (so), adverbs that indicate inferred cause (probably) |

In this context, Table 2 (based on Wong Fillmore, 1989) suggests teacher prompts, or levelled questions that allow learners to comment upon image as content while modelling grammatical structures such as conjectures (e.g. ‘She might fix things’) (Gibbons, 1993).

Such levelled questions and prompts help develop children’s visual literacy because they address the visual principle of closure: the tendency of the mind to ‘seek completion’ by filling in what cannot be seen (Lohr, 2003, p. 235). This correlates well with the language function of inferring which, in turn, requires language patterns involving modals such as might, and adverbs such as maybe or probably.

- The reading of any image should include talk that goes beyond simply identifying what the image contains.

Photographs that foreground time-based phenomena suggest a language focus on verb tense and aspect via images that allow learners to directly observe or to induce understandings from the elements present and to express this in relevant language. Although...
photographs only describe the present (Szarkowski, 2007), a single image can also tell a story (Way, 2006). Alternatively, children can sequence a series of photographs in order to think about what links one to the next. Teacher interactions with learners can thus pose questions tailored to the subject of the photograph while foregrounding appropriate language in order to tell the story of the photograph itself; for example, the frog shown in Figure 2 has both an immediate and a long-term history. While Table 3 suggests possible objectives for a life science unit on frogs, Table 4 offers levelled questions that would promote verbal exploration of the image in Figure 2: ‘What is happening in this photograph? What might have happened before the photograph was taken? What might happen next?’ (Way, 2006, p. 28). This kind of talk contextualises the verb tenses and connectives needed for responses such as: ‘The frog was an egg before it became a tadpole.’ ‘The frog had already found something to eat by the time you took this picture.’

Figure 2. A frog in camouflage
### Table 3. Objectives for life science unit

<table>
<thead>
<tr>
<th>Content area</th>
<th>Life science: Frogs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key content understandings</strong></td>
<td>• Frogs have colouration that is similar to the surrounding environment for camouflage.</td>
</tr>
<tr>
<td></td>
<td>• The life cycle of frogs proceeds from the egg to the tadpole to the mature frog.</td>
</tr>
<tr>
<td></td>
<td>• Frogs have eyes on top of their heads so they can look for food while still underwater, another use for camouflage.</td>
</tr>
<tr>
<td><strong>Language functions</strong></td>
<td>Describing, hypothesising, recalling</td>
</tr>
<tr>
<td><strong>Key visual literacy elements</strong></td>
<td>Story, vantage point (Way, 2006)</td>
</tr>
<tr>
<td><strong>Key receptive language pattern</strong></td>
<td>Present, past, and future questions; temporal connectives (<em>next</em>/before)</td>
</tr>
<tr>
<td><strong>Key productive language patterns</strong></td>
<td>NES: non-verbal or single word responses using single verbs (<em>eat</em>/eating) or nouns (<em>pond</em>)</td>
</tr>
<tr>
<td></td>
<td>LEP: simple sentences using simple present or present progressive tense; prepositional phrases (<em>on its head</em>; <em>in the water</em>)</td>
</tr>
<tr>
<td></td>
<td>FEP: past and past progressive, present and present progressive, and future tense sentences; temporal connectives (<em>before</em>)</td>
</tr>
</tbody>
</table>

### Table 4. Possible levelled questions for Figure 2.

<table>
<thead>
<tr>
<th>Levelled questions/Teacher prompts</th>
<th>Possible learner responses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beginning (NES / LEP)</strong></td>
<td></td>
</tr>
<tr>
<td>Where was this photograph taken?</td>
<td>Pond. / [points to water]</td>
</tr>
<tr>
<td>What is the frog doing?</td>
<td>Swimming. / Sitting.</td>
</tr>
<tr>
<td>What will it do next?</td>
<td>Eat. / Eat a fly.</td>
</tr>
<tr>
<td>Where are its eyes?</td>
<td>[points] / *(On its) head.</td>
</tr>
<tr>
<td><strong>Intermediate (LEP)</strong></td>
<td></td>
</tr>
<tr>
<td>What is this frog doing?</td>
<td>It’s swimming in the water.</td>
</tr>
<tr>
<td>Where are the frog’s eyes?</td>
<td>They are on top of its head.</td>
</tr>
<tr>
<td>Why are they on top of its head?</td>
<td>The frog can look for food. / It hides under the water.</td>
</tr>
<tr>
<td>What is the frog doing right now?</td>
<td>It wants to eat. / It’s hiding.</td>
</tr>
<tr>
<td>What do frogs eat?</td>
<td>Insects. / They eat insects.</td>
</tr>
<tr>
<td>What eats frogs?</td>
<td>Big birds eat them. / Herons eat frogs.</td>
</tr>
<tr>
<td>What’s the same about the frog and the water in the pond?</td>
<td>They’re green and bumpy.</td>
</tr>
<tr>
<td>Why does this camouflage the frog?</td>
<td>The frog looks like the water.</td>
</tr>
<tr>
<td>Why do frogs need camouflage?</td>
<td>They can hide because birds eat them.</td>
</tr>
<tr>
<td><strong>Advanced (FEP)</strong></td>
<td></td>
</tr>
<tr>
<td>Why are the frog’s eyes on top of its head? What do you think the frog is doing?</td>
<td>Frogs look around for something to eat while they are hiding under the water.</td>
</tr>
<tr>
<td>What do you think happened just before this photograph was taken?</td>
<td>It looks like it’s swimming around and looking for food.</td>
</tr>
<tr>
<td>What do you think will happen next?</td>
<td>That frog was probably swimming around under the water.</td>
</tr>
<tr>
<td>Why did the water in this pond camouflage the frog?</td>
<td>It will catch a fly to eat. / It will probably dive under the water.</td>
</tr>
<tr>
<td></td>
<td>It’s because the frog looks almost like the water.</td>
</tr>
</tbody>
</table>
These levelled questions link visual literacy with language learning by relating ‘the decisive moment’ captured in the photograph to the time and transformations that preceded this moment (Cartier-Bresson, 1999, p. 20). The use of a single photograph instead of a series not only helps to motivate and focus both the receptive and productive use of tense but also invites children to think outside the frame (Cartier-Bresson, 1999, p. 20). This enables them to move from the concrete to the abstract visually, verbally and conceptually.

- Use images as a gateway to further questions that can be visually and verbally answered.

When composing a photograph, the photographer must decide what to include and what to exclude. In other words, ‘the photographer starts with the frame … the photograph’s edge defines content’ (Szarkowski, 2007, p. 70). For example, the folded cardboard box shown in Figure 3 has been severely cropped, focusing the viewer’s attention on the rectilinear shapes that have been created by its flaps and folds. Beginning with such a photograph, other shapes in the environment can be located and photographed, including curvilinear or organic ones. Within a geometry unit using the objectives outlined in Table 5, levelled questions such as those shown in Table 6 would help English Learners to visually frame and verbally describe shapes that are observed and photographed. This foregrounds the language needed to classify shapes and to explain or justify these classifications using connectives such as because. Recycled over time as open word and picture sorts (Bear, Invernizzi, Templeton & Johnston, 2008; Thompson & Williams, 2009), photographs ground language in perceptual images from which concepts are derived (Arnheim, 1969).

Figure 3. A folded cardboard box

<table>
<thead>
<tr>
<th>Content area</th>
<th>Mathematics: Geometry</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key content understandings</strong></td>
<td>• Shapes may be rectilinear, curvilinear or organic.</td>
</tr>
<tr>
<td></td>
<td>• We find shapes in the environment that are created by ‘objects, figures, and shadows’ (Way, 2006, p. 23).</td>
</tr>
<tr>
<td></td>
<td>• Objects have histories.</td>
</tr>
<tr>
<td><strong>Language functions</strong></td>
<td>Classifying by attributes.</td>
</tr>
<tr>
<td><strong>Key visual literacy elements</strong></td>
<td>Line, shape, light and shadow.</td>
</tr>
<tr>
<td><strong>Key receptive language pattern</strong></td>
<td>Single noun or adjective + noun combinations to describe and differentiate lines and shapes (rectangle,straight line); imperatives (show me); interrogative pronouns (how many).</td>
</tr>
<tr>
<td><strong>Key productive language patterns</strong></td>
<td>NES: non-verbal responses; single noun responses (triangle), adjective + noun responses (another rectangle).</td>
</tr>
<tr>
<td></td>
<td>LEP: adjective + noun responses; (another rectangle; straight line).</td>
</tr>
<tr>
<td></td>
<td>FEP: adjective + noun responses; complex sentences including conjunctions (because); modals for conjecture statements.</td>
</tr>
</tbody>
</table>

These levelled questions and responses correlate the perception and classification of shapes with elements of photographic composition (shape and line) and with photographic attributes (light, framing, cropping) (Way, 2006). The vantage point and cropping applied to this photograph also suggest explorations of perspective, angle and time to elaborate the possible history of this box and others like it as well as the particular way it was framed. What would change if the photograph had included the dumpster the box was sitting on?

In the same way, beginning with the photograph of the frog in Figure 2, children might study the life cycle of frogs before taking a field trip to a pond. They might collect data by photographing tadpoles and frogs in various stages of development (Neumann-Hinds, 2007). Further questions and answers may result from the comparison of several tadpoles, for example. Children can then recall this information as the photographs are applied to an expanded focus such as ‘Life in a pond’ (Neumann-Hinds, 2007, p. 51).
conclusions

While the children’s vantage points are important ones in the classroom, it is also true that a shift in vantage point can change what the viewer sees (Way, 2006). In this respect, teacher-taken photographs can focus the children’s vision on particular aspects of content—not just as ‘spectators’ but as users (Bruner, 1990, p. 70). This is what is required for language development (Bruner, 1990). Still, an informed use of visual imagery is based on various types of teacher knowledge:

- teacher knowledge of the content at hand, both within and across content areas
- teacher knowledge of the language through which photographs speak (Way, 2006)
- teacher knowledge of the language functions and structures needed to talk about the content and images at hand (Gibbons, 2009; Wong Fillmore & Snow, 2000).

In this way, early childhood classrooms can reflect the fact that language is neither learned nor used in isolation. Instead, it is a mode that works in concert with vision, experience and context in order to play a role in the child’s discourse in the classroom. Children learning a second or third language also use all the knowledge they have of their first languages. From this point of view, language development is not a question of ‘discovering what language is, but rather of discovering what this language is’ (Tabors, 1997, cited in Clark, 2002, p. 183). Photographs taken by teachers can act as windows into context so that this language, ‘grounded in perception’ (Barry, 1997, p. 70), can take its place in the gestalt of learning and communication.

Table 6. Possible levelled questions for Figure 3.

