Younger and Older Together:
Children’s interactions in a mixed-age early childhood centre

By

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He toa takitini taku toa
E hara I te toa takitahi

My strength does not come from myself alone,
It comes from the whole group

This study has come at a challenging time in my life and I have been incredibly blessed by the support that has been around me.

A huge thank-you to my parents for all their love, support and endless hours of care-giving.

Arohanui to my friends who must have thought that this thesis would never be finished. I couldn’t have got here without your support.

It’s over now, we can celebrate.

Taylor, Jackson and Mckenzie,
This is for you, with all my love.

Show a little faith, there’s magic in the night – Bruce Springsteen
Since industrialisation, children have increasingly become educated in age-bands to facilitate manageability. The contemporary 21st century Western world further limits mixed-age interaction for young children, yet there is little concern expressed about educational segregation based on age. At the same time, mixed-age settings have been noted to be beneficial for children’s learning. This qualitative exploratory study, situated within a socio-cultural framework, considered the nature of children’s interactions in one mixed-age Playcentre. Using narrative records that captured the nuances of the social interactions of three focus children, over the course of three Playcentre sessions for each child, the experiences of an 18-month aged girl, a 3-year-3-month old boy and a 4-year-7-month old girl were analysed to explore the qualitative nature of the social interactions that are enabled in a mixed-age early childhood setting.

This study supports earlier studies that indicate that age makes a difference to the type of interactions that children engage in. In this study age impacted on the social interaction techniques and strategies that the focus children applied and was also a factor when choosing a peer to engage with. Older children were the ideal child to observe,
and to engage with, and this assigned an unspoken leadership role to these older children. Yet, all children were active in their life-world with all being able to contribute to the interactions at the Playcentre, regardless of age. Each of the focus children took responsibility for one another, contributing to the upholding of centre rules and regulations while also respecting each others’ needs. I argue that the children’s social interactions within this Playcentre created a sense of togetherness within a community; this was the central feature of children’s social experiences in this mixed-age setting.
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1.0 Introduction

The research question addressed in this study is:

What is the nature of children’s social interactions in a mixed-age setting?

In answering this question, this thesis provides insights into the ways that children interacted with each other, and the social environment that they created.

Traditionally, schools have catered for a range of students at different levels of learning as well as different ages. The one-room school house where children of different ages learnt together in the same environment, was standard in many small towns around the world as well as in New Zealand (May, 2005; Theilheimer, 1993). While originally school-based education was only for the privileged, the onset of industrialisation brought change (McClellan & Kinsey, 1997; Roopnarine & Johnson, 2000). In England, the Factory Acts (1833 & 1844) determined that children were unable to work until the age of 9 (Brantlinger & Thesing, 2002; Kirby, 2003). Assessment within schools was subsequently used as a way to determine which children were suited to working in factories or which should carry on with schooling so they could work in qualified professional roles (Brantlinger & Thesing, 2002). With growing numbers of children gaining access to schools, it
became common to group them into age-bands for manageability (McClellan & Kinsey, 1997).

At the same time in workplaces around the world, people interact and work with people of different ages. Universities educate in interest groups, not by age groups; clubs and groups unite in interest not in age. Yet, in New Zealand, as in many other countries around the world, we educate our children in age groups. Even early childhood settings are affected. While some early childhood education environments, such as Playcentre, Kohanga Reo, and Family Day care cater for mixed-ages, many do not. Up until recently, Kindergartens educated in age bands - afternoon sessions for three-year-olds and morning sessions for four-year-olds. Increasingly, full day care centres are becoming age-banded, with many centres catering for children aged from 0-2 and 2 upwards. Some larger centres educate in more specific age bands. Children are spending increasing amounts of time in full day services and some without the opportunity for mixed-age contact.

This limited cross-age contact becomes more significant when considered with life in today’s society. While once, it was standard for neighbourhood children to play together in the street or at each other’s houses, generally regardless of age, nowadays, this is becoming less common. A reason for this is that more children are in some form of organised care whether after school, or after being in an early childhood education service, as well as through the after-school activities that form part of children’s lives. Furthermore, the safety-cautious society that has evolved
has also impacted on parents who feel the need to be ever-watchful of their children; this means that play in the street is less likely than once would have been the case. Given the lack of mixed-age contact that may occur, it could be very likely that some children could go through the first five years of life with limited contact with others outside their own age group. Should this be of concern?

Research has determined that there are social and cognitive benefits for children being educated in mixed-age groups (Adams et al., 1997; Katz, Evangelou, & Hartman, 1990; Roopnarine & Johnson, 1984, 2000). Most notably, pro-social behaviours seem to flourish more in mixed-age environments (Adams et al., 1997; Katz et al., 1990). Cognitively, peer-tutoring and working within the zone of proximal development seem to occur more readily (Katz et al., 1990; Roopnarine & Johnson, 2000). Older children are generally viewed by the group as leaders and younger children have the opportunity to observe more advanced practices. Furthermore, grouping children in age bands does not always mean that a child will find a peer at the similar developmental level, whether cognitively or socially (Katz et al., 1990). As a consequence, Murphy (2005) has recommended mixed-age groups as an option for gifted and special needs children.

It is important to note that mixed-age is not the only way for learning and for interaction to occur. It is natural that people, particularly as they age, congregate in similar groups with similar interests to themselves. However, for the purpose of this
thesis, mixed-age is the focus and the mixed-age band being discussed is inclusive of up to a six year difference.

Disappointingly, research conducted on mixed-age early childhood settings has mainly occurred in contrived environments and occasionally with children unfamiliar with each other thereby impacting on the validity of the findings in relation to everyday practice. This study seeks to address this gap in the research within a New Zealand context and reflects a naturalistic mixed-age setting. It provides rich description of how children in one Playcentre, where children were not segregated by age, interacted with each other. It records children’s experiences as they unfolded in a normal day-to-day sessional environment. It tells the story of three children’s interactions with the aim to add new understandings about children’s social interactions in mixed-age settings within a New Zealand context.

I have a strong interest in mixed-age settings. My experience of Playcentre, both as a child learning in a Playcentre environment as well as an adult learning alongside my own children, has shaped my belief that not only is social interaction across age-ranges important but that much valuable learning comes from interaction in a mixed-age setting. My schooling experience in Samoa in a ‘Fa’a Samoa’ context placed emphasis on the wider family learning together, in a similar fashion to that of tuakana/teina in Te Aō Māori (Pere, 1987).
I have a history with Playcentre; all three of my children have attended Playcentre as the basis of their early childhood education. I am a tutor for the Wellington Playcentre Association as well as having, in the past, been a paid employee of the Association. My background and experience needs to be acknowledged as it provides an indication of my interest in this topic and my disposition to value mixed-age settings.

Chapter Two provides an overview of the literature relating to mixed-age settings, within early childhood education, as well as primary education. It also considers aspects relating to early childhood education such as togetherness, friendship, conflict and play – factors that are relevant to this study.

Chapter Three outlines the methodology for this qualitative observation study. It details the research question, the observations and analysis methods as well as describing the centre context where the research was undertaken.

Significant themes arising from the data are discussed in Chapters Four, Five, Six, Seven and Eight. The first of these themes is togetherness and this is discussed in Chapters Four and Five. Chapters Six and Seven discuss the second theme of engagement which considers aspects of how the children engaged and sustained play. The third theme of friendship is considered in Chapter Eight which outlines characteristics of special friendships within the mixed-age setting.
Chapter Nine concludes this thesis by summarizing the key themes and discussing the limitations of the study and areas for further research.
Interactions between children are essential for learning and much research and literature emphasises the significance of friendships, relationships and interactions for development (Hartup, Laursen, & Stewart, 1988; Hartup & Moore, 1990; Haworth et al., 2004; Ladd, 1990; Peppler, Corter, & Abromovich, 1982; Roopnarine & Honig, 1985; Rubin, 1977, p. 648; Townsend, 1992). Vygotsky (1978) discussed how interactions with others contributed to development particularly when those interactions involved more experienced peers during which the more experienced induct the less experienced into the ways of the culture (Bruner, 1985; Drewery & Bird, 2004; Rogoff, 1990). The New Zealand researcher Anne Smith (1996) further supports the benefits of peer interaction by stating “Social interaction is … the basis of cognitive development, since children acquire their thinking skills from social interactions with others” (p. 112). Clearly interaction with peers matters, but does the age of the peers matter? As the previous chapter noted, children tend to be grouped together by age when it comes to education in a formal learning environment such as a school. Yet age is not always an indicator of ability. Furthermore, the factor of age may impact on interactions between peers. The reviewed literature in this chapter suggests that there is scope to investigate the interactions between children of differing ages within the New Zealand context.
2.1 Mixed-age settings

Despite fulsome rhetoric about mixed-age settings being the philosophy of many early childhood settings in this country such as Playcentre (Wellington Playcentre Association Inc., 2001), there is very little local research available on the nature of interactions among young children; likewise there is limited international literature that is relevant to the New Zealand context. The research that is available has been conducted largely in a contrived setting that limits play to particular areas or activities. Moreover, the research that does exist (Howes & Farver, 1981; Katz et al., 1990; Kowalski, Wyver, Masselos, & de Lacey, 2004; Marjanovic-Umek & Lesnik, 1996; McClellan & Kinsey, 1997) draws on a developmentally appropriate framework in its analysis rather than a socio-cultural one. A wide search using a range of databases including ERIC, EBSCO and Proquest Education Complete as well as the Victoria University Library was conducted using terms including ‘mixed-age’, ‘multi-age’ and ‘mixed-grouping’.

2.1.1 Symbolic Play in mixed-age settings

A number of studies have investigated mixed-age settings through observing symbolic play. One such study, conducted by Kowalski, Wyver, Masselos and de Lacey (2005) observed 48 toddlers and 37 pre-school children in Australian day care centres, to test the major hypothesis that “participants would, in free play with their older pre-school-aged peers, exhibit symbolic play more frequently and at more complex levels than when they were engaged in free play with their same-aged peers” (Kowalski et al., 2005, p. 56) This controlled study studied the
younger children engaged in same-age play, mixed-age play and mixed-age dyads in an environment arranged with play materials that encouraged dramatic play. Data was collected through videotaped observations. The study concluded that the influence of older peers during symbolic play with younger children “increased the complexity” (p. 61) of the play thus confirming that a mixed-age setting impacts upon the social context. This study followed similar methodology of a much earlier American study conducted by Howes and Farver (1987) that compared the complexity of dyadic play of 16 two-year olds when playing with their own peer group and then with five-year olds. The findings were that the two-year old children engaged in “more complex social pretend play if the play partner was an older child” (p. 310). Both studies, Kowalski et al. (2005) and Howes and Farver (1987), required the use of control groups, isolating the children from a wide range of play areas and placing the children into dyads or a larger mixed-age group with the only toys available being those that would encourage dramatic play. While these studies provide some valuable data relating to more complex symbolic play when engaging with an older child, they were not conducted in naturally occurring contexts and thus do not reflect a naturalistic situation in which children can explore a wide range of areas of play, or select playmates from a wide group of peers. Would these findings have been altered if they had occurred in a natural setting where children have choice about their play?

A natural pre-school environment was used in Marjanovic-Umek and Lesnik’s (1996) study that considered symbolic transformation in the play of children in both
2.1.2 The impact of age on mixed-age settings

Age does seem to be a factor in the interactions that occur within a mixed-age setting with many studies noting that younger children are drawn to older children (Adams et al., 1997; Haworth et al., 2004; Rogoff, 1990; Roopnarine & Clawson, 2000; Roopnarine & Johnson, 1984). A New Zealand study focussing on children’s friendships as part of the Centre of Innovation project at Wycliffe Nga Tamariki Kindergarten, noted that a significant number of interactions occurred with younger children interacting with children slightly older than themselves leading to the conclusions that “mixed age groups could have positive benefits” (Haworth et al., 2004, p. 21). This result was attributed to the fact that the kindergarten had built relationships with a Samoan playgroup and as a result of collaborative relationships between the two, the Kindergarten opened their afternoon sessions to a wider than usual range of ages noting that children of two to three years “tended to gravitate towards and create friendships with the older children” (Haworth et al., 2004, p. 19).
Within a mixed-age setting, young children associate different expectations with different ages (Evangelou, 1989). Younger children tend to look to older children for guidance and leadership (Katz, 1995; Theilheimer, 1993) with Katz (1995, p. 3) noting that “children very early associate different expectations with different age groups …. [and that]….. younger children assign to older children instructive, leadership, helpful and sympathizing roles, whereas older children assign to younger children the need for help and instruction”. Older children are more likely to take on a leadership role as well as an instructional role which allows them to solidify their own learning as well (Evangelou, 1989; Theilheimer, 1993). French, Waas, Stright and Baker (1986) considered leadership in same age and mixed-age (variance of two years) classrooms of primary school age children. They found that leadership was “more pronounced in the mixed-age” (p. 1282) classrooms noting that mixed-age classrooms are a place where leadership skills can be practised by older children.

Not only does age impact on the expectation that children have of each other, it has also been reported to allow children to develop at their own pace as within a setting that caters for mixed-ages, children are likely to find someone at their level either cognitively or socially (Aina, 2001; Furman, Rahe, & Hartup, 1979; Murphy, 2005).
2.1.3 Social Behaviour and Responsibility

Social responsibility is also noted to be a behaviour that occurs more naturally in mixed-age settings than in same-age settings (Evangelou, 1989; French et al., 1986; Furman et al., 1979; Katz, 1995) with Katz (1995) noting that nurturing, turn-taking and sharing tend to be more prevalent in mixed-age settings. Katz has written about the benefits of these behaviours including the sensitivity that is shown to children of differing ages.

The social behaviour of children in mixed-age settings has been a focus of research. McClellan and Kinsey (1997) investigated children’s social behaviour in mixed-age classrooms in primary schools. This American cohort study collected data from teachers once a year for a two-year period and found that mixed-age settings had “a significant positive effect on children’s pro-social behaviour” (p. 2). While this study relied on teacher rating of individual students rather than any direct observational data, its findings do point to the positive impact that mixed-age settings have on pro-social behaviour.

Observing children in their preschool environment, Goldman (1981) investigated the impact of age grouping on the social relationships of preschool children, finding that when compared with peers in same-age classrooms, three year olds in mixed-age groups were involved in more positive interactions, less parallel play and less teacher-directed activities. The same applied for the four-year-old children who were also found to spend more time in solitary play than their same-age
counterparts in same-age classrooms. Along with noting increased positive interactions, Goldman (1981) also stated that “the age composition of children in a preschool group does influence the pattern of social participation” (p. 648).

A 1991 book, *The case for mixed-age grouping in early education* by American researchers Katz, Evangelou and Hartman argued that mixed-age settings encourage cooperation and other social behaviours. This argument was based on a review of American and British studies conducted in the 1970’s and 1980’s from which the authors concluded that mixed age settings:

- resemble family and neighbourhood groupings;
- can enhance a child’s social development;
- provide better opportunity of finding a peer at a similar level whether developmentally or socially;
- allow children to scaffold each other; and
- elicit pro-social behaviour such as helping and turn taking.