<table>
<thead>
<tr>
<th>Levelled questions/Teacher prompts</th>
<th>Possible learner responses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beginning (INES / LEP)</strong></td>
<td></td>
</tr>
<tr>
<td>Can you show me a triangle in this photograph?</td>
<td>[points] Two.</td>
</tr>
<tr>
<td>How many rectangles do you see?</td>
<td>[points] Rectangles.</td>
</tr>
<tr>
<td>Show me two straight lines.</td>
<td>[traces lines]</td>
</tr>
<tr>
<td>Show me another diagonal line.</td>
<td>[traces lines]</td>
</tr>
<tr>
<td>Are there any curved lines in this photograph?</td>
<td>No.</td>
</tr>
<tr>
<td>Find the shadows in this photograph. What shapes do the shadows make?</td>
<td>Someone sent something in it. / It tells how much to pay.</td>
</tr>
<tr>
<td>Can you find any repeated shapes or lines?</td>
<td>We can’t see the whole box. / We can’t see where the box is.</td>
</tr>
<tr>
<td>(Way, 2006)</td>
<td>Maybe at the post office.</td>
</tr>
<tr>
<td><strong>Intermediate (LEP)</strong></td>
<td></td>
</tr>
<tr>
<td>How many four-sided shapes can you find in this photograph?</td>
<td>I see seven.</td>
</tr>
<tr>
<td>Is there another rectangular (rectilinear) shape on the box?</td>
<td>It’s a sticker.</td>
</tr>
<tr>
<td>Are there any curved (curvilinear) shapes in this photograph?</td>
<td>No. All the lines are straight.</td>
</tr>
<tr>
<td>What does the white shape tell us about the box?</td>
<td>Someone sent something in it. / It tells how much to pay.</td>
</tr>
<tr>
<td>What can’t we see in this photograph?</td>
<td>We can’t see the whole box. / We can’t see where the box is.</td>
</tr>
<tr>
<td>Where do you think the photographer found the box?</td>
<td>Maybe at the post office.</td>
</tr>
<tr>
<td><strong>Advanced (FEP)</strong></td>
<td></td>
</tr>
<tr>
<td>How are these shapes different to the curved shapes?</td>
<td>They don’t have any curved lines.</td>
</tr>
<tr>
<td>What do the vertical lines do in this photograph?</td>
<td>They make the frame.</td>
</tr>
<tr>
<td>How do you know this is a box?</td>
<td>Because it looks like cardboard and it has rectangular flaps. There’s some kind of sticker like prices on boxes or addresses.</td>
</tr>
<tr>
<td>Where do you think the photographer found the box?</td>
<td>Maybe it was in the garbage because there’s nothing in it.</td>
</tr>
</tbody>
</table>
What is going on in early years music planning?  
A study of early years teachers’ weekly plans

Susanne Garvis  
Griffith University

ARTS EDUCATION IS AN Important element of the early years curriculum. Children first learn to express themselves through the arts (dance, drama, media, visual arts and music). Furthermore, numerous studies provide evidence that quality learning experiences in the arts contribute in significant ways to social success and impact positively on a child’s academic achievement and long-term education. In Australia, early years teachers are expected to teach arts education.

This study explored the weekly planning of 76 early years teachers across kindergartens, preparatory classes and Years 1, 2 and 3 in Queensland, Australia. Settings took a structured ‘curriculum-focused’ approach to learning in the early years, which made the exploration of planning important. Our study looked for segments of time devoted to music throughout the week. Content analysis was used to interpret the weekly plans, with three themes emerging: (1) The majority of the weekly plans were dedicated to literacy and numeracy; (2) Little time was devoted to the teaching of music apart from the scheduled 30-minute music lesson with a specialist teacher in some schools; and (3) Of the limited number of weekly plans that featured music, activities were teacher-directed. These results provide insight to the current understanding and value of music education in the early years curriculum. Key messages can be drawn about the importance of professional development, music advocacy in the early years, and curriculum and policy planning.

Introduction

Advocates for arts education have continuously argued the importance of the arts in the early childhood classroom (see Eisner, 2002). The arts offer very young children significant ways of knowing about themselves, others and the world (Wright, 2003). Yet little is known about the way the arts are planned for and used in early childhood classrooms. As an essential part of the curriculum, the arts are assumed to be taught on a regular basis to children and that generalist teachers are responsible for this.

This study was conducted in Queensland, Australia. In Queensland, arts are defined as dance, drama, media, visual arts and music. This study will focus on music. In 2010, early childhood teachers throughout Queensland were asked to respond to a questionnaire. Seventy-two teachers returned the questionnaire with a copy of their weekly planning. Teachers were based in ‘structured’ early years contexts that had a ‘curriculum-focus’ on learning. They were currently registered with the Queensland College of Teachers and worked in Kindergarten, Preparatory, or Years 1, 2 or 3. Registered teachers generally hold a Bachelor of Education degree or a Graduate Diploma of Education.

Content analysis was conducted on the weekly planning sheets to reveal current levels of planning for music. Findings from the sample suggest limited time was devoted to music in the early childhood teachers’ weekly planning, and the scheduled activities were teacher-directed. The plans focused largely on literacy and numeracy over the school week.

Literature review

Early childhood education

Within early childhood education, art has been recognised for its contribution to the developing child (Bresler, 1992; McWhinnie, 1992; Spodek, 1993). Developmentalism supports the romantic notion that every child is an artist (James, Jenks & Prout, 1998), with Gardner (2004) asserting that the early childhood years are ‘a time when every child sparkles with
In this post-modern world the curriculum can be seen as part of the curriculum. Little is known about the content and practice within the arts are taught by generalist teachers, even in early childhood education (see Queensland Early Years Curriculum Guidelines (QSA, 2006). The arts to young children (Garvis, Twigg & Pendergast, 2011). These low levels of confidence mean early childhood teachers may provide limited arts learning experiences in their classroom.

Queensland, Australia

In Queensland, registered teachers work in Kindergarten (children aged 3.5–4.5 years), Preparatory (children must turn 5 years old by June of the year of age), Year 1 (children aged 6), Year 2 (children aged 7) and Year 3 (children aged 8). The early years consists of children from birth to eight years. The Early Years Learning Framework (DEEWR, 2009) is currently being implemented in prior-to-formal school settings but not in school settings. Teachers in Queensland Kindergarten can use an accredited learning program as the curriculum, such as the Queensland Kindergarten Learning Guideline (QSA, 2009), although they will also need to use the Early Years Learning Framework. Teachers in Preparatory–Year 3 can use learning programs designated by the school.

Both the Early Years Learning Framework (DEEWR, 2009) and the Queensland Kindergarten Learning Guideline (QSA, 2009) advocate a child-centred approach. A child-centred curriculum offers children the opportunity to make choices about what, how and with whom they want to play. This approach enables children to initiate and direct their own play with the support of interested and responsive adults.

Arts education in Queensland is defined as dance, drama, media, visual arts and music. It is expected that the arts are taught by generalist teachers, even in early childhood education (see Queensland Kindergarten Learning Guideline (QSA, 2009), Essential Learning Statements for the Arts (QSA, 2007) and Queensland Early Years Curriculum Guidelines (QSA, 2006). Previous research suggests that arts education is less than satisfactory in many schools (Garvis, 2010; Jeanneret, 1994; Mills, 1989; Russell-Bowie, 1993). Little is known about the content and practice within early years programs and the weekly planning that occurs as part of the curriculum.

In this post-modern world the curriculum can be conceived, conceptualised and experienced in different ways. Goodlad (1979) makes a distinction between the ideal, the formal, the operational, the perceived and the experienced curriculum. The ideal curriculum is the beliefs about what we know and the way we ought to teach. The formal curriculum is that ideal transformed into texts and instructional materials. The operational curriculum unfolds in our daily interactions with children in classrooms. The perceived curriculum refers to the teacher’s sense of what is being taught and learned. The experienced curriculum represents the students’ point of view. Sometimes a mismatch occurred between what the teacher chose to teach in the curriculum and what children experienced. For example, in the case studies of Stake, Bresler and Mabry (1991), there was a difference between schools’ advocacy for arts education and the reality in schools and classrooms.

Music

Music is seen as a natural part of children’s lives. Young children enjoy singing, moving, dancing, creating their own compositions and engaging with musical instruments. Music is connected to play, with musical activities laying the foundation for learning (Bridge, 1994; Campbell & Scott-Kassner, 2006).

The musical nurturing a child receives during the early years can have a marked impact on later success in music and level of involvement (Feirerabend, 1990) and on adult attitudes towards music (Temmerman, 1995). Research suggests that early childhood teachers play an important role in providing children with musical experiences. Music can become part of the children’s day, whether this be singing songs and rhymes as part of care routines, or responding to, encouraging, talking about, and joining in children’s spontaneous musical play (Young, 2003). The teachers’ role includes (1) encouraging musical creativity; (2) providing opportunities for engaging with musical instruments; and (3) advising parents on suitable extra-curricula music programs. Parents also hold high expectations about early years teachers and music. According to de Vries (2007), parents believed that preschool and other educational settings provided a complete musical experience for children.

Barrett (2006) has explored the area of music creativity in early childhood, exploring ways that children compose and record their compositions with invented notation. She suggests it is important that ‘children’s musical agency as song makers and the unique processes and practice of children’s communities of musical practice are valued, celebrated and fostered in early childhood settings’ (Barrett, 2006, p. 218).

In recent years there has been a considerable amount of research related to children’s learning to play a musical instrument. Wright (1991) suggested that early childhood centres should have a wide variety
of instruments, including piano, guitar, banjo, violin, trumpet, and multicultural percussion instruments, to help children explore sound in a variety of ways including manipulating objects; imitating sounds; discriminating between sounds; classifying sounds; sequencing sounds; improvising with instruments; and organising sounds to communicate ideas and feelings (Wright, 1991).

The role of the early childhood teacher also extends to advising parents about suitable activities for music. Olson and Hyson (2005, p. 67) state ‘we should do a better job communicating our role as reliable credible sources of information and support’.

Focus of the study

In this study, early years teachers are defined as registered teachers working in the early years of schooling (Kindergarten, Preparatory, Years 1, 2 or 3). This study is focused on music education planning by early years teachers in Queensland. It will explore the type and amount of music planned in different early years settings. Even though the Early Years Learning Framework advocates a ‘child-focused’ approach, this study will show that some settings have a ‘curriculum-focused’ approach in the early years. The study will also provide an overview of the most dominant subjects in teachers’ weekly planning.

Teachers are registered with the Queensland College of Teachers and usually hold a Bachelor of Education or a Graduate Diploma of Education. Registered teachers in this study may or may not have had specialist training in the early years.

Planning is important in Queensland schools, especially with the introduction of school audits in 2010 as part of a new state initiative (see Queensland Roadmap for Curriculum, Teaching, Assessment and Reporting in Years 1–9, Education Queensland, 2009). Teachers must demonstrate their planning in these school audits and show that all curriculum areas have been covered. While teacher plans point to a very teacher-directed approach and may not align with some contemporary practice in early childhood, they are important for investigation, especially for teachers working in the early years of Queensland primary schools (Preparatory, Years 1, 2 or 3). They suggest more of a formalised approach to teaching and learning. Some Kindergartens in Queensland have adapted a similar approach, with structured daily planning. This study explores planning for music in these formalised environments (curriculum-centred approach).

Method

Data was collected through a brief questionnaire (electronic) which included questions about demographics and asked the participants to submit their weekly plan. The questionnaire was designed to be completed in less than 15 minutes, and outside of school hours. It was distributed, via convenience and snowball sampling, to early childhood teachers in Kindergarten, Prep and Years 1, 2 and 3. Online professional networks were also used to promote this study. Early childhood teachers were encouraged to return the questionnaire by email or post. Questionnaires returned by email were immediately downloaded and de-identified. Emails were deleted to ensure confidentiality.

The weekly planning was analysed using content analysis—‘a research technique for making replicable and valid inferences from texts (or meaningful matter) to the contexts of their use’ (Krippendorff, 2004, p. 18). This process allowed newly identified themes to be compared with previously identified themes to ensure a greater understanding of the phenomenon under study.

Participants

Seventy-two teachers throughout Queensland participated in this study. Currently there are more than 1300 qualified Kindergarten teachers and 98,429 registered teachers working in the state’s early childhood, primary and secondary schools (Queensland College of Teachers, 2009). Participants were located in rural, urban and metropolitan regions. Seventy participants were female (97%) and two were male (3%). Twenty-one per cent ranged in age from 20 to 29 years (n = 15), 26 per cent from 30 to 39 years (n = 19), 31 per cent from 40 to 49 years (n = 22), and 22 per cent were aged 50 years or over (n = 16). The average age of a registered teacher in Queensland is 43.6 years (Queensland College of Teachers, 2009).

The majority of participants (57%) held a Bachelor degree (n = 41). Fifteen per cent of participants held a diploma (n = 11), 6 per cent held a Graduate Diploma (n = 4) and 10 per cent held a Masters degree. One participant held an EdD (Professional Doctorate) and 11 per cent chose not to disclose their qualification. Figures align with national figures of early childhood staff qualifications, with data from the 2010 Survey of Education and Work (ABS, 2010) finding 69.7 per cent of early childhood staff have a Bachelor degree or higher qualification. The majority of participants worked in Kindergarten (n = 33), followed by Prep (n = 15), Year 1 (n = 10), Year 2 (n = 8) and Year 3 (n = 6). All teachers were in ‘curriculum-focused’ early years classrooms.

Ninety per cent of the participants worked fulltime in the early years (n = 65). Three per cent were employed part time (n = 2) and 7 per cent on a contractual basis (n = 5).
Results and discussion

Limited weekly planning for music

The weekly plans of the 72 teachers were first reviewed to identify any block time periods allocated to music. As previously stated, it is important for primary school teachers in Queensland to demonstrate their planning to school auditors to ensure all curriculum areas have been covered. Planned music sessions (either with a specialist teacher or in class) were evident in 14 per cent ($n = 10$) of the weekly plans (refer to Figure 1); two participants planned extra music sessions on top of a 30-minute music lesson with a specialist teacher; five relied on the music specialist for all music education, and four participants planned their own music sessions in the absence of a music specialist. The music activities planned consisted of teaching students new song repertoires based on the themed unit the students were learning. For example, if the students were studying insects, the planned music time would be designated to learning songs (teacher-chosen) about insects.

Figure 1. Frequency of music in weekly planning

The average amount of time scheduled for music was 30 minutes over the week. Literacy and numeracy appeared to be scheduled for most of the teaching week. In the majority of weekly plans (82%) literacy was taught until morning tea break, followed by numeracy until lunch. This model was replicated for the entire school week. Literacy activities included spelling, handwriting, phonics and reading. Limited description was given of numeracy activities. The afternoon sessions were planned for other curriculum areas and sport.

In the remaining 18 per cent of weekly plans, a play-based curriculum was evident, with sessions devoted to free play for the child. The teacher would write ‘free play’ for each of the sessions, without further details of the activities.

While the music specialist sessions were planned in the weekly timetable, this could be more of a structural approach for ‘release time’ (known as a non-teaching time for planning) within the primary school. In Queensland, release time for generalist classroom teachers is often scheduled when classes spend 30-minute sessions with specialist music and physical education teachers. It is unclear from the weekly plans if early childhood teachers attended music specialist sessions. While music and the arts are an important component of the curriculum in the early years (ideal curriculum), a mismatch may occur in the day-to-day running in the classroom (operational curriculum) where the majority of time is devoted to teaching literacy and numeracy.

The greater time spent on literacy and numeracy in early years classrooms could be a response to the increased pressure for students to perform in national standardised testing for literacy and numeracy in Year 3.

In Australia, arts content knowledge is not tested formally. Without formal accountability, the arts are perceived in a complex way within schools. As Bresler (2002, p. 170) suggests, the arts are ‘a by-product of foundation ideas of curriculum that build from the basics or essential knowledge outwards to a the peripheral or less essential knowledge’. The arts may be evident at festivals, special events and on school walls, but are not central to the curriculum even though all subjects are under the title of ‘compulsory’. The placement of the arts on the sideline becomes evident in the 72 weekly plans reviewed in the formalised curriculum.

Music activities

The activities planned for music were teacher-directed, based on increasing the song repertoire. The teacher would choose the song and teach it to the children. Little is known about the song choice or how the songs were taught in the classroom.

According to the weekly plans, limited time was devoted to composition, cultural music and access to musical instruments in the early years classrooms. While the majority of early childhood curricula documents advocate a child-centred approach (especially in the Early Years Learning Framework) this philosophy was not evident in the teacher-directed music activities. Children had no opportunity to experience music beyond the songs taught by the teacher. In essence, the approach of the formalised curriculum in music was in contradiction to contemporary early childhood philosophy.

A gap also emerges between ‘school-art’ (Bresler, 2002) and musical activities outside of school. Outside of school, children and families may be actively engaged in musical interactions such as singing, playing instruments, listening to recorded music, all nurturing a child’s musical development.

It is possible that greater music and arts activities may have occurred within the school in other weeks. This study documented only one week of planning in the life of 72 early childhood teachers. In Queensland there are generally 40 weeks of school in a year. In the lead-up to
special festivals and school events, more time may have been devoted to music in the weekly planning in the classroom.

Conclusion and recommendations

Planning is an important area for teachers of the early years in Queensland. If we consider the arts, including music, important for young children we must begin to question our current practice and planning in the early years within schools that advocate a ‘curriculum-centred’ approach. Is a ‘curriculum-centred’ approach that appears to limit music suitable? How important is a weekly plan when working with young children? As early childhood educators, we must consider ‘growing from the roots’ upwards with young children. Such beliefs about a ‘child-centred’ approach are evident in the Early Years Learning Framework (DEEWR, 2009) but are not put into current practice.

With the decline in hours dedicated to music during generalist teacher education, it is not surprising that early childhood teachers in this study devote limited time to music in their weekly plans.

Our research findings raise more questions than solutions about the role of music in schools with young children. Such beliefs about a ‘child-centred’ approach are evident in the Early Years Learning Framework (DEEWR, 2009) but are not put into current practice.

Our research findings raise more questions than solutions about the role of music in schools with young children. Greater research is needed to determine why early childhood teachers in formalised early years settings plan in the way they do, and if their teaching philosophies match the expectations from schools and early childhood services.

References


Under-fives swimming as a site for capital building: Supporting and enhancing transitions

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THIS PAPER THEORISES THE possibilities of under-five swimming to add new forms of knowledge and skills to young children. The paper draws on the work of Pierre Bourdieu to frame these new learnings as forms of capital that have been made possible through participating in early years swimming. This paper draws on elements of under-five swimming lessons to illustrate the definitions that are developed within this paper. The framing made possible through notions of capital underpin a much larger project.

CURRENT GOVERNMENT POLICY emphasises the importance of the preschool years engaging socially disadvantaged groups in formal learning. While significant resources are allocated for new centres that enable wider access for children to preschool education, it is argued in this paper that Under-5s Swimming is a largely unrecognised and under-analysed activity that enhances transition from home to school. In other words, high-quality learn-to-swim classes may enhance the benefits young children gain from their preschool experience. These claims are explored by drawing on the theoretical underpinnings of a large project concerned with the potential of the under-fives swimming environment to enhance young children’s learning. The paper uses and extends Bourdieu’s notion of capital.

Across Australia there has been a coordinated movement by governments to create a system of child care that addresses the needs of the nation. The goal is to enable every Australian child to have access to Early Childhood Education (ECE) by 2013. The Australian Government has committed $970 million (DEEWR 2010) to facilitate this provision. This is a significant level of commitment to, and acknowledgement of, the importance of early childhood education to Australian society and to a wider region. It also acknowledges that in the past many children have been denied access to the benefits of early years education (Magnuson, Meyers, Ruhm & Waldfogel, 2004). While there is an explicit recognition that formal ECE learning prepares children for the transition into schooling through particular programs (Webster-Stratton & Reid, 2004; Webster-Stratton, Reid, & Stoolmiller, 2008), consideration of the breadth of potential areas for school preparation is necessary. Much of the focus is on the social development of the child. This paper draws on research from another context—early-years swimming—to examine the potential in other contexts to help build the rich repertoire of learning that can help young children’s transition to school.

This paper represents the theoretical framing of a three-year study on the effects of early-years swimming. It is the first international study on the possible benefits for young children participating in swimming. As a country where swimming is an integral part of the national identity, accidental drowning is the major cause of death in under-fives. The swim industry estimates that approximately 10 per cent of under-fives participate in swimming, and it is the most popular sport undertaken by pre-teens, so it is important to understand the possible benefits of participating in the sport, particularly for preschool children. As swimming lessons are commenced at a very young age, it is likely that for many children it is their first encounter with the instructional discourses found in formal schooling. As such, it offers a site for exploring the possibilities for adding capital to young Australians in ways that extend beyond swimming per se.

Swimming as a capital-building enterprise

Rather than explain the changes in children’s growth in terms of ‘development’, this paper draws on the notion of ‘capital adding’. The position is shaped by the sociological lens of Bourdieu (Bourdieu, 1983). By framing the changes as forms of capital that can be enhanced through participation in early-years education, the various forms become important considerations in how ECE may contribute to the success of learners. This paper considers the early-years swimming context (under-fives) as a site where forms of capital may be added to young learners in ways that may be different from more formal settings. In particular, the project explores the potential ways in
which linguistic, social, intellectual and physical capital can support young children's transition to school. The transition to school requires a set of skills and dispositions that I refer to as school capital.

Unlike other areas of physical education where activities are constrained by the child's physical development, early-years swimming can commence as soon as the baby is born. For example, Laurie Lawrence (n.d.) suggests that babies start water familiarisation as part of the post-natal activities in the early weeks of life. The Federal Government has sponsored Laurie Lawrence in the production of a swim DVD that is given to all new mothers as part of their new baby package. Predominantly, swim schools commence formal lessons for babies aged six months, but some may start earlier. The parent is usually in the water with the child until it is two–three years old (depending on the swim school) and will support the child during this period. Early years swimming in these situations becomes an extension of child rearing and has the potential to be the basis of a form of capital building. This capital can be added through the use of language, the giving of directions in a three-dimensional space the rewarding of behaviours, and encouraging children to enjoy and explore movement. The richness of the swimming environment extends the possibilities of the bath at home so that the child perceives movement in a new space and gains a new world for experiencing aspects of physical space—e.g. up/down, under/over, and so on. Many activities (such as easy tumbling, or moving through space) can be undertaken considerably earlier, as the body is supported in water in ways that are not possible on land. This means swimming can commence much earlier than other physical sports1 and is likely to be the first activity for children in a formal learning context.

It is proposed that early-years swimming has the potential to build capital for the child. In the first three years, parent and child spend time together in a situation where the child explores the environment and the swimming instructor guides them both in perception of orientation of the child's body in water and the pool. The child gains knowledge, skills and dispositions that become forms of capital in this process, which should extend into the years between three and five. The question is how the capital transfers into other environments, the school in particular.

Limited research has shown that early swimming can enhance some motor abilities such as balance and reaching (Sigmundsson & Hopkins, 2010) and motor development in neonatal babies, including holding-up head, steady sitting, and holding items (Jun, Huang, & Dan, 2005) for able-bodied children. Studies of children with physical disabilities have shown water activities can enhance mobility and aerobic strength (Fragala-Pinkham, Haley & O’Neill, 2008; Hutzler, Chacham, Bergman & Szunberg, 2008). The only large study on the impact of early-years swimming on young children was conducted in Germany three decades ago (Diem, 1982) when the industry was in its early stages. Since then there has been a lot of practical knowledge developed around techniques for teaching.

While the focus on swimming lessons is directed primarily at physical skills associated with techniques, other aspects of the lessons can offer enhanced possibilities for learning. Such opportunities may not be unique to the swim context, but swimming's potential to enhance learning may be made available earlier than in other forms of physical activities. This can be discussed further in terms of Bourdieu’s (1990) example of the exchange rates of capitals within and across economies or markets.