### 2.1.4 Peer Tutoring

Peer tutoring is also an area that has been researched in relation to mixed-age settings (Howes & Farver, 1987; Roopnarine & Johnson, 1984). Rogoff (1990) has extended upon Vygotsky’s (1978) concept of the zone of proximal development by detailing how an expert can work with a novice through joint problem solving. Rogoff’s (1990) work further outlines the commonplace nature of peers and
siblings caring for and teaching other children in many cultures around the world, and how these environments “provide many benefits, including the opportunity to practice teaching and nurturance with younger children and the opportunity to imitate and practice role relations with older children” (p. 184).

One New Zealand study conducted in primary schools found that older and more experienced pupils, aged between 10 and 11 years, were able to successfully tutor younger readers of 6 to 8 years of age while at the same time improving their own reading abilities (Limbrick, McNaughton, & Glynn, 1985). This interaction in the form of peer tutoring closely reflects the tuakana/teina relationship (Pere, 1987).

Clearly, the age of peers matter. The above studies conducted across various frameworks and settings, both naturalistic and laboratory, conclude this with Lougee, Grueneich and Hartup (1977) arguing that “observations of same-age interaction may not be generalised to the mixed-age situation” (p. 1353) due to the different nature of the interactions that take place.

In summary, the research reviewed above shows that in a mixed-age setting:

- Children assign different expectations to different aged peers;
- Younger children have a model to observe and imitate while older children instruct and lead;
- Play, particularly dramatic, is more complex for young children; and
• Children seem to be more readily able to find a peer at their own developmental level.

It may be for all these reasons that social responsibility has been found to be greater in mixed-age settings with more prevalent turn-taking, sharing and co-operation noted.

While still an under-researched area, it would seem that mixed-age settings support children’s learning with some notable benefits and this may be why Bronfenbrenner (1986) has argued that age segregation has contributed to the loss of community in North America. The next part of this literature review shifts its focus from mixed-age settings to consider the nature of children’s interactions.
2.2 Observation and Imitation

Curiosity about others and their actions is natural. Wherever there is more than one person, humans observe each other; sometimes in avid engagement as they watch intently to gauge an understanding of what is occurring and at other times a brief glance may occur (Rogoff, Paradise, Mejia-Arauz, Correa-Chevaz, & Angelillo, 2003). Senses become heightened when in a situation of learning or an unfamiliar situation; humans look to see what others are doing, particularly when wanting to conform. Imitation, or modelling, can follow from observation as people learn from people and copy actions and/or words that they observe (Gauvain, 2001). Both observation and imitation involve learning (Gauvain, 2001; Meltzoff, 1988; Morrision & Kuhn, 1983; Rogoff et al., 2003). Particularly, imitation is of importance for young children as they need to act out new skills as part of the learning process (Schunk & Zimmerman, 1996) and it is through imitation that children increase their learning about how to live in their culture. Furthermore, imitation is used by toddlers “as a way to interact and develop social and communicative ties with one another” (Hanna & Meltzoff, 1993, p. 12). Therefore, observation and imitation of others is part of regular experience and would be expected to be seen in any study investigating interactions amongst children.

2.2.1 The beginnings of peer imitation

The age that imitation first appears has been much researched. Killen and Uzgiris (1981) found evidence of imitation in infants and toddlers. Their laboratory study
observed children in highchairs as an adult female sat opposite them modelling different uses of equipment. They noted that imitation increased with age and that while children as young as 7½ months were able to imitate simple acts, toddlers aged 22 months expanded upon simple imitation and were able to imitate the actions, substituting the equipment, thus reflecting symbolic play.

Rubenstein and Howes (1976) considered the effects of peers on toddler interactions with mother and toys by observing toddler pairs, who were familiar with each other, at play, as well as observing the toddlers at play with their mother and no peer present. They found that “peers more frequently than mothers serve as models for imitation when both are present” (p. 602).

### 2.2.2 Delayed imitation

Imitation does not always need to be immediate and can occur sometime after the original event, as research has demonstrated (Abramovitch & Grusec, 1978; Brody & Stoneman, 2001; Gauvain, 2001; Hanna & Meltzoff, 1993; Meltzoff, 1988). Meltzoff (1988) has argued that it is through deferred imitation that cognition can be observed, as the act needs to be remembered, stored in memory and recalled at a later time. Meltzoff (1988) made this argument after noting that children as young as 14 months showed evidence of deferred imitation. His study, using an unfamiliar adult model to display actions with objects, did not allow children access to the objects so they could not have the opportunity for immediate imitation; rather the children returned a week later and were allowed access to the same objects
finding that indeed deferred imitation can occur with children of such a young age and that “infants and their knowledge about objects can expand as a result of seeing the actions of others” (p. 470).

2.2.3 Imitation increasing complexity of work

Morrison and Kuhn (1983) observed groups of children, aged 4-6 years, building with plastic blocks over several weeks noting increased levels of complex building as children observed each other. They found that during these block building sessions, children regularly watched other children’s manipulation of the blocks finding that those that increased the complexity of their work had spent significant time observing others relative to those children who made little progress. They found that “imitation is a prevalent mechanism for enhancing one’s own performance in a cognitively demanding activity in a natural setting” (p. 1061).

2.2.4 The impact of age on imitation

When examining the impact of age in relation to imitation, Brody and Stoneman (1981) found that age does make a difference. Their studies considered school-age children’s imitation of same-age, younger and older peers and found that when children are exposed to other children who were either same-age or younger, the same-age model would be imitated. Furthermore, when exposed to older and younger children, the older child was imitated leading the researchers to the conclusion that “imitation of peers is a selective process that is influenced by the
relative age of the model to the observer” (p. 720) with older age being the preferred model.

The process of children being selective in whom and what they model has been a frequent theme in the topic of imitation. Investigating immediate imitation in a naturally occurring setting rather than a laboratory, Abramovitch and Grusec (1978) found that dominant children were imitated more suggesting that these children “might be seen as reliable sources of information” (p. 60) within the group. In a later study, Brody and Stoneman (2001) also found that imitation seemed to be based upon the model’s perceived competence. Testing two hypotheses regarding competence, this controlled study involved providing information to children on the competence of possible models, and then observing them as they completed set tasks as part of a group exercise. If a model was deemed competent, it was more likely that they would be imitated. When competence of the model was not known, age took priority of imitation, with older, or same-age, models being imitated rather than younger models.

Abramovitch and Grusec (1978) further found that imitation decreased with increasing age in children aged between four and eleven years of age. In her book on the social context of cognitive development, Gauvain (2001) suggested that the decrease in imitation as children age occurs because older children are learning more complex tasks that involve more internal thought and negotiation, and a
reliance on verbal explanation as well as a demonstration thereby changing the nature of imitation more to that of guided participation.

2.2.5 The impact of being imitated

The impact of imitation on the model has also been the subject of research. Eckerman and Stein (1990) found that when 24 month old toddlers were imitated by an adult, the toddlers were more likely to sustain their actions that were causing the imitative play, start imitation games, and were also more likely to look at the other person.

This section has detailed research relating to observation and imitation as elements of the behaviours that may be observed when children of mixed-ages are together. It has noted that observation, and subsequently imitation, can begin very early on in an infant’s life and that imitation of observed behaviour does not always need to be immediate but can be delayed and repeated at a later stage. It has also noted the importance of peers in relation to imitation with peers more likely to be imitated at play than adults when both peers and adults are present. Furthermore, imitation of play with other children can also assist the complexity of play. When provided with choice, children demonstrate preference for imitating an older model or one that is perceived to be more experienced rather than same age, younger or less-experienced model. Being imitated also has positive repercussions that include sustaining the level of play for a longer period of time.
Therefore, due to the reported impact of observing and imitating peers, it is necessary that when investigating the social interactions that occur in a mixed-age setting, observation and imitation of others is one feature that needs to be considered.

### 2.3 Interactions

Children interact with each other when they are together, with play being a common form of interaction. Playing together is a social function and is likely to occur wherever groups of children unite, such as in an early childhood setting (Frost, Wortham, & Reifel, 2001). Playing together can result from a child either initiating play with another, entering an existing group, or by being invited to play by another child who is initiating play (Frost et al., 2001; Haworth et al., 2004; Lauter-Klatell, 1986).

Lauter-Klatell (1986) wrote that toddler peer interactions differ, compared to interactions with adults or siblings as children are learning and developing skills of initiating and maintaining play. Given their developing language, interactions rely on “actions, gestures, looks and affect” (p. 22). Reviewing literature relating to toddler peer interactions, Lokken (2000a) also noted that toddlers’ social style with peers includes a vast array of actions as a form of communication as they interact together. Lokken stated that toddlers are more “walkers than talkers” (p. 535). Haworth, Mepham, Woodhead, Simmons, Schimanski and McGarva (2004) also found that young children are likely to rely on non-verbal interactions to enter into
and maintain play. Their action research, conducted as part of being a Centre for Innovation, noted a number of non-verbal strategies that children used as interactions.

In Parten’s (1932) classic study, stages were identified in social participation amongst pre-school children and their play categorised into six groups: unoccupied, solitary play, onlooker, parallel activity, associative play and organized supplementary play. The first three are representative of individual types of play with unoccupied behaviour characteristic of a child not involved with any aspect of play but generally watching anything nearby of interest; onlooker behaviour is where a child watches others at play having placed themselves so that they are able to see and hear what takes place; and solitary play is a child playing alone. Moving towards group play is parallel play where a child plays beside other children in a similar fashion to their play. Clear group play can be seen with associative play and organised supplementary play where children are involved in play together, with organized supplementary play being a highly organized form of play where there is a clear leader/s. Younger children tend more towards individual play and, with age, shift towards highly organized group play.

Corsaro (2005) discussed strategies that children use when attempting to initiate play with another. He discussed nonverbal entry, where a child places herself in the area of play; encirclement, where a child wanders around the outer edges of the play; and affiliation where a child affiliates to the person or group which they are
trying to enter such as ‘we’re friends right’. These strategies develop over time and practice of them occurs as children who are engaged in play regularly want to protect their play from others (Corsaro, 2003, 2005; Corsaro & Eder, 1990).

Given the focus of this research, it is very relevant to be considering interactions and how these develop within an early childhood setting.

2.3.1 Early Peer Interaction

Is it possible for infants to have experiences of peer interaction? This has not always been thought of as being the case and if this question were asked fifty years ago, the answer may well have been no. With the progression of research into early peer interaction, it has been established that young infants are capable of peer interaction (Hagens, 1997; Vandell, Wilson, & Buchanan, 1980). This is an important aspect to consider, particularly when investigating the nature of social interaction in a mixed-age setting where it is possible for infants to be present from a very young age.

When researching infants’ peer interactions, Vandell, Wilson and Buchanan (1980) found that children as young as six months are capable of interacting together and that the instances of interaction increase both in quantity and length in the absence of object (toys), although the use of objects during interaction was found to increase towards the end of the first year of life. The laboratory study observed 32 infants
when the children were six, nine and twelve months of age noting their behaviour in dyads, with exchanges being brief and included “vocalizations, smiles and touches” (p. 481). Also noting the impact of objects in social interactions was Mueller and Brenner (1977) whose seven-month study of a toddlers daily morning playgroup confirmed the increased use of objects in social initiation. Not only did Mueller and Brenner (1977) find that the interactions increased but that parallel play through the use of these objects, facilitated peer social interactions and that “social interaction was seen as a source of growing social skill and not only its product” (p. 854). A further key finding of this study was that sustained interactions were more frequent amongst acquainted toddlers than non-acquainted toddlers.

The nature of toddlers’ interactions was a focus for Honig and Thompson (1993) who examined the social bids of 24 toddlers ranging in age from 22 to 33 months of age. When attempting to interact with another, the toddlers showed preference for interaction with a single peer over a group and concentrated on using one strategy rather than a collection of strategies. Over half the bids for social engagement made by toddlers were rejected by the other child. When initiating contact with another, the toddlers showed preference for using one strategy rather than a collection from a range of strategies noted by the researchers. Verbal initiation was the most favoured initiation attempt used by the toddlers in the study. Proximal contact, being near to or touching a peer, was the second favoured contact with the least favoured and most rejected approach being distal contact, watching a peer
from a distance. The study also indicated that while toddlers were learning effective strategies for engagement, they had not yet learnt how to maintain the play which often ended after a successful initiation.

Furman and Walden (1990) noted that one aspect of sustained and successful interactions is the understanding of script knowledge (Nelson, 1986). Their study examined dyadic interactions of same-age and same-sex children aged three years, four years and five years. They noted that knowledge of events for the younger group of children helped facilitate turn-taking which in turn led to sustained interactions; and that older children’s interactions were sustained as there were few communication failures due to script knowledge.

Undertaking a review of literature relating to peer relationships, Hazen and Brownell (1999) found that the ability to regulate emotions impacts on relationships noting that “children who display negative emotions have been found to be less accepted by their peers” (p. 236) and that children who are able to read emotional cues are more likely to experience success in peer relations. Familiarity also impacted on interactions, particularly for young children. Toddlers are more likely to sustain an interaction with a peer that they are acquainted with (Mueller & Brenner, 1977)

Finally, it’s also important to note Mueller and Brenner (1977) conclusion that: “participation in peer interaction is … the direct source of skill resulting in more
frequent use of coordinated peer-directed behaviour” (p. 860). Given the essential nature of peer interactions, it is vital that participation, and the nature of interactions, are considered within this study.

2.3.2 Conflict

When children interact together, both positive and less positive outcomes can ensue. There has been much written regarding conflict in early childhood with conflict seen as arising from a range of situations such as attempts to gain access to groups or to resources (Corsaro, 1985, 1997b, 2003; Green & Rechis, 2006; Hazen & Brownell, 1999; Sanchez-Medina & Martinez-Lozano, 2001). While some view conflict with a negative focus, others see that it can have a positive development on social competencies as it is through conflict that young children develop conflict resolution skills (Corsaro, 2005; Green & Rechis, 2006; Hazen & Brownell, 1999).

Not only does conflict aid the development of social competencies, it has also been noted to assist in cognitive development. Corsaro (1985; Corsaro, 1997b, 2003, 2005) has conducted in-depth research into peer culture and has found that conflict is embedded as part of children’s culture as is the attitude towards conflict by the adults observing. He noted that conflict “often serves to strengthen interpersonal alliances and to organize social groups” (Corsaro, 2005, p. 162).
2.3.3 Impact on Interactions

Given the focus of this study on the nature of interactions, it is worth taking a brief look at some factors that may impact on the nature of interactions within any setting.

2.3.3.1 Context

Whatever the environment, the context of that environment will have some impact on the nature of the interactions that occur (Katz & McClellan, 1997). Impacts of beliefs, values, philosophy, teacher practice and community issues will all contribute to the environment and no one context can be generalized from one setting to another.

2.3.3.2 Culture

Cultural components also impact on interactions. Different understandings amongst different cultures bring different meanings and ways of interacting (Corsaro, 2003; Rogoff, 1990) and these will impact upon an individual’s development.