**Capital and the exchange economy**

In order to develop theory to understand the potential of the early-years swimming environment to shape new learning, I have adopted Bourdieu’s theory of an exchange economy where cultural goods can be exchanged for other goods (Bourdieu, 1990). Within such a framework, it becomes possible to theorise the swimming environment as a site that (potentially) builds capital among young children which, in turn, can then be exchanged for other goods when they enter the formal school environment. For example, the rich mathematical language used in swimming creates new possibilities for language learning that prepares children for the mathematical discourse they will hear in school (Jorgensen & Grootenboer, 2011) Young children are then able to enter school with a rich repertoire of words and interactional styles that can be exchanged for successes in school through a range of assessment practices (Bourdieu, 1977). Bourdieu’s theory has been used to explain how the linguistic habitus of learners is shaped by the home environment and then is either validated in school or must undergo considerable reconstruction in order for young students to be recognised as successful learners (Zevenbergen, 2000). This puts the focus of analysis on the learning environment to see how context can shape learning that may offer greater or lesser potential in the transition to school. Using the notion of ‘capital’, I argue that the swim environment offers

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1 The capacity of under-twentos to swim may be questioned in terms of a formal definition of swimming. However, with accidental drowning being the largest cause of death in the under-five age group, being able to swim in a manner that aids in survival is important. While safety is a key feature in many early-years swimming programs, it has been noted that participation of this age group can enhance gross motor skill development (Zelazo & Weiss, 2006). The focus of this paper is not on the development of swimming skills but rather on other potentials for learning that are facilitated through participation in swimming lessons for under-fives.
potential to create opportunities for learning that prepare young children for schooling. In the following sections I discuss the potential of the early-years swimming context to add capital to under-fives.

**Intellectual capital**

While intellectual capital has been used by the business sector to describe the accumulation of skills and dispositions that can be traded for economic wealth, it can also be used to describe the general learning found in school or formal learning contexts. Swimming has the potential to shape intellectual capital in forms that are valued in the context of schooling.

In early-years swimming lessons, the teacher uses a rich language of shape and space when instructing students on how to move through the water. These terms are often richer than those found in the home environments. Prepositions are key words in the mathematics discourse but are often limited at home. Creating opportunities for exposure to these terms is critical to the learning of the complex interactions that will be encountered in formal schooling.

Observations of swim lessons show a complex and rich use of language, as can be seen in the following instructions from a lesson with three-year-old children:

T: Big splash with two feet [holds up two fingers].
T: After one-two-three, we are going to push off with our hands like a rocket.
T: Eyes down in the water.
T: We are kicking around in a circle, Clinton, so kick out to me, then around, then back to the start.
T: Ben, arms out straight like a pencil.
T: Alex, turn around so you can kick on your back, eyes up.

The interactions are supporting a strong link between words and actions or concepts, thus creating opportunities for learning. Similar opportunities in other physical activities may also be possible. The rich repertoire of words linked to actions aids in building knowledge and language that are valued within the school context and can be exchanged for some form of recognition, such as grades or marks.

**Social capital**

Bourdieu refers to social capital as the networks one has and how these can be transferred to some other forms of capital. In the context of early childhood, the notion of social capital can be applied in a more rudimentary way. Socialising between children is important for the transition to school, where they will be expected to work with other children and adults.

Many assessments of children in the early years of schooling are made on the basis of their social skills. The ability to mix confidently and competently with other children becomes a form of capital that has much value in educational settings. Being able to interact with teachers and peers is important for many school activities, so children who have this ability have a greater chance of success in formal school settings that those who do not. All swim lessons are conducted in small groups and may have parents in the pool. There are many opportunities for the child to socially interact with others, thus creating opportunities for social engagement and capital building.

**Linguistic capital**

At a number of levels, language becomes a form of capital that has considerable value in learning contexts. Within the swimming environment, there is potentially a rich vocabulary. Many words and phrases are used to instruct children on the activities. Terms to describe objects and locations (e.g. ‘the red ring at the edge of the ledge’) include adjectives and spatial language. As noted in mathematics education papers (Zevenbergen, 2000; Zevenbergen, 2001; Zevenbergen, Mousley & Sullivan, 2004), children from disadvantaged backgrounds often enter school without the language that prepares them for many aspects of early mathematics. For instance, the language of colour and shape is the foundation for many sorting activities. Similarly, many of the spatial/preposition terms found in the swim environment are not commonly used in the home vocabulary, so acquiring this language becomes a form of linguistic capital which can then be used in the field of education, where it is exchanged for institutional capital in the form of grades or other assessments.

While Brice-Heath’s (1983) work has shown that the ways of interacting in the home can be very different from those in schools, the early childhood swim environment exposes children to interactions commonly found at school. Such instructions as ‘Look at me’, ‘Watch Johnny kick’, ‘Show me how you can do …’ are likely to prepare children for what they will encounter in more formal learning settings.

The early-years swim context has potential to enhance and consolidate not only vocabulary but also children’s familiarity with the ways of interacting in the learning environment. Swimming instructors must exert considerable control over the children to ensure their safety. In so doing, the pedagogical skills of the instructors and their ways of controlling children are highly developed. The control cannot be overt or disciplinarian, as the environment needs to be enjoyable while ensuring attention and safety. Children are thus exposed to pedagogical interactional patterns from their participation in the swim lessons.
Physical capital

The swimming environment offers considerable potential for the development of physical capital. Unlike the land environment where the space is limited to predominantly two dimensions, the child is able to move through a three-dimensional space. Some studies (Hutzler et al., 2008; Malina, 2004) have shown that the flexibility of the water environment offers scope for enhancing the physical capabilities of early-years swimmers. These may be of benefit in the school context.

School capital

School capital refers to the skills and understanding around learning and teaching. Being able to focus on the teacher, and listen to and follow instructions, are some manifestations of school capital. The water environment is one with a high level of safety, so children are inducted into many protocols. Being in control of the learning environment is a high priority for instructors, and this requires strategies for keeping children focused. For example, children may be required to come to the edge of the pool, sit and wait until their lesson commences. Once in the pool, the instructor provides cues for different activities—such as 'kick, kick, kick, stop'. When hearing the cue words, young children learn to comply with the instructions. Through being exposed to these instructional protocols young children are becoming immersed in the practices they will encounter in schools.

Exchange economy: Transition to school

The potential of participation in early-years swimming to enhance learning in ways that are validated in the formal school context has been theorised in this paper using Bourdieu’s notion of capital. To conclude, I draw on the notion of field (Bourdieu & in Wacquant, 1989) as this enables a theorisation of the two contexts—swimming and school—in which to locate the forms of capital. Capital gets its power only from the field within which it operates. For example, language and power are contained by the field. Speaking BBC English gains power and authority within a particular context. Such language would have little power or authority in remote communities of Central Australia or the hip-hop communities of urban settings. Thus, BBC English has strong capital only when it is located in a field where that language form has value. Similarly, the structuring practices of the early-years swimming context value particular skills and dispositions. The priority for the swimming context (or field) is the learning of swimming and/or water safety. Children who develop good swimming techniques are seen to have greater capital than those who do not have such well-developed skills. But the focus on physical capital limits the potential of other forms of capital being added as young children participate in this environment. Many of the attributes noted in this paper, such as language or social skills, may have little power or value in the swim environment and hence may not be the focus of the swim schools. However, in another field, such as schooling, these dispositions have considerable value. As such, the additional learnings offered through participation in the early-years swimming environment may add more capital to young children and aid in their successful transition to school.

Participating in early-years swimming creates opportunities for young children to develop particular attributes, skills, or dispositions that will have value in another field—that is, formal schooling. By exploring a context outside formal early childhood centres, the swim environment is one site where there is considerable opportunity for young children to enhance their learning in ways that may offer considerable value in the transition to schooling. Within Bourdieu’s framework, the swimming environment creates spaces for capital building that will help in the transition to formal schooling. Children who accrue the goods offered within the swimming environment may exchange these goods—language, social skills, etc.—for other forms of capital in the school context. Taking the mathematics language noted in this paper, or the patterns of interaction, these become forms of capital in another context (or field), namely school. Participating in early-years swimming creates opportunities for young children to develop dispositions, skills, and knowledge that help in the transition to formal schooling.

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Retained primary reflexes in pre-primary-aged Indigenous children:  
The effect on movement ability and school readiness

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THE RESEARCH REPORTED IN this paper links children’s movement skills with learning difficulties, particularly school readiness, in the early years. The aim of the research project was to (a) determine the prevalence and severity of retained reflexes, predominantly the Asymmetrical Tonic Neck Reflex (ATNR), and (b) investigate the movement skill ability of pre-primary-aged Indigenous children in the Kimberley region of Western Australia. This provided an important first step in understanding and addressing movement skill deficits that may compromise the acquisition of foundation school readiness skills in young Australian Indigenous children. This project challenged the stereotypical assumption (by non-Indigenous Australians) that the majority of Indigenous Australian children have well-developed or even above-average movement skill development, based on their being more likely than non-Indigenous children to engage in regular physical activity and perform well in sport. It was important to test this assumption if a comprehensive picture of the developmental challenges and educational disadvantages faced by Indigenous Australian children, particularly those in remote regional areas, was to be established. Sixty-five per cent of the sample of Indigenous children were found to have retained moderate to high levels of the Asymmetrical Tonic Neck Reflex (ATNR) which in previous research has been linked to developmental delay, not only in movement skills but also in areas strongly related to academic achievement.

Introduction

The Australian Government’s initiative to ‘close the gap on Australian Indigenous disadvantage’ has clearly recognised the need to identify and address any early childhood developmental challenges and educational disadvantages for Indigenous children (Gillard, 2008). Previous research by McGarrigle and Nelson (2006) indicated that, despite Australian Government initiatives, many Indigenous children continue to experience difficulties with the core aspects of schooling, and often struggle to meet the educational levels attained by non-Indigenous Australians. They identified the need to foster the core skills required in the early years of schooling, including writing, using scissors, coordination, and classroom concentration (p. 4). Further, in a study by Nelson and Allison (2004), investigating the functional issues of Indigenous Australian preschool and kindergarten children, 56 per cent of the 23 children assessed had adaptive and cognitive issues, 49 per cent had fine motor skills issues, and almost 20 per cent had gross motor skill issues (p. 57). It was an operational hypothesis of this research that retained primary reflexes may be contributing to these deficits.

According to Peiper (1963), primitive or primary reflexes are involuntary and mediated by lower-brain centres. Both Fiorentino (1981) and Payne and Isaacs (1995) assert that these reflexes occur sub-cortically, meaning below the level of the cortex of the brain, suggesting that reflexive movements are produced without the direct involvement of higher-brain centres. Many of these reflexes are present pre-natally and are elicited in utero (Haywood, 1993; Piek, 2006; Wyke, 1975). The initial reflexes are necessary for survival after birth; for example, the Moro reflex assists with the first intake of breath and the rooting reflex enables the newborn to feed (Haywood, 1993). One of the most widely researched primitive reflexes is the Asymmetrical Tonic Neck Reflex (ATNR) which is elicited when the neck is rotated (Gallahue & Ozmun, 1998).
From a neurodevelopmental viewpoint, every child proceeds through a series of developmental stages beginning with a ‘reflexive stage’ that spans the pre-natal and early infancy period. During the first year of life, the primary or primitive reflexes supported by the lower centres of the brain are elicited. These reflexive movements are the means by which an infant gathers information, seeks nourishment and protects itself. As the infant matures so too does the central nervous system, with more sophisticated regions of the brain superseding these ‘primitive reflexes’ (Kirby & Drew, 2003). This allows for successful development of underpinning abilities integral to the automatic control of balance, posture and coordination in the early years. It is thought that the presence of the various primary reflexes provide diagnostic signposts of central nervous system maturity indicative of the child’s level of neural maturation and consequent central nervous system development (Blythe, 2005; Capute, Accardo, Vining, Rubenstein & Harryman, 1978).

Persistence of a primary reflex beyond the normal inhibition stage (around six to 12 months after birth) is thought to be indicative of neurological dysfunction (Blythe, 2005; Haywood, 1993; Morrison, 1985; Peiper, 1963). According to Blythe (2005) ‘the term neurological dysfunction describes the continued active presence of primitive reflexes beyond 6–12 months of age and underdevelopment of postural reflexes in a child beyond 3.5 years of age’ (p. 416). Put simply, if reflexes that are supposed to be present only in early stages of development are retained at later stages, then normal motor control will be affected owing to compromised sensory perceptions and integration (Morrison, 1985; Shumway-Cook & Woollacott, 1995). The resultant perceptual dysfunction contributes to the difficulties a child experiences in acquiring automated perceptual skills, such as those required for reading and writing (Fawcett & Nicolson, 1995). This is thought to be because of compromised visual tracking, pursuit and sequencing—all of which are functions of ocular-motor control, which itself is influenced by the vestibular system. The vestibular system is responsible for the detection of motion and also for balance and is located in the head, specifically in the vestibule of the inner ear. Primarily the vestibular system senses motion, stabilises the visual axis, therefore controlling eye movement, and also assists in maintaining head and body posture (Piek, 2006). Sugden and Wright (1998) state that impairments in vestibular-based components such as those listed above may also significantly interfere with academic achievement, strategic planning and visual-spatial performance, which in turn affect the skills of reading and writing. Many things can disrupt the normal progression of infant reflex development, including at-risk pregnancy, foetal distress, birth trauma and infant illness (Brown, 1999). It is surmised that these factors may contribute in some way to retained primitive reflexes.

Research into the effect of retained primary reflexes is relatively long-standing. Rider (1972) provides early evidence of this link between abnormal reflex retention and academic achievement, when comparing the prevalence of abnormal reflex responses in a group of children with learning disabilities and a group of Year 2 children functioning in the normal range. This study revealed that significantly more abnormal reflex responses were detected in the children with learning disabilities than in the children functioning within the normal range. It was also found that children with no reflex abnormalities scored higher on the Wide Range Achievement Test (WRAT) than the children who displayed abnormal reflex responses. Recent research (Blythe, 2005; McPhillips, Hepper & Mulhern, 2000; McPhillips & Jordan-Black, 2007; Taylor, Houghton & Chapman, 2004) has confirmed this relationship between abnormal primary reflex activity and academic performance. Research among children in the UK has established significant links between retained reflexes and reading disability (McPhillips et al., 2000; McPhillips & Sheehy, 2004), and reading, maths and spelling ability (McPhillips & Jordan-Black, 2007).

Gallahue and Ozmun (1998) suggested that children with retained primary reflexes will have less efficacy in performing various motor tasks, including gross motor activities such as running, catching and throwing, and fine motor tasks such as doing up buttons. This affects self-esteem and results in withdrawal from physical activities (Missiuna, Rivard & Bartlett, 2003). At the extreme end of the spectrum these issues are collectively referred to as developmental coordination disorder (DCD) (Missiuna, 1996) and may have far-reaching implications for children’s learning and academic progress. More recently in Western Australia, research was conducted on non-Indigenous children of pre-primary age, concluding that children with retained ATNR perform at a lower level on motor skill tasks, particularly those involving manual dexterity, than do children without ATNR (Callcott, 2008). In this 2008 study, 14 per cent of the tested population (n = 195) were found to have an ATNR in the moderate to high range.

Retained primary reflexes are also evident in children diagnosed with Attention Deficit Hyperactivity Disorder (AD/HD), one of the most prevalent neurodevelopmental disorders of childhood (American Psychiatric Association, 2000). Taylor and colleagues (2004) propose that there are areas of overlap between retained reflexes and AD/HD symptomatology. A sample population of boys diagnosed with AD/HD had significantly higher levels of reflex retention than did non-diagnosed boys. It was concluded that there were both ‘direct and indirect relationships’ between the retention of specific reflexes, the symptoms of AD/HD, and achievement in mathematics (p. 23).
Up until the current study there has been no research into the prevalence and severity of retained primary reflexes on Indigenous Australian children of any age. Therefore, the aim of this project was to investigate the prevalence and severity of retained primary reflexes among preschool-aged Australian Indigenous children and to determine its potential impact on educational attainment. The research was guided by three questions:

1. What is the prevalence and severity of the Asymmetrical Tonic Neck Reflex (ATNR) among Australian Indigenous preschool children?
2. What is the relationship between the presence and severity of ATNR and movement ability?
3. Is there evidence of diminished school readiness abilities (copying) in Australian Indigenous preschool children who have moderate to high levels of ATNR?

Answers to these questions were sought using a mixed-methods approach. Standardised, validated instruments were used in conjunction with qualitative measures, enabling links to be made with previous research. A description of the methods follows.

**Methods**

Catholic primary schools in the Kimberley region of Western Australia (with an appropriately aged Indigenous population) were contacted through the Kimberley District Catholic Education Office and invited to participate in the research. Two schools in the Perth metropolitan area with a high enrolment of pre-primary Indigenous Australian children were also invited. Whereas it was anticipated that a sample size of 50 Indigenous children attending preschool (4.6 to 5 years) would participate in the project, several issues arose that reduced the sample size to 40 children. One of these issues was that the information package, including the permission notes to be completed by parents, was sent at the end of 2009. With research anticipated to start in the first week of the school term in 2010, some parents had not had adequate time to return the permission notes. A second issue was that many parents needed the assistance of the school Aboriginal and Islander Education Officer (AIEO) to complete the permission note and this was difficult to achieve in the limited time span.

All children involved in this research were assessed for the presence and severity of ATNR and level of movement skill ability. Data was gathered using the Schilder Neurological Test, as described in McPhillips et al. (2000) and Ayres (1972). This is a well-validated and extensively-used assessment of ATNR (McPhillips et al. 2000; Morrison, 1985). Scores on the Schilder Test range from 0 (indicative of no evidence of ATNR) to 6 (the highest level of ATNR). While this research focuses on the prevalence and severity of one major primary reflex, the ATNR, it should be acknowledged that other primitive reflexes make up part of the automatic movement patterns in the early months of life. Up to 70 primitive reflexes have been described in the newborn (Piek, 2006), and there is ongoing controversy concerning the reflexive behaviours that have the greatest predictive clinical significance (Zafeiriou, 2004). According to McPhillips et al. (2000), the level of ATNR identified using the Schilder neurological test gives a good indication of total reflex persistence, and the prescribed method of testing in a standing position is acceptable in clinical contexts (Morrison, 1985). Descriptive statistics were used to report on the prevalence and severity of retained ATNR. This data was used to answer research question one.

Various data was used to answer question two. Motor ability was assessed using the Movement Assessment Battery for Children-2 (MABC-2) (Henderson, Sugden & Barnett, 2007), a comprehensive standardised assessment battery. In the MABC-2 test, eight tasks are grouped under the headings of manual dexterity, aiming and catching, and balance. For every item, standard scores are provided for each age group between four and 16. Age-adjusted scores and percentiles are provided for each of the three components (manual dexterity, aiming and catching, and balance) and for the total score. A percentile range table enables the comparison of each standardised component and total score. A child scoring at or below the 5th percentile would be considered to have a significant movement difficulty, and a child scoring between the 5th and 15th percentile ‘at risk’ of having a movement difficulty requiring monitoring. A child with a total score above the 15th percentile is considered to have no movement difficulty (Henderson et al., 2007, p.176).

Total scores, as well as component scores on the MABC-2 and scores indicative of the prevalence and severity of the ATNR, were compared using Pearson Product Moment correlations to determine whether there is a statistically significant relationship between the two. Work samples (such as human figure drawing, cutting, and pre-writing exercises) were gathered from all children participating in the research as further evidence of their manual dexterity.

This data was supplemented with further qualitative data via interviews. Teachers were asked to comment and reflect on what they had observed in terms of the school readiness and academic ability of children with retained ATNR, as opposed to those without evidence of retained reflexes. It is important to note that the teachers were informed that the children discussed during the interview process had been identified...
as having high levels of ATNR. Teachers were not briefed prior to the interview on the possible effects of ATNR on each child’s performance, nor were they given any other results of testing until the interviews were concluded. However, the effect of labelling the children as ‘possibly at risk’ must be considered in the interpretation of these results.

The interviews were transcribed and data analysed in order to identify common themes, issues and concerns about the children’s educational functioning.

Results

Forty Indigenous pre-primary children, 20 male and 20 female, participated in the research. The mean age of the children was five years for both males and females. Seventeen of the children were from Perth metropolitan schools and 23 were from the Kimberley region. Two children from the Kimberley region were in a kindergarten-pre-primary split class.

Prevalence and severity of the Asymmetrical Tonic Neck Reflex (ATNR) among Indigenous Australian preschool-aged children

For the purpose of this study an ATNR score of 0 indicates that an ATNR was not detectable; 1–2 is classified as mild, 3–4 moderate, and 5–6 high. This is accepted practice using this instrument (Callcott, 2008; Jordan-Black, 2005; McPhillips, 2001). Table 1 indicates the prevalence and severity of the ATNR in the total sample population using the Schilder Test. Gender differences are indicated.

Table 1. Frequency and severity of ATNR scores for all children showing gender differentiation (%)

<table>
<thead>
<tr>
<th>ATNR Score</th>
<th>Male (n = 20)</th>
<th>Female (n = 20)</th>
<th>Total (n = 40)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
</tbody>
</table>

As shown in Table 1, 67.5 percent of the children in this project demonstrated moderate to high levels of ATNR. More males than females featured in the moderate to high range. The mean ATNR score for males was 3.80 (SD = 1.70) and for females 3.45 (SD = 1.69). The mean ATNR score for the whole group was 3.63 (SD = 1.69).

Performance in the MABC-2 and subcomponents

Children scoring in the bottom 15 per cent of the MABC-2 are considered to be at risk of motor problems, with children in the bottom 5 per cent at high risk of Developmental Coordination Disorder (DCD). The numbers of children scoring in the percentile ranges (≤5 %, 6–15%, >15%) for Total MABC-2 scores, manual dexterity scores, aiming and catching scores, and balance scores are shown in Table 2 and represented in Figures 1, 2, 3, and 4 respectively.

Table 2. Total number of children scoring in the 3 percentile ranges (≤ 5%, 6–15% and >15%)

<table>
<thead>
<tr>
<th>Percentile Range</th>
<th>MABC-2 Total</th>
<th>Manual dexterity</th>
<th>Aiming &amp; catching</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤5%</td>
<td>4</td>
<td>10</td>
<td>1</td>
<td>5a</td>
</tr>
<tr>
<td>6–15%</td>
<td>6</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>≥15%</td>
<td>30</td>
<td>25</td>
<td>38</td>
<td>34</td>
</tr>
</tbody>
</table>

One sample chi-square test revealed a significant difference between the percentile range groupings on total MABC-2 scores ($x^2 (3, n = 40) = 13.20, p = 0.004$) and manual dexterity ($x^2 (3, n = 40) = 14.15, p < 0.001$) but not aiming and catching ($x^2 (3, n = 40) = 6.60, p = 0.086$) or balance ($x^2 (3, n = 40) = 2.60, p = 0.457$). This analysis indicates that 10 per cent of children scored below the fifth percentile in their total MABC-2 score, demonstrating significant issues in movement skills, with a further 15 per cent considered to be at risk. In the specific area of manual dexterity 25 per cent of children demonstrated significant levels of difficulty.