Sanchez-Medina and Martinez-Lozano (2001) studied cultural differences that existed between two different pre-school environments – Andalusia and Holland. They found that interactions, even among young infants, have “a marked cultural component” (Sanchez-Medina & Martinez-Lozano, 2001, p. 159) which is reflective of the wider adult environment surrounding the children.
2.3.3.3 Social Status

How children perceive each other is a factor that may impact upon the likelihood of an initiation bid being accepted, or on the success of an interaction. Research has shown that children’s social status impacts on the success of their interactions (Hazen & Black, 1989; Katz & McClellan, 1997; Lawhon & Lawhon, 2000; Putallaz & Gottman, 1981).

Putallaz and Gottman (1981) found that when comparing dyadic interactions of popular and unpopular children, popular children are more likely to be accepted into group play than unpopular children. They found that unpopular children were more likely to be disagreeable rather than lack entry skills. Similarly, Hazen and Brown (1989) found that ‘liked’ children were more able to initiate and maintain social exchanges via discourse when compared to their peers who were not judged with the same social status. This in turn impacts on the nature and quality of children’s interactions with each other.

Katz and McClellan (1997) noted that “social knowledge, social understandings, and interactive skills” (p. 85) are significant factors in the success of social relationships with peers.

The studies reviewed in this section indicate that interactions are impacted by a number of dynamics and these in turn impact on children’s development. It is
through interactions with others that children increase their understandings of how to operate in the world around them. Overall, section 2.3, has included relevant literature demonstrating the importance of interactions for learning but has also considered the age that interactions develop and some of the factors that impact on interactions. This breadth of research will be drawn upon when considering the nature of interactions in mixed-age settings.

2.4 Friendships

Friendship is important because it contributes to the health and well-being of children (Dunn, 2004) and because of its impact on social development. Townsend (1992) has noted that “the social development that occurs within friendships forms the basis of success in adult relationships, in marriage, and in employment” (p. 7).

For young children, friendship involves two children who seek each other out and engage together with the term friendship defined as “a dyadic relationship requiring mutual selection between two specific children (Vandell & Hambree, 1994 as cited in Katz & McClellan, 1997). It is this reciprocity that defines friendship as different from interaction (Dunn, 2004; Ladd, 2005; Salkind, 2002). Hartup (1998) also argues that friendships differ from interactions as friendships involve a different kind of social interaction than occurs between non-friends, partly as friendship tends to be “more intimate, caring and supportive” (p. 164). Further support is added by Furman and Bierman (1983) who add that these characteristics develop with age.
While traditionally friendship was not believed to be possible until children were at least three, as group care for young children has become a more prevalent phenomenon, research in these contexts has challenged these beliefs and has found this to be otherwise (Howes, 1983; Ladd, 2005). Growing understanding of observations and children’s development has shown that in fact friendships occur in children eighteen months and younger (Dunn, 2004; Howes, 1983).

Reviewing research for an investigation of early friendships, Howes (1983) that early friendships existed between infants when she defined friendship in terms of affective behaviours. Her study revealed that infants engaged with each other primarily through object exchange; toddlers engaged more through verbal language while continuing with object exchange; and preschool children engaged through verbal exchange. This is not only indicative of early friendships but shows the change in relationship with more developed verbal communication.

For young children, friendship seems to be based around shared interests and activities (Baron & Byrne, 2003; Dunn, 2004; Hartup, 1998; Lawhon & Lawhon, 2000; Newcomb & Bagwell, 1995; Salkind, 2002), and, as children age, the characteristics of friendship develop to include other factors such as intimacy, trust and support (Baron & Byrne, 2003; Dunn, 2004; Franzoi, 2000; Salkind, 2002).
2.4.1 Emotional Regulation

Also developing with age is emotional regulation which is a key component in friendship (Hazen & Brownell, 1999; Sebanc, Kearns, Hernandez, & Galvin, 2007). Walden, Lemerise and Smith (1999, p. 368) found that while behaviour regulation was more important to popularity with peers, it was emotional regulation that was a key component in friendship relationships. Their study investigated how 59 children in a childcare centre, who were aged three to five years, demonstrated and reacted to the emotional cues of others. It appeared that friends are able to overlook behavioural issues; however friends are not able to overlook the lack of control of emotions.

2.4.2 Conflict

Not only is emotional regulation important in friendships but so too is conflict, as was discussed in section 2.3.2 of this Literature Review. In relation to friendships, it would appear that friends are more concerned about resolving conflict differences than non-friends, and friendships provide children with the opportunity to engage in and resolve conflict on a deeper and more meaningful level than may occur during interactions with non-peers (Dunn, 2004; Newcomb & Bagwell, 1995). In fact, children who do not have friendships may also “develop problems learning conflict management skills” (Johnson & Foster, 2005, p. 155) as they do not have as much opportunity to develop conflict resolution skills.
2.4.3 Social Responsiveness

Further supporting the difference between peer interactions and interactions with friends is a study that considered mutuality in boys’ friendship. Newcomb and Brady (1982) investigated how primary school age children co-operated and found that children’s responses were different with friends than with acquaintances. Friends “were more socially responsive” (p. 394) including through exchanging information; turning towards the speaker; listening; complying with each other’s directions; working more in conjunction with each other; and being more likely to share credit for their joint work than they were when they engaged with acquaintances. Friends were also found to look at each other more regularly, smile, and engage in humour than did non-friends. Howes (1983) also found that friendship supported the learning of “complex social interaction skills” (p. 1051)

2.4.4 Ease of Transitions

Friendship has also been noted to ease transitions (Edwards, 1986; Peters, 2003). In a New Zealand study, Peters (2003) considered the impact that friends had on children’s experiences as they went to school finding that friendships helped children to settle, particularly during the lunch-hour period. A number of recommendations were made as to how to facilitate friendships for children who did not have a friend at the school, including schools encouraging mixed-age friendships as this could promote “modelling and protection” (p. 52).
2.5 Togetherness

What is togetherness? Research literature using this notion is still limited with writers typically developing their own definition. The dictionary defines togetherness as “a feeling of closeness and friendship” (Cullen, Higgleton, & Collins, 2002). Togetherness considers aspects of a group and its membership, with Van Oers and Hannikainen (2001) suggesting that it is a feature of groups where people come together, or are together, for a common purpose rather than a random group of people thereby reinforcing the idea of closeness for a purpose. Van Oers and Hannikainen (2001) suggest that togetherness has always been implied in socio-cultural theory rather than being specifically discussed (Vygotsky, 1978) and in recent years this aspect has started to be explored although not always under the name of togetherness (Avgitidou, 2001; Corsaro, 1985; Hannikainen, 1998, 2001; Howes, 1983; Rayna, 2001; Van Oers, 2003; Van Oers & Hannikainen, 2001).

2.5.1 Characteristics of Togetherness

Togetherness is demonstrated in different ways with care being one of its characteristic features (Hannikainen & Van Oers, 1999; Van Oers & Hannikainen, 2001). It is through the consideration of others in the form of offering help, compassion and comfort (de Haan & Singer, 2001, p. 122) that young children “express their relationship of togetherness with other children” (de Haan & Singer,
Hatch (1986) specifically stated that smiles and eye contact are contributors to togetherness. Every day games, humour and playful actions are other ways that develop and express feelings of togetherness (Hannikainen, 2001). Co-creation is another way togetherness can be seen as children work together (Rayna, 2001). Children’s language can express togetherness as they verbally share the sameness of their activities and express their common ground (de Haan & Singer, 2001).

Van Oers (2003) suggested that togetherness is essential for a learning community and that it is maintained through the members of the group. This suggests that within any learning community, it is important that the features of togetherness are considered.

2.6 Conclusion

There are many factors that impact on children’s development. The way in which children interact together is just one of these factors. With a focus on development during early childhood, this literature review has considered some aspects of interaction including observation and imitation; play initiation, conflict; friendship and togetherness. In addition, this review has considered literature relating to mixed-age settings and possible implications that this may have for children’s development. It is evident from these studies that mixed-age settings differ from same-age settings; particularly in relation to interactions with peers.
As was noted, many studies considering the impact of mixed-age interactions have been conducted in laboratories or non-naturalistic environments. I wanted to investigate the real-life world of children’s experiences in mixed-age settings. An observational study of children interacting in their natural mixed-age setting seemed an appropriate way to do this and the next chapter describes the methodology for this study.
3.0 Methodology

3.1 Introduction

“To understand childhood socialization, then, it is necessary to observe children’s everyday activities as they are embedded in their life worlds” (Corsaro, 1985, p. 288).

The aim of this study was to explore how young children interacted together in a mixed age setting. One research question guided the study as follows:

What is the nature of children’s social interactions in a mixed age setting?

In order to investigate this question, a qualitative observational study was undertaken within a sociocultural theoretical framework.

This was an explorative study. There was no hypothesis to be tested; rather an exploration of experiences was required to answer the research question. Qualitative research permits a holistic approach that recognises the importance of context upon the social interactions and allows patterns to be exposed from which theory might be developed (Denscombe, 1998; Mertler, 2006; Mutch, 2005; Neuman, 1997).
It was important that the data reflected naturally occurring phenomena within a New Zealand environment. As noted in Chapter Two, most studies considering interactions between children of mixed-ages have been conducted in an artificial environment rather than a naturally occurring setting. A qualitative approach involves “documenting real events” (Neuman, 1997, p. 328). By adopting this approach, this study captured data in a natural setting rather than needing to manipulate the environment or bring groups of children of mixed ages together, as has occurred in these other studies (e.g Howes & Farver, 1987).

3.2 Methodological Approach

3.2.1 Overall framework

This was a case study of mixed-age interaction in one Playcentre with a focus on three children of different ages. The dominant data gathering method was narrative observation.

An observational case study approach was used as it accommodated naturally occurring phenomenon (Mertler, 2006). Merriam (2001, p.19) states “… case study design is employed to gain an in-depth understanding of the situation and meaning for those involved. The interest is in process rather than outcomes, in context rather than a specific variable, in discovery rather than confirmation”. Using an observational case study approach allowed me to investigate what was occurring and to explore social phenomena in context, rather than test hypotheses. This
approach enabled the study of children’s interactions in the context of their life world (the Playcentre) while enabling the recording of rich descriptive context of the interactions.

Narrative observation enabled me to tell the children’s story of their interactions within the life world in the Playcentre during the time I was present. Podmore (2006) writes that “sociocultural observations characteristically emphasise researching and understanding children within their sociocultural contexts” (p. 30). This form of observation allowed me to focus on the interactions and the context combined (rather than look or probe for specific instances) which Fleer and Richardson (2004) argue is important if we are to understand development.

As will be detailed below, three children were selected and each of these children was the focus of three separate observational studies within the one centre.

3.2.2 Theoretical Framework

As already mentioned, this study used a sociocultural lens which recognises the importance that social interactions and context have on a child’s development (Berk, 1994; Bodrova & Leong, 2007; Podmore, 2006; Rogoff, 1990; Smith, 1998). It acknowledges that learning occurs when the active learner engages with the environment as well as co-constructs ideas with others (Berk, 1994; Bodrova & Leong, 2007). Valuable learning occurs from working alongside a peer. Children are able to “perform more skilfully together with others than they could alone” (Smith, 1998, p. 3). The three concepts of the zone of proximal development
Younger and Older Together

Children’s interactions in a mixed-age early childhood centre

(Vygotsky, 1978); scaffolding (Bruner, 1985); and guided participation (Rogoff, 1990) all acknowledge the impact that others have on an individual’s learning. As Vygotsky (1978) has argued “Every function in the child’s cultural development appears twice: first on the social level, and later, on the individual level; first, between people (interpsychological), and then inside the child (intrapsychological)” (p. 57). Vygotsky viewed teaching and learning as interactive, a similar concept to the Māori concept of ako which means to teach and to learn. Furthermore, within a sociocultural approach, play, particularly imaginative play, is deemed a valuable experience, described by Vygotsky (1978) as the leading activity for development during early childhood. It is through play that children are able to explore concepts and objects as they come to understand the culture and the world around them (Smith, 1998). It is this cultural context that is an essential part to the sociocultural theory as it highlights that children take on the thinking from the environment around them. This not only includes language but the values, beliefs and artefacts of those around them (Rogoff, 1990; Smith, 1998). This holistic view of interactions, culture and context to learning, development and understanding seemed most suited to the framework of this study.

3.2.3 Research Context: Playcentre as the children’s life world

The research question focuses on the nature of children’s interactions in a mixed-age setting. For this reason this study was conducted in one licensed and chartered
Children’s interactions in a mixed-age early childhood centre

Established in 1941, Playcentre is a parent co-operative which is unique to New Zealand (Stover, 1998; Woodhams & Woodhams, 2008). A key component of its philosophy is that mixed-age settings are beneficial for children’s learning (New Zealand Playcentre Federation, 2008; Stover, 1998; Wellington Playcentre Association Inc., 2001). Playcentres around New Zealand offer sessional-based education that caters for children up until six years of age, with each session operating for a set number of hours – generally 2.5 hours (New Zealand Playcentre Federation, 2008; Stover, 1998; Wellington Playcentre Association Inc., 2001). Each Playcentre belongs to an Association with each Association affiliated to the New Zealand Playcentre Federation (Woodhams & Woodhams, 2008). Each Association works within their community, therefore the daily operations of one Centre in one Association may not be the same as another Centre in another Association, however the philosophy will be the same (Mitchell, Royal-Tangaere, Mara, & Wylie, 2006).

The parent cooperative nature of Playcentre differs throughout Aotearoa/New Zealand and this is because each Association governs how the centres within their area operate due to Community needs (Woodhams & Woodhams, 2008). Generally, depending on the Association, each parent/caregiver will undertake one sessional duty per week where the parent stays, along with their children, and helps
run the session under the guidance of an experienced Team Leader (Mitchell et al., 2006). After this one session, dependent on their child’s age, parents are not required to ‘do a duty’ but can drop off their child for the session. Because of this, the adult team members on duty vary on each session and so do the children attending. In most Associations, parents or a caregiver must remain with children until two and a half years of age (Mitchell et al., 2006; Wellington Playcentre Association Inc., 2001). Therefore, children under this age will generally only be on a session with their parent or caregiver present. Children over two and a half will have one session where their parent or caregiver is on a session duty and then, depending upon the Association, the child may have up to four sessions a week where the parent does not remain.

3.2.4 Site of Study

At the time of selection, the study Playcentre had a large roll of over 50 families and offered seven sessions per week: four mixed-age sessions, one starter session for first-time parents/caregivers and their infants; and one session for children over 3.5 years of age. The internal design of the centre also permitted me some cover as I observed so that I was not in direct view of the children but still close enough to capture language, interaction and activities. It had the added benefit of being within 20 kilometres of my home making travel for fieldwork somewhat easier. During the time the research was carried out, most sessions had an average of 14 children in attendance. This was due in part to winter illnesses, and a decline in the Centre’s roll from the time of selection to the commencement of data collection.
Therefore, there was a decrease from the expected numbers of 21 children on session.