Figure 1. Histogram of total number of children at each percentile range for total MABC-2 scores according to gender
The preceding tables and figures indicate that most of the children scored in the upper percentile ranges for aiming and catching but that there were high numbers in the lower ranges for manual dexterity in particular. There were also high numbers in the lower percentile ranges for the total MABC-2 scores despite the relatively high scores on the aiming and catching subcomponent.

The relationship between the presence and severity of ATNR and performance in MABC-2

Pearson correlations suggest there is a significant correlation between ATNR and Total MABC-2 standard scores and also between ATNR and manual dexterity standard scores, but not between ATNR and aiming and catching, or balance standard scores. All of the subcomponent MABC-2 scores are significantly correlated with the total MABC-2 scores. Manual dexterity is significantly correlated with both other subcomponents, but the aiming and catching and balance subcomponents are not significantly correlated with each other for this group of children. This is further illustrated in Table 3.
Table 3. Pearson correlations (sig. 2-tailed) for all MABC-2 scores and ATNR level

<table>
<thead>
<tr>
<th></th>
<th>MABC-2 Total</th>
<th>Manual dexterity</th>
<th>Aiming &amp; catching</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual dexterity</td>
<td>0.738**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(p &lt; 0.001)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aiming &amp; catching</td>
<td>0.586**</td>
<td>0.316*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(p &lt; 0.001)</td>
<td>(p = 0.047)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance</td>
<td>0.753**</td>
<td>0.375*</td>
<td>0.138</td>
<td></td>
</tr>
<tr>
<td>(p &lt; 0.001)</td>
<td>(p = 0.397)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATNR</td>
<td>-0.417**</td>
<td>-0.446**</td>
<td>-0.201</td>
<td>-0.261</td>
</tr>
<tr>
<td>(p = 0.007)</td>
<td>(p = 0.004)</td>
<td>(p = 0.214)</td>
<td>(p = 0.103)</td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.001 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

Simple regression analyses suggest that levels of ATNR are significantly predictive of total MABC-2 scores ($R = 0.417$, $R^2 = 0.174$, $R^2_{adj} = 0.152$, $F(1, 38) = 7.997$, $p = 0.007$) and manual dexterity scores ($R = 0.446$, $R^2 = 0.199$, $R^2_{adj} = 0.178$, $F(1, 38) = 9.460$, $p = 0.004$) but not aiming and catching ($R = 0.201$, $R^2 = 0.040$, $R^2_{adj} = 0.015$, $F(1, 38) = 1.597$, $p = 0.214$) or balance ($R = 0.261$, $R^2 = 0.068$, $R^2_{adj} = 0.044$, $F(1, 38) = 2.784$, $p = 0.103$).

Evidence of an impact on school readiness (cutting with scissors, figure drawing, copying) in Indigenous Australian preschool-aged children with moderate to high levels of ATNR.

Evidence of the impact on school readiness was collected using qualitative methods. Work samples were collected and teacher interviews were conducted based on the study of three children, aged 5.6 years (Child 1), 5.11 years (Child 2) and 5.6 years (Child 3), with ATNR scores of 6 which are classed as high.

Figure 5 contains samples of human figure drawing by these three children.

Figure 5. Drawings of human figure by children with high ATNR level (Child 1 left, Child 2 middle, Child 3 right)

The ability to cross the midline supports sensorimotor intelligence and contributes to body image and self-observation, and difficulty in crossing the midline may affect the representation of the body in self-portraits (Sherick, Greeniman & Legg, 1976). The drawings have many similarities, including no trunk in the drawings by Child 1 and Child 2, no arms in the drawings by Child 2 and Child 3, no mouth in the drawing by Child 1 and Child 2. It is proposed that, based on research which outlines the effects of retained ATNR in self-portraits, the retained ATNR present in all three of these children may have contributed to the lack of detail in their human figure drawings.

The following transcripts are from interviews with the children’s teachers.

Child 1:

Her pencil grip is quite the palmer grip. Her cutting was quite interesting: hers had to be hand over hand. She definitely needs work on her cutting and pasting … when we did gluing for their name, it was just kind of glue everywhere … A lot of glue as well … She often will have bag over here, drink bottle over there – quite unorganised (Teacher KN, Personal interview, 9 February 2010).

Child 2:

He is a really big challenge. His behaviour in the classroom is quite disruptive … he can’t sit still. He touches everybody and plays with things. His name is just a scribble … even when I wrote it out for him and sounded it out; his is just scribbles and lines … I have big worries about him. Just the fact that, I mean, a lot of the other Aboriginal kids who are disruptive can sit there even for a minute or two and focus. He can’t do it at all. And like most of them like reading stories and listening to them, he is just off … so I worry about his attention. His fine motor skills are quite poor … he likes to colour in a lot of blacks and grey and he can’t cut or paste without assistance (Teacher KN, Personal interview, 9 February 2010).

Child 3:

He cannot sit still. He’s just not able to concentrate at all. He needs someone to sit with him if you want him to do anything. He finds cutting and pasting too hard … very messy (Teacher BB, Personal Interview, 2 February 2010).

Teachers also completed questionnaires for each of the three children. The results indicated that these children exhibited deficits in a variety of attributes that are considered important for classroom success (see Table 4).
Table 4. Teacher Questionnaire (Henderson et al., 2007)

<table>
<thead>
<tr>
<th>Questions to teachers</th>
<th>Child one</th>
<th>Child two</th>
<th>Child three</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Disorganised (e.g. scattered clothes slows up dressing; puts on shoes before socks)</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>2. Hesitant/forgetful (e.g. slow to start complex actions; forgets what to do in the middle of an action sequence)</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>3. Passive (e.g. hard to interest; requires much encouragement to participate)</td>
<td></td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>4. Timid (e.g. fearful of activities such as jumping/climbing; constantly asks for assistance)</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Anxious (e.g. trembles; becomes flustered in a stressful situation)</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>6. Impulsive (e.g. starts before instructions are complete; impatient of detail)</td>
<td></td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>7. Distractible (e.g. looks around; responds to irrelevant noise)</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>8. Overactive (e.g. squirms and fidgets; moves constantly when listening to instructions, fiddles with clothes)</td>
<td></td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>9. Underestimates own ability (e.g. complains of task difficulty; anticipates failure before starting)</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>10. Overestimates own ability (e.g. tries to make tasks more difficult; tries to do things too fast)</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>11. Lacks persistence (e.g. gives up quickly; is easily frustrated)</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>12. Upset by failure (e.g. looks tearful; refuses to try task again)</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>13. Unable to get pleasure from success (e.g. fails to respond to praise)</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
</tbody>
</table>

The above interviews and teacher questionnaire indicate a definite trend of impulsivity, hyperactivity and inattention in all three children.

Discussion

The number of children with retained ATNR in this study was significantly greater than in previous research, with 67.5 per cent demonstrating moderate to high levels of retained ATNR. In earlier studies, Fylan and Grunfel (2004) found that 35 per cent of a total of 674 Year 2 and Year 5 children (aged 5–9 years), from schools in Northern Ireland, displayed evidence of retained reflexes. Recent research conducted with pre-primary children in metropolitan Perth, Western Australia disclosed that only 14 per cent of the children showed retained ATNR in the moderate to high range (Callcott, 2008).

Although the sample of children in the current research is quite small, the high number with retained ATNR is of significant concern. This warrants further investigation because, as previously stated, high levels of retained ATNR are linked with reading disability (McPhillips et al., 2000; McPhillips & Sheehy, 2004), maths and spelling ability (McPhillips & Jordan-Black, 2007) and motor skills tasks (Callcott, 2008). Further, Morrison (1985) suggests that the persistence of ATNR ‘contributes to the development of learning failure as a result of related problems in attention and automated perceptual processing skills’ (p. 61).

The persistence of the ATNR may also be used as a clinical indicator of developmental delay, and research suggests that the higher levels of persistence of the ATNR in boys ‘may place them at risk of potential difficulties relative to girls’ (Jordan-Black, 2005 p.109). There is considerable evidence of boys being more ‘at risk’ than girls in terms of a range of developmental problems (Frith, 2003). In the current research 75 per cent of the boys displayed a retained ATNR reflex in the moderate to high range compared to 60 per cent of girls.

As in previous research (Callcott, 2008), a significant correlation was found between the presence of retained ATNR at a moderate to high level and performance in movement skills as assessed by MABC. This supports the assertion that high levels of retained ATNR have a significant impact on movement skills, specifically manual dexterity. This deficit impacts not only on children’s ability to explore their environment, but also on classroom tasks which require the manipulation of tools such as pencils and scissors. Of great concern was the poor performance of students in the Kimberley region, compared to Indigenous students in the Perth metropolitan region, in both total test scores and scores of manual dexterity. Seven of 23 Indigenous students (30.4 %) in the Kimberley region had total test standard scores of six or below, placing them outside of one
characteristics common in the diagnosis of AD/HD. The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (2000) which lists behavioural characteristics, including hyperactivity, coordination difficulties, messy work and disorganisation, are also characteristic of children with retained primary reflexes (Taylor et al., 2004), indicating a possible link between the retention of primary reflexes and behavioural characteristics common in the diagnosis of AD/HD. Further research in this area is certainly warranted.

Below standard performance in the MABC-2, particularly in the manual dexterity component, is of concern as it is suggested that there is a link between skills such as those measured in the manual dexterity subscale, especially the ‘tracing activity’, and early reading and writing (Iversen, Berg, Ellertsen & Tonnessen, 2005). Retained ATNR is related to issues involving the crossing of the visual midline and poor eye tracking, and can interfere with hand-eye coordination and control of the hand when writing (Blythe, 2005; Taylor et al., 2004). Sherick and colleagues (1976) surmise that the ability to cross the midline supports sensorimotor intelligence, and contributes to body image and self-observation. It is proposed that the retained ATNR in all three of these students may have contributed to the lack of detailed body-part representation and attention to fine detail in their self-portraits. The effect of retained ATNR and consequent deficits in manual dexterity should also be considered as a factor in these drawings, as writing and drawing requires fine motor skills with the hands, as well as hand-eye coordination (Callcott, 2008; McPhillips, 2001; Woodard & Surburg, 1999).

The behavioural characteristics of the three children with high ATNR scores, as described in the personal interviews with teachers and revealed in the questionnaire, indicate some obvious trends (Table 4). According to Taylor et al. (2004), there may be a symptomatologic overlap between AD/HD behaviours and the retention of a set of primary reflexes (including the ATNR). AD/HD is a relatively common brain disorder that may affect as many as 10 per cent of the population (Voeller, 2004) and is characterised by a difficulty to sustain attention, distractibility, and lack of impulse control (Schacher, Mota, Logan, Tannock & Klim, 2000). Clinical diagnosis of AD/HD is based on the criteria from the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (2000) which lists behavioural characteristics common to the disorder. These characteristics, including hyperactivity, coordination difficulties, messy work and disorganisation, are also characteristic of children with retained primary reflexes (Taylor et al., 2004), indicating a possible link between the retention of primary reflexes and behavioural characteristics common in the diagnosis of AD/HD. Further research in this area is certainly warranted.

Conclusion

In light of this research, the retention of primary reflexes may have a significant influence, possibly underestimated in Indigenous Australian children, in the attainment of movement skills and school readiness attributes. The premise underpinning this research is that persistent primary reflexes may be viewed as an early developmental risk for some children.