The centre is located in an urban suburb in a North Island City. It is situated next to an Intermediate School that caters for children aged between 11 and 12 years of age. The Centre is housed in a renovated house with large open spaces for play, a separate library with comfortable couches, a sleeping room for children, a separate kitchen and a large covered deck which houses water play, paint and carpentry. The centre also has the luxury of a separate meeting room for adults. The grounds are landscaped around a declining bank giving small flat areas and a sandpit built over two levels. Due to the slippery nature of the bank during winter, outdoor play is offered only after morning tea when the sun has dried the dampness.

### 3.2.5 Centre Session Structure

The Centre sessions operated for a period of two and a half hours. Parents and caregivers, who made up the duty team for each session, arrived at least 15 minutes prior to the start time to set up the centre. Such preparations included making playdough, setting out paints and organising areas of play. As the children arrived at the Centre, this duty team welcomed them and settled the children. During this arrival time, parents and caregivers who dropped off their child/ren regularly chatted with each other before leaving. The beginning of the session can have ‘heavy’ adult presence because of this; this whānau type interaction is characteristic of the Playcentre setting and philosophy.
During the session, all children had freedom to choose from a range of play areas and could move about these at their own discretion, remaining for as long or as little time as they chose. The only exception to this was morning tea time.

Morning tea, a centre routine, was called around 10:00am during each morning session. Children brought their own lunchboxes from home and it was expected that all children moved to a table that was set up just for morning tea. The morning tea was presided over by an adult who read a selection of stories or organised group singing while the other adults took a less active role and used this time for a cup of coffee.

### 3.2.6 The Children

In order to investigate interactions among children of mixed age, three children were selected from the age-ranges present in the centre. The selection of the children was done by the centre president who also compiled the term supervision plan. I provided the following age criteria for the selection, adding no other qualifiers:

- 0-24 months of age
- 2-3.5 years of age
- 3.5 –5 years of age
The centre president selected a girl of 18 months, a boy of 3 years and 3 months and a girl of 4 years 8 months on the basis that these children were from families who were established within the playcentre and who would be remaining at the centre throughout the duration of the observation. The Centre President saw this as being important given recent changes within the centre. The next three subsections introduce each of the focus children.

### 3.2.6.1 Natalie – 18 months

Natalie was eighteen months old and lived with her parents and her two older sisters aged 9 and 7 years; a new baby was expected in six months time. Natalie attended Playcentre once a week with her mother.

Natalie appeared relaxed in the centre and explored all areas of play that were offered. She displayed qualities that suggested she had a reserved nature and she was often hesitant with large groups or in noisy areas. During the busy session times, she often looked to her mother for reassurance. Approaches by others, either children or adults, who were not well known to Natalie, often led Natalie to look for her mother – sometimes moving at quite a speed. Like most children of this age, Natalie was a careful observer, watching those around her as they engaged in play.
3.2.6.2 Stephen – 3 years, 3 months

Aged 3 years and 3 months, Stephen was one of three children in his family; he had two older siblings at school and lived at home with both parents. He attended the Playcentre three times a week; one session with his mother and two without. Stephen had a slight speech impediment that made some words slightly hard to understand and if his Mother was on session and nearby, she would assist others to understand.

Stephen appeared comfortable with the environment, particularly enjoying block building and making garages for the cars he brought from home. On the surface, Stephen had a quiet nature but once he was familiar with others, his humour and sense of fun started to bubble over and become evident. He had a strong understanding of the rules, and of fairness. At times he stepped in to solve issues and at other times, he stood back to observe how others intervened and provided solutions. He was a quiet reflector; often standing back to observe his work; or to watch how things worked.

3.2.6.3 Bronte – 4 year, 7 months

Living in a two parent household, Bronte had an older school age sibling and a younger, 7mth old, sibling. She attended Playcentre 4 times a week; one session with her Mother and younger brother and three sessions by herself. In less than five months time, 4 years- 7 month old Bronte would be leaving Playcentre to start school; something which she was looking forward to.
Bronte was comfortable in the centre environment and explored all areas of play on offer as well as accessing equipment that she wanted. She often enlisted the help of others to achieve this and readily called on those nearby to help. Her commanding requests generally saw her assisted. Bronte was determined. It would seem that once she had something in mind, she would work her best at ensuring that it happened. Bronte had a ‘best friend’ and the two often played with each other on session. Bronte also engaged with other children, particularly those around the same age as her.

3.3 Data Collection Methods

As researcher, I was the sole data collector and transcriber which enabled me to be fully immersed in the data. Narrative observations were collected for each child over three sessions per child. An initial plan to hold a focus group meeting for centre parents was unable to proceed due to circumstances within the centre. As an alternative, I organised a discussion group with the Association to discuss my initial findings and to add a parental perspective to the data, even if this was from outside the study centre.
3.3.1 Observation

Data collection involved observations recorded using pen and paper. Observations took a narrative form as this allowed me to capture social and cultural nuances. Podmore (2006) states that narratives “tend to emphasise the importance of infants’ and young children’s understanding, and their relationships with people, places, and activities” (p. 64). In order to examine the research question, it was the social interactions and the context in which they occurred that needed to be focused upon; therefore narrative observations were most suited.

Observations commenced approximately ten minutes after the start of each session. This was due to the nature of Playcentre sessions. This short delay in starting observations allowed time for parents who were not staying on session to settle their children and/or have a quick catch up with other parents before leaving. This activity can disrupt the interactions between children as some children remain by their parent/caregiver until they have left. As a result of this, data collection commenced after most of the adults who were not ‘on session’ had left; ‘on session’ is a Playcentre phrase for being on duty or present during a given session.

I wanted to record naturally-occurring phenomenon so it was important that I minimised the impact of my presence at the Centre. As it was impossible to be a “complete observer” (Merriam, 2001) a “researcher participant” stance was selected which recognised that my researcher’s presence would have had some impact upon the centre environment. Gans (1982) has described this as one “who participates in
a social situation but is personally only partially involved, so that he(sic) can function as a researcher” (p.54). For this reason, eye contact was avoided with the children and interactions with them did not occur. There were two occasions where safety appeared to be an issue and safety concerns took priority over being a researcher so that I intervened to prevent possible injury.

Age is a key component of this study relating to mixed-age interaction. Therefore, not only was it important to know the ages of the focus children but also the age of the other child or children involved in each observed social interaction. The centre was most accommodating by ensuring that all children on session had name-tags for identification as well as providing access to a list detailing the name and the age of each child on session. This ensured that all observations recorded the name of the child with whom the interactions occurred along with the age of the child.

Once each observation had commenced, the focus child was followed throughout the session. I used a primitive form of shorthand to write down the child’s activities with a particular focus on interactions with others and the context in which these interactions occurred. These notes were then transcribed as soon as possible after the observation and within 12 hours of the initial observation. Where possible, I remained distant from the activity but close enough to record the language that occurred so that my impact upon the interaction was minimised in order to capture as much naturally occurring data as possible.
Observation was complemented with a researcher’s journal that reflected initial thoughts about data captured. Regular entries were made in this journal including initial impressions and hunches directly after each observation was completed. Entries were also made as data analysis progressed.

### 3.3.2 Group Discussion

As noted earlier, I had planned to have a group discussion with centre members to discuss preliminary findings and gain another perspective on the children’s life world of this mixed-age setting from adults who participated with the children as both parents and educators. However, unexpected events within the centre led to a request from the Playcentre to not proceed with the planned group discussion. This has both limited the data I was able to utilise as well as impacted on my data validation. As a substitute, I held informal discussions with members of the centre during my last few observations. These discussions enabled me to check out my interpretations of the behaviours I had observed and provided a measure of the data validation that I had hoped to gain from the group discussion.

Initial findings were also presented at a Playcentre Association Meeting and this opportunity provided valuable feedback on my initial findings.


3.4 Fieldwork

Prior to the commencement of data collection, I spent time at the centre during two sessions with my notebook and pen. This was to help my familiarity with the centre and the centre with me. I attempted to remain as unobtrusive as possible so that I could capture what was occurring naturally rather than change the environment. I believe that I had some success with this as I had several comments back to me from adult team members stating that they had not realised I was there.

Data collection was carried out over a six week period between July and September; it started with the youngest child on 31 July 2006 and finished with the youngest child on 11 September 2006. Data collection for the focus children was affected by winter illnesses, and the absences that resulted, as well as one focus child and their family taking time away from the centre on holiday. The makeup of children attending sessions was also affected by winter illnesses as well as an outbreak of chicken pox that had infected children at the centre.

The youngest child was an 18-month old girl, Natalie, who, being under 2.5 years of age, attended only one session per week with her mother. The observations collected for this child were undertaken on 31 July 2006, 21 August 2006 and 11 September 2006, approximately three weeks apart.

The boy, Stephen, aged 3 years 3 months, attended three sessions per week, one with his mother, two without. The observations collected for this child were
collected over a three week period and were undertaken on 3 August 2006, 17 August 2006 and 22 August 2006. During these observations, Stephen’s Mother was present for one session and not for the remaining two.

The oldest child was another girl, Bronte, aged 4 years 8 months. Bronte attended four sessions per week, one with her mother and three without. One of these sessions was restricted to children who were over three and a half years of age and thus Bronte could not be observed on this session as it did not meet the criteria for this study. The observations collected for this child were undertaken a week apart on 28 July 2006, 04 August 2006 and 11 August 2006 and her Mother was not present during any of these sessions.

### 3.5 Data Validity

Triangulation is important in any study as it supports the trustworthiness of the research. As the Focus Group discussion did not proceed as planned, the researcher’s journal became particularly useful when re-reading the data. The informal discussions with centre parents towards the end of the data gathering were likewise invaluable for feedback to my on-going analysis. The presentation I gave to the Playcentre Association (mentioned above) also proved useful as feedback on my initial findings.

In addition, personal circumstances required that I postpone my study during the analysis. This break meant that when returning to study, data were re-analysed.
All original analyses and categories were put to one side and not considered until after re-analysis had taken place. The same categories emerged from the data and were more complete as there was a more complete analysis cycle undertaken the second time around. This unexpected postponement and the re-analysis of data was a further check for rigour.

3.6 Ethical Considerations

“Qualitative researchers are guests in the private spaces of the world” (Stake, 1994, p. 244).

Ethics were important throughout my study, not only from the perspective of being a researcher but also as someone who belongs to the Playcentre Community.

Ethical approval for this research was granted by the Victoria University of Wellington Human Ethics Committee. Additionally, the relevant Playcentre Association was approached and my research was discussed with them both verbally and via email before any formal approach was made to the study Playcentre. A letter was sent to this Playcentre Association asking for consent to undertake the research in one of the Playcentres connected to the Association (Appendix A). The relevant Playcentre Association gave their consent and I subsequently investigated suitable centres from ones within travelling distance of my home.
As my daughter and I were still attending Playcentre at the time the research, I immediately eliminated my own Playcentre to avoid conflicts of interest that could have impacted upon my study.

Upon selection of a centre that was suitable for my requirements of centre roll and layout, I entered further discussion with the Centre President. The Centre President discussed this at a Centre Business Meeting and the Centre agreed that I could conduct my research within their Centre. An information sheet was sent to all Centre Members and one remained posted on the news board at the centre for the duration of my research (Appendix B). Further consent was obtained from the parents/guardian of each of the three focus children (Appendix C). All families gave their permission to be involved in this research.

All participants have been given pseudonyms. However, the centre that the research was carried out at may be recognised in the description by those who are familiar with Playcentres in the North Island. I have attempted not to be too descriptive in places that are not relevant to this study in order to strengthen confidentiality.
3.7 Data Analysis

“[Data analysis] must begin early, in order to influence emerging research design and future data collection” (Wellington, 2000, p. 134).

Analysis began at the start of the data collection. It followed processes associated with grounded theory methodology (Denscombe, 1998; Merriam, 2001) where categories and patterns evolved from the data rather than having pre-established categories. As I was the sole observer and transcriber of notes for this study early data analysis was both essential and possible. All observations were typed up within 12 hours of the original pen and paper documentation occurring and this ensured that my memory was fresh and I was able to recall detail easily.

As noted by many researchers (Denscombe, 1998; Mertler, 2006; Pillow, 2002; Wellington, 2000), qualitative data analysis can be messy and overwhelming. For this researcher, it was no different. However, constant comparative data analysis and following Wellington’s (2000) stages of data analysis assisted me in working through this. Wellington (2000) recommends becoming totally immersed in the data, reflecting upon this, taking the data apart, coding, synthesising and positioning data within the categories.

Immersion and reflection were relatively easy for this project as I was the sole researcher and much time was spent reflecting on what I had seen. Deconstruction of the data occurred from the first observation. Categories emerged early and were
reorganised as each collection of data was added. This coding of data required reading and re-reading the data to ensure that no patterns were omitted and that any contrasts or irregularities were noted. This “continuous refinement” (Wellington, 2000, p. 136) of data assisted the synthesis where data were positioned with what was known from existing literature on this topic leading up to the final reflection.

A discussion of the data is presented in the next five chapters which take an in-depth look at the data. These data chapters follow two themes; the first theme of ‘being together’ discusses the observation, imitation, and social responsibility that occurred. The second theme ‘engaging with others’ considers how children interacted including initiation and protection of play. This leads to the final chapter that brings together insights from the five data chapters to a conclusion.
4.0 Being together: To watch is to learn

This chapter considers how children operated in the mixed-age setting of a Playcentre while not always directly engaging with each other. It presents observational data from the experiences of the three focus children that show each engaging in observation and imitation. I argue that in the study Playcentre these behaviours created a community marked by a sense of togetherness.

As noted in Chapter Two, togetherness is about community; a sense of belonging to and maintaining the group (Van Oers, 2003). Van Oers and Hannikainen (2001) state that people show “signs of an awareness that they belong together” (p. 103) in their context. These signs of togetherness were evident in this study as the children participated in centre life.

Children’s awareness of belonging together was demonstrated throughout this study, including when children were in the presence of peers even if direct contact did not always occur. The literature described in Chapter Two shows the impact that the presence of peers can have on learning. Observation and imitation were noted as two features of learning that one would expect to find in any early childhood setting and therefore this has been examined in the context of a mixed-age setting for this study.
4.1 Observing others

For children, as well as adults, watching others is an important part of daily life; in particular, it is through observation of others that one learns about the world. Gauvain (2001) has suggested that children as young as three and a half months of age are able to regulate their attention and it is around this time that infants spend increasing amounts of time socially observing. Smith (1998) states “learning through watching others is a tremendously powerful process” (p. 34). Through observation young infants gain knowledge and skills which help them to interact with the cultural context surrounding them. Bandura’s social-learning theory was based on observational learning – learning through watching others (Papalia, Olds, & Feldman, 2001). Sometimes this observation will lead to imitation (discussed in the next section of this chapter), and sometimes it does not.

For the three children of this study, observation of others was a notable feature, and particularly so for the youngest of the three children.

Natalie (18 mths) spent considerable time as an onlooker - watching others and observing different situations such as solitary play, conflicts and joint play. While Natalie did engage in solitary play as well as playing alongside others (see Chapter Six), observing others fascinated Natalie and seemed to be her main activity during sessions. When comparing the number of episodes that each focus child spent observing other children, it was Natalie who had the most data collected in terms of time spent engaged in observing others. Even when engaged in solitary play,
Natalie would be looking around her and watching other children. Observation of others has been noted to be a feature of the toddler with Lokken (2000b) stating that observation is a distinctive ‘social style’ of the toddler.

In the example below, Natalie could be seen observing Stephen (3yr, 3mth), following him as he moved around the Playcentre suggesting that in this instance it was Stephen that was of interest to her rather than the activity he had been involved in:

Natalie (18 mths) has been at a paint activity but leaves this when her mother moves to go to the kitchen. She starts to follow her mother but stops in the hallway. Natalie stands there in the hallway, holding a toy duck and playdough that she has brought with her from her previous activity. Natalie watches Stephen (3 yr 3 mth) who is pushing a pushchair into the library. Natalie follows Stephen into the library. Stephen reaches and gets a book from the bookshelf. Natalie keeps her eyes focused on Stephen’s movements while putting the duck in her mouth. Natalie’s Mum comes into the room and cleans Natalie’s hands which have paint on them (0101:107).

Clearly, Natalie’s interest is captured by Stephen and she follows, watching him as he gets a book; she only stops watching when her attention is claimed by her mother who cleans her hands.

In the next example, the focus of Natalie’s observation is a group of older children; in this case her attention is captured by the older children’s movement over the
climbing equipment, perhaps indicating also that it was as much the equipment, as the children that she found interesting.

Natalie has some playdough in her hand from the dough table she has just left. She throws the playdough on the ground. She moves, bends to pick it up and then sits down on a seat. She watches Amanda (3yr 0mth) jump up and down. Aaron (4yr 9mth) comes over and climbs on the nearby block structure. Natalie stands and moves closer to watch the children climb for about one minute; her eyes appear to be focused on the movement of the children as they climb up and over. She then turns and walks to the nearby fish tank where she looks at the fish (0201:25).

This next data excerpt demonstrates Natalie observing an older child during a ‘private’ moment:

Natalie walks towards voices coming from the bathroom and looks in from the doorway. She watches Cooper (4 yr 11 mth) sit and use the toilet. She stands watching for about 1 minute then she walks closer to look but remaining in the hallway. Cooper stands and flushes the toilet. Natalie looks at Cooper and then looks away as she walks off to the baking table (0101:255).

During this observation, Cooper made no response and did not look at Natalie. While it was not possible to be certain about Natalie’s exact focus as she watched the older boy “go to” the toilet, it was clear that Natalie found the activity of
interest as she stayed and watched and even took a step closer to the action for a better look.

In each of these examples, Natalie’s attention was captured by older children. On each occasion Natalie was not engaged in play but had left an area of play. It could be that she stopped to observe while she was in a state of transition between activities with no further course of play directly in mind. It could also be that she was interested in what these children were doing simply because they added another dimension to her knowledge of the world and so stopped to watch, occasionally moving closer to the child/ren for a better look. But it was certain that she found older children fascinating as it was only occasionally that Natalie (18 mths) observed children who were of a similar age to herself. In the following example, Natalie stopped to look at Eden (2yr), who was at the Playdough table with her father:

Natalie (18 mths) walks to the playdough table. Eden (2 yr 0 mth) and Eden’s father are sitting at the table ‘baking’ with the playdough. Eden is using a plastic knife to cut playdough. Natalie is holding a shark in her hands; she drops the shark and bends to look more closely at Eden. Natalie picks up the shark, stands and walks over a little closer. She sucks on the shark. She tilts her head to the side. Eden’s Dad says “Hello” to her. Natalie does not look at him but walks off (0301:23).

While Natalie stopped to observe, she ended this when she was acknowledged by Eden’s Father. This could have been because Eden’s Father was not a regular
participant in the Playcentre session and unknown to Natalie. However, it could also be that Natalie’s observations generally went unacknowledged by those she observed and having this freedom to observe allowed Natalie the luxury of watching without an expectation for her to engage perhaps almost giving her the feeling of invisibility to others during her observations. Natalie generally appeared to be a quiet, reserved child and being ‘invisible’ seemed to suit her and it may be that acknowledgement would have reduced her observations. It could have been that when she was spoken to by Eden’s Father, Natalie lost her sense of invisibility and this, alongside the expectation that she needed to respond, may have triggered her departure.

In this next example Natalie watches Matthew, another peer near her age, and it seems that on this occasion, it was the activity that was the focus of her attention:

Natalie has arrived at the playdough table and watches Matthew (2 yr 2 mth) and Amanda (3 yr 0 mth). Natalie’s mother is also at the playdough table. Natalie turns to get a play carrot from the play kitchen directly behind her. She starts to ‘eat’ the carrot and then puts it down. Natalie watches Matthew rolling the playdough. Natalie reaches and picks up a big pile of blue playdough from the table and then moves so she is positioned between her mother and Matthew. She is still looking at Matthew rolling the playdough, with her focus on the playdough being rolled. Natalie picks some playdough from her pile and puts it in her mouth. She turns as she hears comments about the face paint nearby and moves away to watch the face painting while still holding the playdough (0101:230).
As all of the above examples show, Natalie spent time observing others. The focus of this observation differed; sometimes it was the other child’s overall actions that were of interest to Natalie and at other times, it was specific activities such as rolling the dough.

In terms of observation of others, Natalie seemed to demonstrate a preference for observing children who were significantly older than herself. Given the structure of the Playcentre sessions - which limited the number of children under two and a half - there were not many children of the same age or younger attending the same Playcentre sessions as Natalie, and therefore this clearly did rather limit Natalie’s choice of whom to observe to mostly older children. However, from the children in attendance, it was the older of the children who attracted Natalie’s interest the most. These children were not only older but more experienced, and it may be that for Natalie, this ‘experience’ was interesting to observe.

Like Natalie, Stephen, (3 yr 3 mth) also watched others at play. However, his gaze was generally directed at the equipment rather than the people involved, indicating that it was the activity that was of interest, as demonstrated in this next example:

Stephen is playing at the water trough with three children. An adult brings out some gloop. Two children, Skye (4 yr 2 mth) and Kahu (4yr 3 mth) walk to look at the gloop. Stephen turns from sitting beside the water track and moves to the table with the gloop. He is holding a piece of the water track in
each hand. An adult is talking about the feel of the gloop. Skye puts her hands into the gloop and gets involved by making patterns in the gloop.

Stephen looks, then turns and walks back to the water trough (0103:24).

It would seem that while engaged at another activity, Stephen moved to look at the gloop that had been brought out as a new activity before he returned to the water trough implying that it was the arrival of the gloop that captured his interest rather than the activity of the children who were at the gloop.

A similar example of Stephen’s focus seemingly being on the object, rather than the person, can be seen in the following excerpt:

Stephen walks to look at the collage area then walks through to the family play area where there are four children (all four years) who are having turns on an electric typewriter. Stephen leans in to look. He walks to the play phone on the nearby table and fiddles with the buttons while watching the typewriter. He watches the children typing on the typewriter for around one minute. He says to the adult who is present “I need to go to the toilet”. The adult asks if he needs help and Stephen says “no, I can do it all by myself” (0103:143).

Stephen’s focus on observing activity changes slightly in the following excerpt where he observes conflict between two of his peers:

Stephen (3yr 3mth) is at the water trough. He has been making trips back and forwards to the bathroom where he has been filling up a jug with water.
He returns to the water trough with some water. Freddie (3yr 2 mth) and Emma (3yr 8 mth) are also at the water trough and are arguing about a toy which both are holding and pulling. Stephen stands by and continues to watch as an adult intervenes. A discussion between the adult and the two children occurs and the argument is sorted as the adult asks Freddie to give the toy back to Emma. Stephen says “we need more water”. Freddie and Emma select a container each from a nearby box of water toys and follow Stephen to the bathroom to fill the containers with water (0103:48).

In this excerpt, Stephen has had a purpose of adding more water to the water trough. He has been working at this for a while, solitarily. Returning from one of his trips to get water, he finds two others are present and are arguing. Rather than get involved, Stephen stood and observed the argument and the subsequent resolution which was determined by an adult. Only then did Stephen propose to the two children that they needed “more water” a suggestion that purposefully or otherwise involved both the other children in his activity, and thus ensured re-established peace.

Unlike in the data for Natalie and Stephen, no instances were recorded of Bronte (4yr, 7mth), one of the older children, observing other centre children at play or of her watching activities. While there were episodes of her observing, these generally occurred while she was involved in joining in the play or imitating the play as detailed in the next section of this chapter.
There was, however, one common type of observing behaviour that all three children engaged in and that was observing the children from the nearby Intermediate School at play. The Playcentre was located next to an Intermediate School which was up a bank from the centre. Generally these children were in class but when they came out either for morning tea or to play a sport outside, and the Playcentre children were outside, the attention of the Playcentre children was drawn to the older school children. The next four examples demonstrate episodes of all of the focus children’s attention being on the school children.

Natalie (18mths) is in the sandpit digging. The children from the school next door come outside and start running. Natalie stops and fixes her gaze on the school children playing (0201:198).

On another occasion:

Natalie is in the sandpit. The children from the school are outside. Natalie moves back and looks up at the children at the school. She puts her hands on her hips and stands watching as they play ball for around two minutes (0301:176).

Stephen (3yr 3mth) too, was also interested in watching the children outside:

Stephen has been near the sandpit. He runs off to the climbing boxes and stands to watch the children at the nearby Intermediate School as they kick balls, many of which go over the fence, and the school boys jump the fence to get them back (0203:162).
Bronte (4yr 7 mth) also stops her play to observe the children at the school next door:

Bronte had been outside at the water play. She walks away and gently puts her bucket on the ground between the guttering and the climbing frame. She climbs on to the climbing frame and stops at the top. She looks up at the Intermediate School children who are outside playing ball. She looks at them for about half a minute then looks around the centre grounds. Bronte calls out to Amanda (3yr 0mth) who is nearby to “come and climb” and Amanda walks over to the climbing frame (0104:164).

Each of the focus children in this study spent time observing the older school children at play. The focus children would not only position themselves to watch, such as getting height to look upwards at the school, they would also stop the play they were engaged in to watch the school children’s activities. These were purposeful actions which highlight the level of interest the Playcentre children had in these school children. This commonality across all three focus children is indicative of their focus: Older children were appealing to observe.
4.1.1 Summary

In the foregoing sections I have argued that observing others was part of the culture of the Playcentre and that with the exception of the oldest child in this study, the focus children regularly watched other children.

Clearly, for all three focus children age was a factor when selecting whom to observe with older children more likely to be observed. This could be why the eldest focus child, Bronte (4yrs, 7mth), did not engage in observation within the centre as there were few children older than her attending. However, as was discussed, Bronte did engage in observation outside of the confines of the Playcentre with the focus of Bronte’s observation being the older school children.

Observation has been noted to afford opportunities for younger or more inexperienced children to watch others interact and at play, quite possibly at more complex levels (Di Santo, 2000; Mounts & Roopnarine, 1987; Papalia et al., 2001). It is clear that in this study, the youngest focus child, Natalie, engaged in observing other children, with a particular focus on observing older children. The complexity levels of the play being observed were not measured in this study so no conclusion on being exposed to this play can be made. However, Di Santo (2000) found when investigating the affordances and opportunities of mixed-age settings that not only were the younger children of the setting more likely to observe others, they would observe children who were older in age and who used equipment in more complex ways. Di Santo suggested that observation in a mixed-age setting afforded younger
children opportunities to see “others at play, particularly the more complex levels of play” (Di Santo, 2000, p. 73). Further investigations into the level of play in a mixed-age setting would be worthwhile as it is here that the possibilities of indirect teaching amongst peers are evident.

4.2 Imitation of others

The previous section considered children observing others. Imitation of others is one further step in the learning process as children copy, internalise this learning and repeat what they have observed others do (Abravanel & Gingold, 1985; Hanna & Meltzoff, 1993; Meltzoff, 1988; Smidt, 2006). Imitation is social by nature and although there have been debates about the point at which imitation commences (Meltzoff, 1988), simple forms of imitation can be observed very early such as when infants copy adult facial expressions when jointly engaged (Hanna & Meltzoff, 1993; Papalia et al., 2001). Through imitation, children develop new actions and expand their understanding of the world around them (Abravanel & Gingold, 1985).

Imitation of others is not always immediate, rather imitation can be delayed and replicated some time later, particularly with children older than 12 months (Abravanel & Gingold, 1985; Hanna & Meltzoff, 1993; Meltzoff, 1988; Papalia et al., 2001; Smith, 1998).
Within my study, imitation of others was noticeable particularly for the youngest of the three focus children.

When observing children at solitary play, Natalie (18 mths) would sometimes imitate the other child’s actions. It appeared that the children in the environment were a resource, teachers who showed Natalie what to do even though there was no obvious joint interaction.

This next excerpt details Natalie imitating an older child’s activity:

Natalie walks to the paint activity where Jason (3yr 8mth) and an adult are present. Natalie watches as Jason (3yr 8mth) presses the paint-soaked sponge on a sheet of paper. Natalie bends down, pushes her hands on a different sponge to Jason’s and pushes it up and down. She stands and walks around the activity, looking at Jason and at the paint. She moves and watches as Jason is talking to an adult about the purple paint images he is creating. She looks as he presses the sponge to make prints. She walks around the activity and holds up the glitter container looking at an adult who does not acknowledge her. Natalie stands still and shakes the container. She puts the container in her mouth. She pulls it out and shakes it again. She crouches and puts the container down on the floor. She touches a paint-covered block with her fingers. She abandons the block, picks up the glitter container and stands. Kyle (3yr 11mth) arrives, takes a sponge and dips it in paint. Natalie shakes the glitter container while watching Kyle (3yr 11mth) press shapes onto the paper (about 2 min). She lifts her head and looks around. She walks to the kitchen where an adult asks “are you looking for
mummy, she’s over here” pointing in the opposite direction to the one Natalie is headed for (0101:35).

Five minutes later, Natalie returns to the paint activity and where her Mother now is.

Natalie’s Mother hands Natalie a piece of paper. Natalie puts this on the ground and then picks up a sponge. Natalie uses her hand first to push the sponge and then tries with her foot. She pushes down, then picks the sponge up and moves it along. She repeats this several times using both hands and foot. Mum is talking to an adult. Natalie turns to look inside a nearby bucket sitting on the table behind her. She turns and pulls at Mum’s arm. Mum pulls Natalie into her lap and cuddles her asking “what do you want” (0101:48).

The above observations show that after spending a little time watching Jason, Natalie imitated his actions as he worked. She later returned to this activity, repeating her earlier actions but also expanded upon them by using her foot as well. While there was no direct engagement with Jason, Natalie was actively aware of what he was doing.

A further example of Natalie imitating the actions of older children follows:

Natalie’s Mother asks Aaron (4 yr 9 mth) to wash his hands before cooking. Natalie follows Aaron into the bathroom to wash his hands. She stands on a stool at the sink where Bronte is already washing her hands. Natalie is the only child using a step to stand at the sink. She puts her hands in the trough
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sink where water is running from one of the three taps. She watches Aaron and her Mum wash Aaron’s hands. Natalie puts her hands in the sink. She tries to turn on the tap close to her but does not manage to do this. She uses her hands and splashes. She looks at the others and then down towards the ground. Bronte (4 yr 7 mth) leaves the washing trough. There are no words exchanged during this. Natalie hops off the stool and pushes it under the sink and tries to stand there to wash her hands. She stands on her tip toes stretching out to reach the sink. This is hard but she reaches one hand in the sink and manages to splash a little water. She hops down and walks to Mum. “Mum, Mum, Mum, Mum” says Natalie as if to draw attention to her recent achievement. Mum picks her up (0101:267).