The Australian Government’s initiative to ‘close the gap on Australian Indigenous disadvantage’ has clearly recognised the need to identify and address the early childhood development challenges and educational disadvantages for Indigenous children (Gillard, 2008). The prevalence of moderate to high levels of retained ATNR in Indigenous pre-primary children from the Kimberley region (67.5%) compared with 14 per cent of non-Indigenous pre-primary students in a previous study (Callcott, 2008) confirms that the prevalence of retained reflexes in pre-primary students should be considered as an early developmental risk factor in this population group.

While the causes of reflex retention are thought to be many and varied, there are reasons to suggest that the Indigenous Australian population in particular may at risk. The Telethon Institute for Child Health Research (Zubrick et al., 2004) reported that children in the Aboriginal population are placed at risk from a developmental and biological perspective even prior to conception. Aboriginal children may be exposed to the mother’s tobacco use, poor maternal health, obstetric complications and low birth weights (p. xvii), all factors previously outlined as having possible links to reflex retention and which might place this specific population at risk of some type of central nervous system dysfunction.

School-based movement programs deemed to address the detrimental effects of retained reflexes (both movement-based and of an academic nature) include the INPP School’s Developmental Exercise Program (Blythe, 2005) and Primary Movement program (Callcott, 2008; McPhillips et al., 2000). Currently, these intervention programs have a limited research base; however, research on the implications of retained reflexes on developmental progress, specifically in Indigenous Australian children, should provide the incentive for the breadth of this research to expand. Although it needs to be stressed that not all children with movement or behavioural difficulties have persistent reflexes, testing for these reflexes at an early age may complement other methods that seek to identify children at risk of later difficulties. At the very least, early identification of motor problems could allow for earlier intervention for these children. Recognising the influence of retained reflexes in the early years of schooling as a possible contributing factor to developmental delay in various domains appears to be of the utmost importance if disadvantage is to be adequately addressed.
References


How we view our theoretical competency:
Early childhood pre-service teachers’ self-evaluation of a professional placement experience

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RECENT EFFORTS TO RENOVATE the teaching of young children have led to a greater emphasis on teachers’ theoretical understandings of children and teaching, and how they translate their understandings into practice. This qualitative research analysed and discussed how early childhood pre-service teachers in one Australian university perceived their theoretical competence and how they used this in their pedagogical decision making and adaptations in their professional placement. The paper investigated how the pre-service teachers justified and enacted decisions about which pedagogical and theoretical approaches to use in their classrooms, and how they reconciled potential conflicts and contradictions between their own ideas, pedagogical and theoretical knowledge, and those of their mentor teachers. A framework analysis of rich qualitative data obtained through focus groups in class illuminated the pre-service teachers’ theoretical competency, theoretical confidence, theoretical preparation and theoretical reflexivity. The paper concludes with recommendations for improving early childhood pre-service teachers’ professional practice.

Introduction

Current rapid global developments in early childhood education and care, and the drive towards quality teaching, are changing the early childhood pre-service teacher education landscape. The role of early childhood teachers is now increasingly complex and demanding (Early & Winton, 2001; Lovat, 2003; Pianta & Hamre, 2009; Wood & Bennett, 2000). Cranston (1999) argues that teachers, like their students, will need to be prepared for rapidly changing and unpredictable teaching and learning environments. Sims (2010) observes that, because society is becoming increasingly dynamic and complex, early childhood professionals of the next decade will face different work situations from those experienced now. The present study analyses how early childhood pre-service teachers in one Australian university perceived their theoretical competence and how they use this. It explores how they justify and enact decisions about which pedagogical and theoretical approaches to use in their classrooms, and how they reconcile potential conflicts and contradictions between their own knowledge and that of their mentor teachers. The study was informed by three research questions:

- How do early childhood pre-service teachers describe their perceived theoretical competence?
- How do they use this in their pedagogical decision making and adaptations in their teaching practicum?
- How do pre-service early childhood teachers reconcile potential contradictions between their own pedagogical/theoretical knowledge and beliefs and those of their mentor teachers?

This study takes the stance that theoretically rich understanding of teaching and learning is important for ensuring quality in early childhood education. Research validates that teacher quality and teaching quality are mutually constitutive (Churchill et al., 2011; Sims, 2010). The same point is advanced by Riley (2009): that ‘what teachers do comprises the identity of the teacher, their knowledge and their ability to develop strong skills in pedagogy, content and theory in order to plan for the learning of all students’ (p. 7). Therefore, to advance the field of early childhood education, teachers need to understand the interrelationship between teaching and learning theories in order to personalise teaching within a supportive early childhood education environment, implement theoretically relevant curriculum, and continuously use appropriate and multiple approaches to monitor and evaluate children’s learning.
Research suggests that teachers’ understanding of theories largely determines how they teach (Wood & Bennett, 2000). Disparate classroom characteristics often challenge teachers’ dominant beliefs, values and strategies, and make teaching an unpredictable experience (Churchill et al., 2011). Evidence suggests that transformational teachers tend to draw on theoretical reflection to modify teaching approaches learned during their pre-service education to suit their current condition (Ryan & Goffin, 2008). On the other hand, assimilationist teachers tend to lose focus by reverting to their pre-existing ideas about teaching or by copying what their mentor teachers do without questioning its empirical and theoretical basis (Churchill et al., 2011).

In the field of early childhood education and care, pedagogical and theoretical decision making is important for teachers in order to be visible as professionals. Ryan and Goffin (2008) argue that teachers are missing in their teaching because ‘of not having the knowledge and skills necessary for supporting children’s learning’ (p. 386). Many experienced early childhood researchers are concerned that educators are simply focusing on children and developmental psychology and ignoring how their own pedagogical decision making influences children’s learning (Dahlberg, Moss & Pence, 1999). Further evidence indicates that teachers become less visible pedagogically when they use children’s development as the primary starting point for curriculum planning and teaching instead of focusing on learning theories (Ryan & Goffin, 2008). This is problematic because focusing on development as the primary starting point restricts teachers’ ability to look beyond biologically determined behaviours (Gesell & Ilg, 1949) and established notions of classroom teaching (Vygotsky, 1987). Good teachers often look beyond children’s biological characteristics and consider their own teaching personality, the teaching and learning environment, appropriate resources, cultural factors, and children’s family background (Vygotsky, 1987).

As pre-service early childhood teachers do not know what to expect in child care and kindergartens, a transformational approach to teacher preparation is crucial for preparing them to adapt to changing pedagogical and contextual situations. Transformational teachers are proactive and often able to link theory to practice (Maloney & Barblett, 2002; Mezirow, 1997; Ryan & Goffin, 2008; Sanguinetti, 2000). It is crucial for teacher educators to place early childhood teacher development within a Transformative Learning Theory (Mezirow, 1997) because pre-service teachers are at various levels of development and hold a wide range of professional/personal experiences and areas of expertise. This approach is important for supporting their gradual transformation to expert teachers.

The most important tenet of transformative theory is that it does not conform to an assimilationist view of learning (Mezirow, 1997). This means pre-service teachers are exposed to multiple theoretical paradigms and their link to practice as well as being given an opportunity to critique, challenge and re-enact theoretical and pedagogical ideas in order to transform their own thinking. Providing opportunities for early childhood pre-service teachers to reflect on knowledge of children to develop their own understanding is opposed to teacher development as assimilators of packaged knowledge (Giroux, 1992).

McGonigal (2005) states that ‘transformative learning requires an environment that encourages and rewards intellectual openness’ (p. 1). Mezirow (1991) describes perspective transformation as:

... the process of becoming critically aware of how and why our assumptions have come to constrain the way we perceive, understand, and feel about our world; changing these structures of habitual expectation to make possible a more inclusive, discriminating, and integrating perspective; and, finally, making choices or otherwise acting upon these new understandings (p. 167).

If teachers assimilate theory which simply fits to their pre-existing knowledge and ideas without carefully interrogating them, becoming a transformed practitioner may prove very difficult (Genishi, Ryan, Ochsner & Yarnall, 2001).

Teachers’ knowledge is constantly subject to revision and abandonment through exposure to classroom conditions during practicum (Ryan, Ochsner & Genishi, 2001). Hence, research information on early childhood pre-service teachers in particular, and with respect to the value of teaching and learning theories in practice, is important for developing ongoing professional learning to induce good teaching and quality early childhood education (Ryan & Goffin, 2008; Silin, 1987; Swadener & Kessler, 1991).

The research context

This research was conducted in the Faculty of Education at one Australian university located in Melbourne, Victoria. The research involved 106 pre-service teachers enrolled in the Re-imagining Children’s Learning unit. This unit prepares pre-service teachers for professional placement in early childhood centres. It introduces students to a range of different theoretical perspectives related to children’s learning and development, including developmental, sociocultural, post structural and postmodern theories. These theoretical lenses are used to examine images of childhood as they are constructed in relation to time, space and place, with a particular emphasis on cultural constructions. Students examine learning that occurs in a range of contexts.
including the classroom, the home, other informal settings and the wider community, and the implications this has for students from different backgrounds. Students have opportunities to describe, critique and utilise these theories during their professional placement. Upon successful completion of this unit, students are expected to:

- develop an understanding of different theories of children’s learning and development
- use theories to investigate practices across time, culture, space and places
- develop techniques to assist in observing children and their learning
- reflect on their personal professional learning during professional placement
- recognise and apply their understanding of children’s learning in an educational setting.

Pre-service teachers attend a 10-week lecture and tutorial series followed by a three-week intensive block professional placement in early childhood centres. The unit is assessed on the basis of passing both the professional placement and assignment components. Each pre-service teacher was assigned to a mentor from teaching staff, who, as well as mentoring, assessed the pre-service teachers on the quality of their teaching. The completed assessment reports on the pre-service teacher’s attendance, professional responsibilities, teaching quality and progress were then submitted to the Education Faculty Placement Office. During the placement, university faculty members were assigned as liaison lecturers who visited the pre-service teachers, yet they were not expected to play an active role in assessing their teaching unless they were perceived by their mentor to be at risk of failing the professional placement and had notified the University Placement Office. The one-day visit by a university academic was used to discuss any issues the pre-service teachers faced during their placement and to write brief comments on their portfolios.

Method

This study adopted a qualitative approach of focus groups which provided a powerful research tool for gathering opinions about the participants’ professional placement experiences. Three research questions were devised for participants to discuss in focus groups. These questions were derived from the key characteristics of transformative teachers in the research literature (Genishi et al., 2001).

Participants

Participants were 106 pre-service teachers in the second year of a four-year Bachelor of Early Childhood Education (BECE) program in a city university in Melbourne, Australia. Graduating teachers from the program are eligible to teach children aged birth–eight years. The 106 students who participated in this study were recruited through convenience sampling techniques. The research was approved by the university’s Ethics Committee for Research Involving Humans. Of the participants, 7 per cent were males and 93 per cent females, with ages ranging from 20 to 41 years. Of these, the majority (95%) were enrolled in university for the first time and the remaining 5 per cent had some previous university study experience. Twelve per cent of the participants were international students and the remaining 88 per cent were local students.

Data collection

Data was collected in tutorials in the week that followed completion of the professional placement in five focus groups (21 students in each group). During the focus group sessions the participants were asked three questions:

- How would you describe your perceived theoretical competence?
- How do you use this in your pedagogical decision making and adaptations in your teaching practicum?
- How do you reconcile potential contradictions between your own pedagogical/theoretical knowledge and beliefs and those of your mentor teachers?

The discussions were audio-recorded by nominated student representatives in each focus group and the data transcribed by two student representatives. The transcribed tapes were verified by each focus group, after which the student-validated versions of the data were included for analysis.