Having observed the older children washing their hands at the sink, Natalie joined in, altering her actions upon noticing that the older children were not using a stool to stand at the sink like she was. While not direct imitation, Natalie has noted the older children’s actions and replicated them so that she was able to approximate them closer to those of her older peers.

The following excerpt further demonstrates Natalie imitating an older child’s actions:

Natalie has been watching a group cooking activity. She stands up and walks along the bench seat located next to the cooking activity. She sits down and watches Kylie (3 yr 5 mth) cutting a small cardboard box using scissors. Natalie stands to get a pair of scissors from a shelf next to the table and then walks to get a box from another nearby shelf. She returns with the box and scissors and looks at Kylie (3 yr 5 mth). Natalie puts the scissors on the box;
she looks at the scissors, looks at the box and then looks back to Kylie (3 yr 5 mth). She looks up and sees that Mum has moved away from the cooking activity and she moves to follow her (0101:285).

In this excerpt, Natalie’s behaviour suggests that as she observed an older child using scissors to cut up a box, Natalie became interested in the same activity and could be seen to take the desired actions to achieve this goal; she went to get the same equipment and attempted to cut a box as well. However, not having fully developed scissor-cutting skills, Natalie was unable to effectively complete this action and this could explain why she left the collage table to seek her Mother.

As noted earlier, not all imitation can be observed to occur immediately after the behaviour watched. In the following example, Natalie demonstrates behaviour she imitated after having watched the behaviour of another child some time earlier.

Nigel (4 yr 8 mth) and an adult are putting children’s name on a velcro chart in the hall. Natalie stops and watches for one minute; then leaves and walks off to look in the main area (0101:140).

Four days later when I happened to be at the Playcentre to conduct observations on another focus child, I noted in my observation notes:

Natalie is in the hall and bends down. She picks up some nametags and puts them on the Velcro chart (0204:36).
As the above examples demonstrate, Natalie not only observed others at play but she would imitate some of the actions and behaviour of the children she observed. The last excerpt showed delayed imitation of an older child highlighting that imitation is not always immediate but that actions of others are observed, stored and can later be imitated.

Unlike Natalie, Stephen (3yr 3 mths) did not spend much time imitating others. In fact, I only recorded one instance of this behaviour in my field notes. As noted earlier, the school children from the Intermediate would regularly lose balls over the fence and would climb the fence to retrieve them. In the following example, it would appear that the Playcentre children, including Stephen, imitated the activities of the school children:

Stephen is throwing a ball up and over the swing beam in the Playcentre outdoor area with Emma (3yr 8 mth) and Aaron (4 yr 9 mth). Emma (3yr 8mth) leaves and Stephen takes the ball and throws it high “Like the boys at school” he calls out. “Fantastic throw Stephen” calls a nearby adult. Aaron (4 yr 9mth) has a turn. The ball goes over the boundary fence and the boys come up with ideas about how to get the ball back. “We could go over the fence” says Stephen. “Yes, climb over the top” says Aaron (4 yr 9mth). They climb on a large tyre to look over the fence. They talk quietly but animatedly to each other, pointing and gesturing as they do so. A nearby adult decides that as the ball was purposely thrown over, it would not be retrieved until the end of session. (0203:201).
It would seem that the activities of the older children from the Intermediate School were not only of interest for the Playcentre children to watch but were also being replicated within the centre through imitation.

Like Stephen, Bronte rarely imitated another child’s actions. However I did note the following two instances of imitation during the time I observed her in this study. In the first instance Bronte imitates a slightly older child and in the second instance, the imitated behaviour is that of a younger child.

Cooper (4yr 11mth) is on the obstacle course. He hops up, climbs along the frame, walks up a board and jumps. Bronte watches from nearby. She stands, approaches the obstacle course, walks along the board and then jumps too (0304:163).

and:

Both Bronte and Skye (4 yr 2 mth) are working at opposite ends of the carpentry table and are not talking but concentrating on their work. Kyle (3yr 11 mth) comes out with his Father, they move to a vice on the table and put in a piece of wood and begin sawing. Bronte keeps hammering and looks up occasionally at Kyle sawing. Skye (4 yr 2 mth) moves to get a brush and a jug and dips the brush in the water. Bronte goes inside and finds an adult. The adult comes out with her and takes down a saw which is hanging high on a hook (which Bronte must have asked for). Bronte puts her wood in a vice. She asks the adult to start sawing the wood for her. Bronte stands watching as the adults sets up the saw and when the adult stops, Bronte takes hold of
the saw and moves it backwards and forwards. The adult helps her move her arm, she stops and Bronte stops and says “this is too hard” looking down at Kyle (3yr 11 mth). She sees Skye (4 yr 2 mth) at water trough and moves over to look (0204:214).

This final instance was the only recorded example in this study of an older child imitating the actions of a younger child. One could speculate that in this instance the adult’s involvement compensated for the age of the child as this was the only recorded instance of an older child imitating a younger child.

4.2.1 Summary

As the above examples demonstrate, imitation of others occurred within this mixed-age setting and imitation was mostly evident in the actions of the youngest focus child. The excerpts demonstrated immediate imitation of observed behaviour along with one example of the youngest child engaging in delayed imitation. This delayed imitation was recorded by pure chance when I happened to be present at the Playcentre to observe another focus child. This raises the suggestion that many other such instances may have occurred but were not noted or recorded. Delayed imitation may be why there were few observations of both older children imitating other children at play, as actions were repeated some time later and were not recorded by this researcher. Kuczynski, Zahn-Waxler & Radke-Yarrow (1987) also made this suggestion stating “immediate imitations decreased with age, whereas
deferred imitations increased with age” (p. 276). Research also indicates that imitation generally involves a younger child copying an older child and very rarely is this reversed unless the younger child is considered to have competence at an equal or higher level (Brody & Stoneman, 1981; Hanna & Meltzoff, 1993). This may in part explain why there were less recorded imitations by the two older focus children as there were fewer older models to imitate.

It seems that being in this mixed-age setting provided younger children with a range of older models to imitate as well as afforded older children the opportunity to have their actions imitated.

### 4.3 Being observed and being imitated

The previous two sections of this chapter have considered how the focus children observed and imitated other children in the setting. As noted, observation and imitation are important aspects of learning in an early childhood environment and therefore, not only did these children observe and imitate, the eldest two focus children were also the subject of observation and imitation by others in the centre. Mounts and Roopnarine (1987) found benefits in being observed, with older children reported to find it rewarding to be imitated by younger peers.

In reading this section of the chapter it is important to note that the key goal was to observe the focus children. Children who were on the periphery were often not
noted during the observation as the researcher was focussed on the more immediate actions and interactions of the child being observed. Therefore, this section will not be fully representative of the wider observing behaviour and imitation that may have occurred.

Natalie, at 18 months, was the youngest child of this study and one of the youngest in the centre during her attendance and there were no observations of her being observed or of her actions being imitated. This would be consistent with studies that suggest that it is more likely that peers imitate older models (Brody & Stoneman, 1981; Hanna & Meltzoff, 1993).

Being of an older age than Natalie, Stephen (3yr 3 mths) was the subject of attention by others during the session. There were no recorded instances of Stephen’s behaviour or actions being imitated during the researcher’s time at the centre however Stephen was regularly observed by others.

In this example, Stephen was the subject of a younger child’s attention during morning tea time:

It is morning tea time. An adult approaches the table where the children are sitting and she sits Jake (14 mths) between Stephen and Kylie (3yr 5 mth).

Jake (14 months) looks intently at Stephen as he eats from time to time (0203:130).
In this next example it is an older boy’s attention that was captured by Stephen’s building with blocks:

Stephen is building a robot with blocks. He moved away briefly and then moves back to his robot. Josh (3yr 9mth) comes over and watches for half a minute and leaves as another older child approaches (0103:169).

Josh’s onlooker behaviour could have been an initial attempt to join in the building with Stephen; although as Josh departed when another child approached, it did not result in interaction.

As the oldest child of this study, Bronte, (4 yrs, 7 mths) was regularly observed by children, in particular younger children. Sometimes, she would acknowledge these children and other times, she would not. The following two excerpts show no acknowledgement of the younger children:

Bronte is on the deck where she has been painting. She has been calling to an adult to come over to hang her painting. When the adult indicated she would come shortly, Bronte reached for the pegs and hung it herself. Hayden (1yr 1mth) came close and stood by the easel and watched Bronte hanging her painting. Hayden leaves once the painting is hung (0304:70).

and

Bronte is outside at the water troughs. She uses a small hand pump that someone has left in the water trough and she pumps water into a bucket. She
also fills her jug with water using the pump. Amanda (3yr 0mth) is nearby and has been watching Bronte pumping water with interest (0104:127).

Due to the physical placement of the two children it is hard to believe that Bronte did not notice the children observing her; however she did not acknowledge their presence, perhaps providing an indication that she was more interested in her older than her younger peers or perhaps suggesting that she would choose when she would acknowledge these younger peers.

In the following example, however, Bronte does acknowledge a younger child who is imitating her behaviour:

There is a small group of children and two adults at the carpentry table. Bronte has a hammer and is banging a nail into a piece of timber. Hayden (1 yr 1 mth) looks at her banging his fist up and down. He is doing this on a piece of wood. He reaches for a nearby stick, picks this up and uses it to hammer. Bronte looks up at Hayden and smiles. Hayden’s adult family member says, “I think he wants a hammer” and passes him one (0204:196).

Bronte seemed to choose when she wished to acknowledge the presence of another who was either watching or imitating her. There was no consistency to this. What was consistent was that she never demonstrated annoyance at being observed with this, adding to the suggestion that observing and imitation of others was part of the culture of this study Playcentre.
4.3.1 Summary

As previous research (Di Santo, 2000; Gauvain, 2001; Katz et al., 1990; Rogoff et al., 2003) would lead one to expect, being observed and being imitated occurred in this mixed age setting. Not surprisingly, it was the oldest two focus children who were the subjects of this behaviour. Due to the close proximity of the observing child, the child/ren being observed must have been aware that, at times, they were watched, although in most observations there were no evident indications of this. Observation within the centre seemed accepted as there was no conflict or obvious dislike of being observed. It was this unchallenged acceptance that suggested that in this context, observing and being observed were part of life in the centre; part of what occurred when one was a member of this community.

4.4 Summary

This chapter has considered how children act within the mixed-age centre often without direct interaction.

When considering the indirect interactions of children in this setting, some key points are worth highlighting. For example, as demonstrated in previous studies, age does seem to make a difference:

(i) as to who is observed and who is imitated; and

(ii) as to who spends time observing and imitating others
Furthermore, there seemed to be no obvious discomfort in being observed or imitated.

In terms of the group of children who were observed and imitated, age made a difference because generally, the child/ren who were observed and imitated, were older than the observing child. This was evident through the experiences of all three focus children and is consistent with the work of Brody and Stoneman (2001) who reported that older children were more appealing to observe.

Of the three focus children, the youngest child was the one who was documented to spend the most time engaged in observation and imitation of others and this was a notable feature of her time at the centre. However, this does not mean to say that it did not occur for the other two focus children as it is quite likely that imitation may be delayed rather than immediate; it may have been this that has resulted in its occurrences not being documented by the researcher. Furthermore, as noted earlier, Gauvain (2001) has suggested that the nature of imitation shifts to guided participation as children develop and tasks become more complex.

As discussed in Chapter Two, observation and imitation can add to the complexity of play by those observing, thereby increasing the cognitive development of children (Morrison & Kuhn, 1983). It was not the intention of this study to measure whether the complexity of play increased or not. However, there were
signs, that the youngest child certainly imitated behaviours that she had observed older children perform, and it is reasonable to argue that these actions may not have occurred without observing others at play.

One of the interesting findings was that all three focus children appeared captivated by the older school children. Not all centres border on school grounds; this researcher did not enter this study expecting the vicinity of the school to be a feature at all, yet it quickly become apparent that these older children, outside of the centre grounds, were of interest to the Playcentre children. This confirms that not only is age a factor as to who is observed, but also suggests that the ‘real world’ outside of the centre is of interest to the children.

Given the findings above that older children are more likely to be observed and imitated, it is not surprising that age also made a difference to who spent time observing and imitating others, with this being noted to occur most frequently for the youngest of the three focus children, and was less prominent in the older children. Furthermore, there was no evident impact on the play of the older children from the reality of being observed and imitated by younger peers, suggesting that the observation by the younger children was not objectionable to the older children.
This study did not measure any possible benefits arising from children being observed, such as sustained interactions (Eckerman & Stein, 1990) and given the amount of observation by younger children, this would be a suitable topic for future research.

In terms of the nature of social interactions amongst children in this mixed-age setting, the data has shown that there seemed to be a shared understanding between the Playcentre children that each could observe and imitate others; that together children can watch and learn from each other.
5. Being together: Rules and responsibility

The previous chapter discussed the role of observation and imitation of others as an aspect of togetherness within the mixed-age setting of one Playcentre. In this chapter, the focus shifts onto another aspect of the theme of togetherness: the children’s sense of social responsibility for each other.

Social responsibility practices such as pro-social skills, and regulation of others’ behaviour, are discussed as they have been noted to be a benefit resulting from mixed-age settings (Katz et al., 1990). It is through this consideration of others that togetherness may be demonstrated by young children (de Haan & Singer, 2001) as will be demonstrated in this chapter.

5.1 Social Responsibility: Nurturing and empathy

Within any early childhood education centre it is expected to see children exhibiting pro-social behaviours or “voluntary behaviour intended to benefit another” (Avgitidou, 2001, p. 146). Pro-social behaviour includes nurturing and empathy, illustrating skills of caring for each other within an environment (Avgitidou, 2001) and strengthening the togetherness of the group (de Haan & Singer, 2001). Mixed-age settings have been found to be of benefit for promoting these pro-social skills including “helping, sharing, and taking turns” (Katz et al.,
1990, p. 21) as children come to have some understanding of age and ability differences.

In this study there were a number of instances when Natalie, the youngest of the focus children, was observed demonstrating nurturing behaviour towards other children.

This example shows Natalie acknowledging a younger child with a smile, the beginnings of friendship:

Natalie has not long arrived at the centre and is on the external deck. An adult has been talking with her and then leaves. Natalie turns and looks at Lewis (8 mths) in his pushchair and she smiles at him. Natalie walks to the playdough table. (0301:20)

This next data excerpt shows Natalie demonstrating empathy:

Natalie is standing by her mother. Natalie is watching children carry water in jugs from the bathroom to the deck. She sees a child slip in the water and fall. Natalie frowns and says “ohhh”. She turns to look at her Mother who is talking with another adult and does not acknowledge Natalie. Natalie’s gaze then shifts to the collage table (0301:30).
The above excerpt shows Natalie vocalising her concern as a child slips. Natalie turns to look at her Mother almost as though her Mother should go and assist the child but Natalie is unable to capture her Mother’s attention.

There were also observed attempts of others demonstrating this behaviour towards Natalie, particularly at times when these children perceived danger.

In the following instance, an older child altered a task so that it was achievable for Natalie.

Natalie has been watching two children climb over the top of a wooden tunnel that had been constructed from large wooden interlocking blocks. Natalie stands and walks to the tunnel and tries to climb up it like Aaron (4yr 9mth) and Amanda (3yr 0mth) had done. Both of the children have left the tunnel. An adult (not Mum) comments on Natalie’s ambitions as she tries to climb it. Amanda comes over and says, “come on, this way” and they crawl through the tunnel together. Amanda then climbs over the top. Natalie tries to do the same (0201:55).

By simplifying the task for Natalie, the older child demonstrated pro-social and peer tutoring skills as she helped make the task achievable for Natalie.
Sometimes children demonstrated their awareness of Natalie’s safety as illustrated in this example:

Natalie moves and watches as the carpentry is packed away. She moves towards a saw. Matthew (2yr 2 mth) sees Natalie. He walks and picks the saw up and passes it to his Mother who puts it away (0301:96).

Matthew, only eight months older than Natalie, saw her reach for a carpentry saw. It may be that he was concerned for her safety, or that he realised it was morning teatime and the carpentry was being packed away and he knew that she could not have it. Either way, he was aware that she was reaching for this saw and moved it from her.

Stephen (3yr 3 mths) also demonstrated nurturing tendencies towards other children. At times, he would not be directly engaged with these children yet seemed to keep a ‘wider’ view of the play area and would quickly get attention if he thought it was necessary.

In this next example, Stephen walked around a younger child to avoid possible mishaps:

Stephen is carrying water in a jug to fill up the water trough/boat track with water. He walks out widely to step around a one year old (0301:45).
This simple gesture of walking around a child rather than stepping over the child (which he could have done) demonstrates nurturing and respect for the younger child.

In this example, Stephen helped a child get an adult’s attention:

An adult has been bitten by a spider when uncovering the sandpit. Five adults are standing around the sandpit and talking with the adult who has been bitten. Stephen has been standing watching. He notices Eden (2 yr 0 mth) climb down the steps to the bank while at the same time calling out to her Mother but her Mother does not hear her. Stephen calls to Eden’s Mother, who is near him, “look at her” and he points. The adult does not understand and asks Stephen if he wants to play on the boxes but Stephen says again “Look at her” and Eden’s mum goes to her as Stephen runs to play on the boxes (0203:151).

Rather than ignore a child’s calls to her parent, Stephen drew the Mother’s attention to the child. This small gesture of helping another child also is demonstrative of pro-social behaviour.

In this next example, Stephen is concerned about a child’s safety:

Stephen is on the climbing frame. Jake (1 yr 2 mths) walks towards the frame carrying a ball. Jake drops the ball and walks past the climbing frame to stand on the edge of the bank. I start to step in to intervene (for safety
reasons as Jake could have fallen down to the lower level which was approximately a half metre drop) but Stephen who is still on the climbing net calls out “No, you can’t go in the mud” (the mud was on the next level down). Jake looks at him and returns to pick up the ball, walking away from the edge of the bank (0203:177).

While Stephen was not playing with Jake, he noted Jake’s actions and realised that Jake might fall down to the next level as he was standing right on the edge of the bank. Stephen’s approach by calling out to Jake again demonstrates pro-social behaviour as Stephen noted the safety issues and prevented an accident.

Stephen was also the recipient of pro-social behaviours, as demonstrated in this next excerpt:

Stephen is sitting at the morning tea table. Alexandria and Freddie are sitting next to him, they are all eating. Alexandria (3yr 2 mth) strokes Stephen’s cheek and says “look at baby Lewis (1 yr 7 mths)”. Lewis had crawled under the playdough table. Stephen turns to look but is drawn back as singing starts. “Wibbly Wobbly Woo” is sung. Stephen sits and eats looking around the table (0301:60).

Alexandria gently stroked Stephen’s cheek as they sat and ate morning tea demonstrating a caring action.
There were no observations of Bronte (4 yr 7 mths) being the recipient of pro-social behaviours. In terms of being the recipient of pro-social behaviours, it seemed that, in this study playcentre, the recipients were more likely to be younger children. As Bronte was one of the oldest children in the centre, this could be why she was not noted to be on the receiving end of these behaviours. However, she did demonstrate pro-social behaviours and while there were not many displays of this, they did occur as the next excerpts describe.

Here, Bronte is showing nurturing tendencies towards a younger child:

Bronte has been jumping from a high box onto a large tyre tube on the ground. The tube had rubber stretched over the top, resembling a mini trampoline and it provided a soft landing surface. Kylie has been watching as Bronte has just jumped. An adult who is supervising the activity pushes the tyre in closer to the high box the children are jumping from and Bronte stands to watch Kylie (3yr 5mth) jump and Bronte smiles at her. Bronte pulls the tyre out away from the high box and then climbs up the box, pushes past Kylie (3yr 5mth) who has climbed up again and then Bronte jumps. Bronte, on the ground, calls out to Kylie (3yr 5mth) “I’ll push it in for you”. She pushes the tyre in towards the high box but not all the way. Kylie (3yr 5mth) looks hesitant but does jump. Bronte claps and says “good girl”. Bronte climbs up on the high box for another turn and asks the adult to move the tyre out “just a tiny bit more” which happens, then the adult leaves to talk to two children having an altercation. Bronte turns to look at Kylie (3yr 5mth) “hmmm” she says. No adults are around. She stamps her feet up and down. She turns and looks at Kylie (3yr 5mth) then turns back. She sees an
adult nearby and calls out but the adult doesn’t respond. She sees another adult and calls out to her by name and says, “come and move this closer”. The adult does as requested and Bronte jumps. Bronte pushes the tyre tube in towards the high box for Kylie (3yr 5mth) to jump. The adult says, “Come and look at this obstacle course I have done. Now, no-one can touch the ground”. The play ends (0304:189).

In the above example, Bronte encouraged the younger child to jump by clapping her hands when she recognised the child’s hesitancy. Bronte also pushed in the landing pad (the tyre tube) a little closer to the box that Kylie was jumping from, actions that encouraged Kylie to make the jump. Bronte’s pro-social skills and peer tutoring assisted Kylie in achieving more than she may have done on her own.

Here is a more subtle approach at nurturing:

At morning tea, an adult starts to sing ‘Old McDonald’ to the group. Bronte looks at Eden (2yrs) singing. Bronte smiles while watching her and Bronte starts singing too (0104:87).

It is interesting that beyond these few instances Bronte was not observed to make many more attempts at pro-social behaviours towards others as one would expect to see more pro-social behaviours being exhibited by the eldest in the centre. As mentioned, studies suggest that pro-social behaviours is one of the benefits from a
mixed-age setting (Katz et al., 1990; Mounts & Roopnarine, 1987). Yet in the case of Bronte, this was not readily observed during the observation sessions.

5.1.1 Summary

Pro-social behaviours by the children were part of the centre environment. Children took care of others’ safety, sought help as it was needed and encouraged others to complete an activity. Documented age differences in how these skills are generally demonstrated were apparent in the behaviours of the focus children with the youngest child of this study, Natalie, not only displaying pro-social skills but also being the recipient of these behaviours including when safety was an issue. Like Natalie, Stephen was also the recipient of pro-social behaviour as well as a contributor of this within the centre. For the eldest child, Bronte, there were no noted observations of her being a beneficiary of pro-social behaviours. There were also only a few noted observations of Bronte demonstrating pro-social behaviours towards others. Hartup (1976 as cited in Katz et al., 1990) found that pro-social behaviours are more likely to be evident with younger peers than with children of the same age; this finding suggests that it is not unusual for there to be no noted observations of other younger children exhibiting pro-social behaviours such as empathy and nurturing toward Bronte. Additionally, this finding (Hartup 1976 as cited in Katz et al., 1990) could explain why Bronte displayed more pro-social behaviours towards younger children than towards her same age peers.
Nurturing and displays of empathy were observable among the children in this mixed-age setting. It appeared that all three children demonstrated pro-social interactions and that the younger two children, particularly the youngest child, were the recipients of this behaviour. These pro-social skills are important contributors to building a community (Hannikainen & Van Oers, 1999; Van Oers & Hannikainen, 2001); it is through these expressions that togetherness is built.

5.2 Social Responsibility: Regulating others’ behaviour

Regulation of others’ behaviour is a precursor to self-regulation and can be seen “in children’s social interactions with other people” (Bodrova & Leong, 2007, p. 82). Regulation of others’ behaviour was part of the learning context of this Playcentre and all the focus children demonstrated this. In this study the acceptance of regulation from others in the environment contributed to the feeling of community, it created a sense that together “we” know the rules and “we” can enforce them.

In the following example, Natalie appeared to regulate the behaviour of two older children who were pushing each other:

A baking activity is taking place at the centre. Many of the older children are gathered around the main table cooking pikelets. Natalie is being held by her Mother. Two four year old boys are sitting at the end of the table and are pushing each other. Natalie is watching, then raises her hand, palm outwards
(as though to say no). She waves her hand. The boys look at her and stop the pushing. Natalie puts her hand down. Natalie’s Mother starts turns her attention to the group, talking about the activity; the two boys are listening (0101:274).

While the youngest at the activity, Natalie was able to stop the boys from pushing by putting her hand up in a ‘stop’ position. No words were exchanged but the boys noticed her gesture, understood her meaning, and stopped the pushing. Natalie regulated their behaviour and through her understanding and expression of the rules, she must have been aware that she too has a presence in the centre.

Stephen also chose to regulate others’ behaviour, reminding the children of the rules. In the following example, Stephen chose to regulate the behaviour of two children at the morning tea-table:

It is morning tea time and the children are sitting around the table. Stephen is sitting next to Alexandria and Freddie. All are eating. Alexandria shakes her hand and bangs her feet distractedly, the banging of the feet making a noise. Freddie (3yr 2 mth) copies. Stephen says “no you two” and then returns to eating his sandwich. Freddie (3 yr 2 mth) stops and Alexandria (3yr 2 mth) eventually does too (0103:155)
Bronte also regulated the behaviour of others, including that of adults; however the interactions described will focus solely on her interactions with the children. Bronte would regularly command others and sometimes this was a form of regulation as she wished them to change their behaviour or move away, as seen in the following excerpt:

Bronte is at the morning tea table. A boy (3 yrs) of age tries to squeeze in to sit beside Bronte and her friend Skye. Bronte says “No” sharply. The boy moves away quickly and sits down at the opposite end of the table (0104:67).

While also stating her preference not to have the child sit beside her, Bronte caused the child to move quickly away.

In this next observation, Bronte asks her friend Skye to move, demonstrating her ability to use her words to do this and not just actions:

At morning tea, Skye and Bronte are sitting together and slide along the bench seat on their bottoms and travel back and forwards along the seat. Bronte stops and says “do not move” sharply. Skye stops. Bronte stands, walks to the other side of the table and sits down. They both eat from their lunchbox without talking. (0204:152).
As was seen in the above examples, Bronte used speech, rather than gestures, as her method of regulating others’ behaviour.

5.2.1 Summary

In this mixed-age setting, children were able to regulate others’ behaviour. It is worthwhile noting that all these instances occurred around the food table and it may be that during this time of routine, rules were enforced by the children.

Interestingly, each focus child was observed to regulate another’s behaviour and to reinforce the centre rules, including the youngest focus child, Natalie (18mths), with her gesture being responded to by two older boys despite Natalie’s lack of verbal language. As in the previous chapter, age again appeared to be a factor in these dynamics. It was the factor of age (i.e. being older) that contributed to Natalie’s gesture being effective as it is likely would not be likely that two peers of a similar age to Natalie would have noticed or responded to her request. The engagement of the older children with Natalie’s communicative attempt meant that Natalie was able to effectively regulate others behaviour, while also likely enhancing the older children’s sense of responsibility within the community.
5.3 Summary

In this mixed-age centre, age did not seem to impact on social responsibility in terms of being able to contribute pro-social behaviours and regulation of others behaviour as all children displayed these skills. However, as discussed, it may also be the age of the recipient that makes the difference to the effectiveness of this regulation. Age also made a difference in terms of safety with younger children’s safety and needs being nurtured by the older ones.

Each of the factors above contributed to the signs of togetherness that were demonstrated by the children within this mixed-age setting. The unspoken shared understandings (Rogoff, 1990) that existed within the group about what was acceptable or safe behaviour, also appeared to help develop and maintain feelings of togetherness. Children seemed to understand that they could contribute to the rules of the setting and that they had a responsibility to look after each other, particularly the younger members of the community.
6. Engaging with others: How can I play?

The previous two chapters discussed indirect engagement and learning from others and how this was demonstrated within the mixed age setting of this study as elements of togetherness. In this chapter the focus shifts to considering how children in this mixed-age setting engaged in play with other children. It considers how each of the focus children of this study initiated play with another child and how they protected play that they were part of.

As noted in Chapter Two, there is much written regarding social competence and its importance to children’s development (Corsaro & Eder, 1990; Dunn, 2004; Singer & de Haan, 2007; Smith, 1998) including its role in children’s cognitive development (Bodrova & Leong, 2007). Corsaro and Eder (1990) have argued that for children, learning to initiate and maintain play “establishes understandings that become fundamental social knowledge on which they continually build” (p. 200).

6.1 Initiating play with another

Learning to initiate play with others is considered an important cognitive step because as children learn to interact successfully with peers, (Katz & McClellan, 1997; Munro, 1986; Rubenstein & Howes, 1976) they not only increase their own learning but also increase their belonging to the group. Together, children can explore an environment in a way that is much more interesting to them than would
be to an adult and child, or a child on their own (Rubenstein & Howes, 1976). With a peer, they find another partner who is willing to be engaged in a repeated activity (Dunn, 2004; Rubenstein & Howes, 1976). Initiation of play with a peer also allows children to increase their understanding of the peer culture of their environment as they learn strategies to engage and interact with partners (Corsaro, 1997a; Lauter-Klatell, 1986).

All three case study children initiated play with others and could be observed to engage in social interaction that Parten (1932) would have categorised as unoccupied behaviour, onlooker, parallel, associative and cooperative play. This was seen within the children’s attempts to initiate play with another.

For example, the youngest child in this study, Natalie (18 months) was observed to make limited attempts to initiate play with others over the course of three observation sessions. However, the attempts she did make demonstrated that she had an awareness of some ‘rules’ that helped her to initiate contact with another. These rules included verbalising as well as “proximal contact”, where a child is within physical contact range of another child but not using verbal language (Honig & Thompson, 1993, p. 6). Natalie used these strategies with children from both same age and mixed age groups although verbalisation was used more often with children of the same age. As is illustrated below, Natalie’s range of proximal contact included onlooker behaviour, smiling, placing herself in the ‘space’ of
Children’s interactions in a mixed-age early childhood centre

another and handing an object to another; all of which were attempts to communicate with others.