Data analysis

The unit of analysis included qualitative description of theoretical competence, pedagogical decision making, potential conflicts, theoretical understanding and confidence in using it, and adaptations made during teaching in professional placement. To analyse the data, Ritchie and Spencer’s (1994) framework approach was applied because of its systematic and visible stages of the analysis process. The analysis process involved familiarisation with the data and identifying a thematic framework. The next stage involved indexing, using textual codes to identify specific pieces of data which corresponded to differing conceptual themes. This was followed by using headings from the conceptual themes to create charts of the data, after which I engaged in mapping and interpretation of the results.
Results and discussion

Analysis of data yielded four themes: Theoretical competence, Theoretical confidence, Theoretical reflexivity and Theoretical preparation. All four themes appeared to be interrelated.

Theoretical competence

The results demonstrated that the pre-service teachers who participated in this study experienced a significant lack of competence in applying learning and developmental theories to their professional placement teaching.

*Why don’t they just teach us how to teach? Everything is about theory … Since there are many of them it just doesn’t help you to master them before you start your placement (Focus group 3).*

The statement suggests that the multiple theories discussed in the course unit are confusing to the pre-service teachers, and called for strategies of teaching rather than theories. Viewing teaching in this way loses the complexity and interdependency of theory and effective teaching. It also reflects a fragmented and mechanistic view of teaching (Doyle, 1990). A mechanistic view sees pedagogy as a craft or as a technical exercise (Foran & Olson, 2008). However, the complexity of teaching and the complex nature of child development require the adoption of approaches to teaching that consciously utilise appropriate theory to respond to different children’s learning needs in classroom diversity (Laursen, 2007; O’Sullivan, Morrel & O’Conner, 2002).

In addition, views were expressed regarding a perceived lack of in-depth exposure to the theories discussed in the unit, and the difficulty of how a teacher could develop theoretical competence to meet different children’s multiple needs:

*You only feel confident to use something if you have deep knowledge of it. Since we have a lot of theories in one unit, we couldn’t get to the bottom of everything … you don’t expect magic from us … we don’t actually see how the classrooms reflect all the theories we learnt (Focus group 2).*

*The main point is the different understandings each theory brings … there is this concern we have, how can a teacher extract from theory what is relevant to work with in a classroom with different children without imprinting our own beliefs and values … believe that while we are all entitled to understand theories and use them, our competence as teachers would develop when we are encouraged to come up with our own values and theories that work for us (Focus group 4).*

These narratives provide rich information for explaining some theoretical intentions of the pre-service teachers. On the one hand, it can be argued that, perhaps in the second year of a four-year course, some of the pre-service teachers were not yet well-grounded in how to extract relevant theoretical information to construct their own teaching moments, and this may have led to them perceiving theory and teaching as separate entities. On the other hand, the pre-service teachers’ pedagogical intentions appeared to be in conflict with multiple perspectives the theories espouse. When teachers face complexities they cannot manage well, they may turn to their own ideas about teaching. These ideas play crucial roles in teacher thinking, planning and decision making (Yerrick, Parke & Nugent, 1997). In support of this view, Carrington, Deppeler and Moss (2010) state:

*… in Australia, pedagogy is viewed as a practice or a craft representing the teachers’ accumulated wisdom with respect to their teaching practice acquired over time. Teachers’ knowledge and beliefs provide a framework for pedagogy, knowledge of students, subject matter and the curriculum, and guides the teachers’ actions in practice (p. 2).*

This means that, unless pre-service teachers are invited to partake collaboratively and meaningfully in discussing and reframing theories of learning, their exposure to them may have little or no impact on their teaching.

Theoretical confidence

The second theme relates to some of the pre-service teachers’ lack of confidence in using theories to influence their teaching or enact theoretical explanations of their practice. This has a direct link with their perceived status as pre-service teachers.

*… under someone’s surveillance you are under constant scrutiny because everybody thinks of you as a novice teacher … after all, you haven’t been certified yet, so you end up discrediting yourself … applying the teaching strategies of your mentor teachers, although you may not like all of their stuff, I mean how they teach the children … you just want to play it safe and get good evaluations (Focus group 1).*

There are two perspectives to this situation. First, probably, is the inadequacy felt as a result of a lack of depth in the teaching units prior to their professional placement which had led to a feeling of discrepancy between theories as treated in the course unit and the practical teaching moments experienced in placements. The second perspective relates to seeing themselves as being at the mercy of mentor teachers who have the power to determine the success or failure of their professional placement. Fear of receiving negative evaluation comments resulted in the pre-service teachers following the practices of their mentor teachers even though they knew they would have done it differently to achieve good teaching outcomes:
... the unspoken aspect of our professional placement was to do with some mentor teachers dictating to you what to do in their class. For example, you enter the classroom the first time with inclusive and positive mind about the children ... suddenly you get this welcome address from the mentor teacher ... this student has behaviour problem, this one can't do any work, that one is like this ... they corrupt your mind so you begin to put them in categories before you even start to know them. How possible is it to challenge the teacher when you have just started your apprenticeship? (Focus group 4).

These findings have revealed some flaws in how early childhood professional placements are conducted in some Australian universities. The emphasis on pre-service teachers’ theoretical and practical preparation should not be used as a platform for mentor teachers to demonstrate their capacity as policing agents in the professional development process.

Theoretical reflexivity

The third theme relates to the pre-service teachers’ ability to use theory to reflect on their practice. Davies in Cousin (2010) describes reflexivity as ‘a turning back on oneself, a process of self-reference’ (p. 11). It is an ongoing conversation about one’s teaching experience and its impact on the students (O’Sullivan et al., 2002). Teacher education researchers suggest that the quality of teaching is enabled by reflective practice (Loughran, 2002; Parsons & Kimberlee, 2001). However, the data showed that the pre-service teachers did not consciously reflect on their practice during and after their professional placement classes.

When you are teaching you don’t know you are doing it right or not. It is left to your mentor teacher or university advisor to provide the comments … sometimes you think you have done your best but the evaluation comes negative and that is unfair … university lecturers usually point out that you are not applying your theory well but they don’t teach us how to do these theories in practice … it is time the university advisors get to the classroom and show us how theory is done practically in teaching (Focus group 5).

To engage in reflective practice these pre-service teachers need a strong understanding of teaching and learning theories to think through their own professional and pedagogical knowledge, knowledge of children and families, culture, priorities, strengths and weaknesses (Chaiklin, 2001; Fleer & Raban, 2007). Reflexivity and, more specifically, self-reflexivity has received increasingly more consideration in teaching (Loughran, 2002) because it is through reflexive practice that teachers minimise their subjectivity and exclusion in their teaching. Robinson and Diaz (2008) conceptualise subjectivity as ‘the unconscious and conscious thoughts and emotions of the individual, or one’s sense of self and how one relates to the world’ (p. 184). Reflexivity enables teachers to interrogate and transform their subjectivity. This kind of reflexivity was absent in the majority of the early childhood pre-service teachers who participated in the study. Also, the mentor teachers, who should provide support to the pre-service teachers in reflection on their work, were rather busying themselves on evaluation criteria specified in the professional placement manual.

Importantly, the structure did not allow us to have confident interaction with some of the mentor teachers to reflect and contribute our theoretical knowledge … to suggest possible ways of doing things differently, truly, listening to your mentor teacher discussing practice and theory would help spark reflective thinking about what it means to be doing good teaching (Focus group 4).

... I’ve never really been interested in theory but I think should someone [more] experienced than me pull me in the conversation about what theory they are using to frame their work, I think this will give us some starting point to think about our work in theory. But what do you see; your presence in the classroom means you are there for someone to evaluate you (Focus group 3).

The data showed that some of the pre-service teachers in this study taught to please their mentor teachers without thinking about why they adopt this approach or the other. Such practices are not likely to lead to quality early childhood teaching. Early childhood pre-service teachers need to think more about how to bring themselves into their teaching process (Cousin, 2010), requiring them to be ‘intellectually sharp and emotionally open’ (Cousin, 2010, p. 15). Ultimately, theoretical reflexivity would help teachers to create a more ‘humane, caring and self-actualising life for those we educate’ (Dadds, 2005, p. 35). Duncan and Watson (2005) argue that a ‘robust concept of reflexivity should involve reflecting on, and being accountable about one’s pragmatic, theoretical and epistemological influences on teaching’ (p. 51). Engaging in theoretical reflexivity would enable teachers to turn a self-critical eye onto their own identity as researcher, knower and learner (Alvesson & Sköldberg, 2009).

Theoretical preparation

The final theme relates to theoretical preparation. Developing a meaningful curriculum and practice involves theoretical knowledge, preparedness and the ability to select appropriate theory in preparing for lessons (Zaslow & Martinez-Beck, 2005). Some of the pre-service teachers in this study indicated that
they do prepare their lessons according to specified requirements and yet they hardly consider theories when preparing lessons:

Theory rarely comes to mind when preparing lessons. You just want to prepare your lesson on what your mentor teacher gives you to teach … you don’t really think at that time which theory you are going to use, it never comes consciously like that … To be a good teacher you just need to know your content and be excited about teaching and this keeps you going (Focus group 3).

… If you are writing for your assignment in your course unit the criteria guides you to incorporate theory to meet the requirements … for teaching, theory does not really click for me (Focus group 1).

It appears that the early childhood pre-service teachers perceive theory as a product made by researchers and teacher educators which they must use to satisfy course requirements and not necessarily consciously apply it to their teaching preparations. Laursen (2007) argues:

A good theory works like a tool helping teachers to master their job. Because the personal and relational aspects of teaching are so important, ‘practice’ cannot be guided by recipes or manuals. Instead the teacher should be able to improvise and to develop teaching adapted to the persons involved and to the circumstances (p. 9).

I argue that a lack of theoretical consideration and its infusion into curriculum preparation and teaching defeats teaching as a profession. Theory would help teachers conceptualise their content, classroom context and children they teach, and themselves as teachers, leading to deeper preparation and delivering of effective lessons that transform themselves and their students.

On the issue of how the pre-service teachers reconcile potential contradictions between pedagogical/theoretical knowledge and beliefs and those of their mentors, the results suggest that, although the pre-service teachers perceived themselves as constructivists who can develop personal theories for their teaching, they tend to model their teaching mostly on the practices of their mentors:

We have our own beliefs about good teaching and what we can do if the classes were our own … but you know, you are under someone who is monitoring your work. Because you do not yet have the certificate like them you don’t have the authority to challenge anything … even if it contradicts what you believe good teaching should be (Focus group 5).

You just got to work it out cool with them if you want good results at the end of your practicum (Focus group 2).

Fear of failure or perceiving themselves as not yet qualified played a role in the pre-service teachers’ inability to challenge ineffective teaching practices of their mentors. Pre-service teacher educators must take a more active role in demonstrating theory in practice to early childhood pre-service teachers, providing regular professional development to mentor teachers to improve their supervisory roles and early childhood pedagogy.

Conclusion

The findings suggest that more work is needed to support early childhood pre-service teachers in professional placement to engage and use theory to inform their practice. Early childhood pre-service teacher educators need to do more to engage with schools and conduct demonstration lessons for student teachers, as well as providing regular professional development to mentor teachers. University teacher educators should not only ‘preach’ theory to students but also attempt to demonstrate this under real classroom conditions. They need to give students teachers an in-depth understanding of education and learning theories if they want them teaching well (Hutchings, 2007; Hutchings & Huber, 2008). It is with rich theoretical knowledge that teachers can become transformative teachers who engage all learners in early childhood settings.

References