The example below shows Natalie initiating play with another child through object exchange and placing herself in the space of another:

Natalie is outside. She climbs in and under the large wooden cube shaped house. Eden (2 yr 0 mth) comes over and Natalie sits down in the corner. Eden (2 yr 0 mth) climbs in and sits in other corner. Natalie gives Eden a jug she had picked up and Eden accepts this. Natalie walks closer to Eden and sits on a narrow ledge under an open window. Natalie loses her balance and falls through the window out of the cube. No adults are present and I move over in concern, but Natalie picks herself up and appears okay as she climbs back in the cube. Eden (2 yr 0 mth) stands and leaves (0301:142).

In this exchange Natalie’s first approach of offering a jug is accepted although her second approach to Eden unfortunately ended when she fell. However, even without the fall, it would be likely that this interaction would have ended within a short space of time as toddlers “have not yet learned effective strategies to maintain [sic] play bouts or sustain an initial successful social bid” (Honig & Thompson, 1993, p. 13).

The following observation demonstrates a further attempt by Natalie to initiate play with a child of the same age although it does not result in a direct interchange:
Natalie (18 mths) is at the water trough where she is tipping and pouring water with small buckets. Emma is nearby pushing a pushchair on the deck and Natalie glances at her from time to time. Emma (1yr 8mth) comes over and plays at the trough behind Natalie. Natalie pours water. Natalie turns and picks up a bucket. She sees Emma and starts to vocalise as if trying to express her excitement at seeing her. Emma looks up briefly. Natalie puts a bucket in Emma’s trough which Natalie fills with water before tipping it out. She tips it out towards herself and the water goes over her and a bit over Emma. Emma moves away a little. Natalie turns back to the other trough, as does Emma. They tip and pour while occasionally looking at each other. Emma steps away. Paris (2yr 1mth) comes up and pulls at Emma’s shoulder and Emma cries. An adult intervenes. Natalie goes “oh” and walks to get the pushchair that Emma had used previously, but later abandoned at the water play (0201:100).

Natalie and her same age peer appeared engaged in parallel play as they are working alongside each other rather than directly interacting. There was no trading of objects that would suggest that direct interaction had occurred. Natalie’s verbalizing as she saw Emma would appear to be an initial attempt to attract Emma’s attention and engage with her, particularly as Natalie then moved and worked in the same water trough as Emma. This parallel play continued until they were disturbed by Paris. Natalie’s approach was different when initiating interaction with an older peer, as this next example demonstrates:

Natalie is holding a shiny silver tube. After looking at it and waving it around, she walks up to Stephen (3yr 3mth) and stretches out her arm holding
the tube toward him. Stephen looks, says ‘thanks’ and takes the tube and remains standing where he is waiting for his mother. Natalie looks, does not appear upset and turns to look at a painting activity (0101:19).

This excerpt from Natalie’s observations illustrates Natalie experiencing success in using an object to gain entry into an interaction; she has followed structural rules for interaction by approaching another and initiating an interaction by use of an object (Lauter-Klatell, 1986). Studies have found that social exchanges between toddlers often involve interchanges using objects (Brownell, Ramani, & Zerwas, 2006; Holmberg, 1980; Mueller & Brenner, 1977; Musatti, 1993). In Natalie’s case, Natalie used an object with an older peer.

It was clear from a number of other data excerpts that “offering objects” was a frequently used technique by Natalie in attempts to engage with others. Garner (1998 as cited in Frost, Wortham & Reifel, 2001) stated that objects are generally used for “early play encounters” (p.140) and it would appear that this was the method for initiating play that Natalie seemed to prefer, particularly when approaching children older than herself. Natalie did vocalise and appeared to favour doing so with children of her own age. However, as her language was still developing, it was often not understandable, and this limited the effectiveness of this approach.

Stephen (3 years 3 months) on the other hand, tended to use language as his preferred way of initiating play with others. When considering the patterns of
social interchange with children aged between 12 to 42 months, Holmberg (1980) found that “verbal initiations was the social act that increased” (p. 454). This may have been the case with Stephen as his increased verbal skills provided him with options when wishing to initiate play with others. For example, in the following excerpt, Stephen used verbal language in conjunction with the symbolic act of pointing when he identified the image printed on a peer’s drink bottle:

At the morning tea table while eating Stephen pointed to Freddie’s (3yr 2 mth) drink bottle and says “That’s King Kong”. Freddie does not respond. (0103:156)

On this occasion, Stephen’s verbal comment did not engender a response and he made no further attempt at interacting with Freddie.

A more purposive approach can be seen in the following data excerpt:

Stephen had been building a house from large wood blocks but stopped to watch a group also building with blocks nearby. He turned his attention to his building and said to Emma (3 yr 8 mth) “Let’s make a robot”. Emma and her dog puppet are talking to an adult and she comes over and hops inside Stephen’s building. “Look at this one” he says holding up a block to Emma. They talk about what it could be used for. Stephen sees Cooper (4 yr 11 mth) on the balance board and says “watch out, you’ll fall”. Cooper jumps on the board, Stephen pushes from the board from the bottom. They both laugh. Cooper jumps/falls off and turns and runs. Stephen starts to follow, stops and
returns to his building. Emma is still in the house but gets up and leaves.

Stephen stops to watch the nearby building activity (0103:117).

In the above interaction Stephen verbalised as a method for engaging in a social exchange and initiating play with another. This interaction attempt was successful and Stephen not only engaged another in play, but he was able to sustain it as the two worked together on a shared project. Stephen also managed to interact with one further child before returning to his dyadic play, which ended with the departure of the other child.

Stephen also found that special objects worked well when wishing to engage others in play. These objects appeared to be carefully pre-selected as they were brought from home. They were hot wheel cars, which were forbidden in the centre. Corsaro (2005) discusses secondary adjustments to adult rules where children “attempt to evade adult rules” (p. 42) and gain some control within their social context. While there are many rules that can be broken, Corsaro found that the bringing of small toys into the centre was a common way for children to challenge adult rules and it also had the added benefit of being exciting to other children (Corsaro, 2003, 2005; Corsaro & Eder, 1990). Stephen’s way of evading the adult rules was to conceal hot wheels cars in the pockets of his clothes and use these as a successful way to initiate play:

Having just arrived, Stephen is outside on the deck. There is one adult, one infant and Jason (3yr 8mth) there. Stephen is showing infant Ollie (1
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Stephen is building a garage with the blocks. He looks up smiling and says “Kahu look what I have done”. Kahu (4yr 3mth) doesn’t acknowledge as he pushes his train around the track. Stephen looks through the glass doors onto the deck and says “Oh look what Mum’s doing, Kahu”. Kahu still does not acknowledge. Stephen moves to Kahu’s track and says “I’ve got hot wheels in my pocket. You don’t have hot wheels”. Kahu looks at him. Stephen smiles. Mum comes in and sits down. Kahu says, “My train goes fast”. Stephen says “Mum you can’t see my cars”. Mum says “where are they, are they hiding”. Stephen smiles and says, “One is in my pocket”. Mum takes

Although this interaction was interrupted when Stephen’s mother asked Stephen to put his cars away as toys from home were not allowed, it is useful to illustrate Stephen’s skills in using desirable playthings as a tool for engaging others in interaction with him. However even desirable objects are not always immediately successful in convincing others to interact with you. This can be seen in the following data excerpt in which Stephen had to persist with Kahu (4yr 3mth), an older boy who often rejected Stephen’s (3yr 3mth) initial attempts at interaction. As the situation below demonstrates, Stephen persisted until he found an approach that worked with Kahu:
some guesses where they might be hiding. Kahu looks up from time to time.
Mum finally guesses the correct place where the car is hiding. “Yes” says
Stephen. Kahu moves over to look. Joint play continues at this activity for
some time (0303:214).

In this example, Stephen used his ‘prized’ hot wheel cars to interact with Kahu.
When Kahu ignored this attempt, Stephen then tried to redirect Kahu’s attention to
an activity on the deck. Finally Kahu’s interest was drawn as Stephen hid his cars
and asked his Mother to guess where they were resulting in sustained activity
between both Kahu and Stephen. It would appear that Stephen’s Mother decided to
overlook the rule that was being broken to allow play to continue.

A further example from a different observation session demonstrates Stephen’s
persistence at interacting with Kahu. Stephen had managed to attract Kahu’s
attention with the hot wheel cars, which the two boys played with prior to morning
tea. Perhaps emboldened by this, when morning tea was called, Stephen rushed to
sit beside Kahu, where they ate and listened to the story that was read.

Kahu leaves the morning tea table and puts his lunch box away. Stephen
stands suddenly and walks quickly behind Kahu to put his lunchbox away.
Stephen follows Kahu (4yr 3mth) to the train track. Stephen says to Kahu
“Look at my car” as he sends it down the ramp. Kahu gives a cursory look
but goes back to his work. Stephen says, “Look, it goes on the track too” as
he pushes it along. But Kahu doesn’t look. Stephen then says, “Kahu,
someone did a fart”. Kahu looks at Stephen, and laughs saying “pooh”.
Stephen says, “It must be Lucas” (who is playing nearby). Kahu laughs again, and moves closer towards where Stephen is (0303:193).

Of interest in this exchange is the response Stephen achieved from Kahu through the breaking of rules, using ‘toilet talk’ (e.g. ‘pooh’, and ‘fart’) that is not permitted in the centre. It would appear that this action assisted Stephen in initiating play with Kahu.

It is clear through these examples that Stephen had developed a repertoire of skills that enables him to initiate play with another. He appears to have moved beyond using objects to initiate interchanges, as Natalie did, and demonstrated an ability to interact verbally. Along with his verbal communication, he chose various methods to engage another in interaction and demonstrated persistence as he made more than one attempt to engage at times. Stephen brought his cars from home and found these a useful way to attract an older boy’s interest and this would suggest that he had put some thought into ways that he could initiate play with this boy. While Corsaro (1985) would argue that this evading of adult rules helps to contribute to group identity, it is evident that for Stephen the evasion of adult rules was more of an attempt to engage in play with this older boy. Eventually, it may be that this engagement will contribute to group identity; however the fact that these cars seem to have been reserved for Kahu suggests that Stephen was using them for an individual purpose. Corsaro (1985) says that “children’s secondary adjustments can be seen as makeshift means to obtain ends or needs” (p. 266) and in this case, Stephen appeared to use his cars to obtain a need – a need to engage with Kahu.
With the exception of initiating play with this older boy, Stephen generally entered into group play rather than with individuals (see Section 5.3).

The oldest focus child of this study, Bronte (4 years 7 months) also developed a range of strategies for engaging others in play. By and large, Bronte’s strategies were more elaborate than those used by either Stephen or Natalie. These strategies outlined the play objective or assigned roles within the play with the strategies changing depending on the age of the child. This is evident in the following example where Bronte approached a younger child, made eye contact and ‘invited’ her to play:

Bronte (4yrs 7 mth) walks from the crayon activity to Amanda (3yr 0mth) who is at the collage table. Bronte bends to make eye contact with Amanda and asks, “Do you want to play doctors”? Amanda responds with “Who will be sick?” At this time, morning tea is called and Bronte goes to get her lunchbox (0104:57).

Since morning tea was called, the play never commenced but it is evident that a clear play objective had been set by Bronte, and there can be no misinterpretation of the aim.

Bronte also appeared to initiate play with others through issuing directions where she would call to someone nearby and tell them what to do, as in the following example:
After morning tea, the outside area has been opened up. Bronte has run around the outside and come back up to the elevated deck by herself. Kyle is on the deck along with some other boys. Bronte looks through the sand toys and finds a cup and a jug. She calls out to Kyle (3yr 11 mth) “Kyle, come and get some water”. Bronte gives the cup to Kyle. They move to a set of four small water troughs placed together (0104:96).

Bronte’s direct approach was a consistent feature of how she engaged with others in the mixed-age group setting of this Playcentre. Bronte used this approach generally with children around the same age as her and she used this strategy frequently with her usual playmates. Her voice was often sharp in tone, and directive, suggesting that she had learnt this as an effective way to initiate play with others in this context.

A similar example of Bronte initiating play with another child through issuing directions in the following example:

Bronte gets up and puts her lunchbox away, then goes to the bathroom where she uses the toilet. Bronte then walks to the deck. She gets a ball and calls out to Nigel (4 yr 8 mth) who is nearby “Come on Nigel, let’s play ball”. He follows, as does Skye (4 yr 2 mth). Skye stops at the easel and paints. Bronte throws the ball to Nigel. He throws it back (0204:160).

In all of the examples above, Bronte engaged others in play through the use of verbal communication. All of these children in the examples were either her age or
younger. From other examples it is clear that Bronte tailored her approach to other children on the basis of the age of the child. When initiating play with younger children, she used an invitational approach to play by approaching the child, making eye contact and using clear direct sentences about the aim of the play. However, when initiating play with children around the same age as herself, she used a different approach that was less invitational and more commanding. Both approaches seemed to work as she engaged successfully in play that she initiated.

6.1.1 Summary

These examples from the experiences of three children suggest that in terms of initiating play with others in this mixed age setting, the focus children were able to select from a range of age groups for their play partners. The younger child, Natalie (18 mths), did not make many approaches to initiate play, but when she did, there were more noticeable approaches with older children rather than children of the same age. Brownell (1990) has argued that infants and toddlers are more likely to be interested in engaging with another, slightly older peer than a peer of their own age; this certainly proved to be so for Natalie. Being in a mixed-age setting exposed her to older peers and provided her with opportunity to initiate interactions with them.

The second focus child, Stephen (3yr 3 mth), made approaches to initiate play with children of all ages but seemed to prefer to make these interchanges with a male
child, one year older than himself and tailored his entry approach to encourage initiation with this child. He demonstrated persistence with his attempts to engage with this older child despite having several peers of his own or a very similar age around.

The third child, Bronte (4yr 7mths), approached children of the same age as herself as well as children younger in age than herself. She varied her approaches with these two groups of children, using a commanding approach with children of the same age and an invitational approach with children who were younger. This would suggest that she had some awareness of the different age groups that existed in this environment.

Overall when initiating play with another, each of the children exhibited approaches of social exchange which changed with age. The use of object exchanges as initiators of interaction transformed to initiations using verbal expressions with the development of language. This is consistent with the findings of earlier studies (e.g. Honig & Thompson, 1993; Mueller & Brenner, 1977). It would appear that age makes a difference in terms of the type of approach used to initiate play with another. It would appear that the age of the partner the approach is being made to also matters, as the younger children seemed to make more play initiations to children older than themselves.
6.2 Protection of ongoing play

For young children, play can be fleeting and the threat of interruption to play is ever present including through adult interruption, child interruption and interruption for routines. Corsaro (2005) has argued that children regularly desire to keep play ongoing rather than change the order of play by sharing with others who come into the play; Corsaro (2005) terms this the protection of interaction space and describes this as “the tendency on the part of preschool children to protect their ongoing play from the intrusion of others” (p. 140). This protection of play is seen more with older children, three years upwards, as generally most of these children are verbal, have developed strategies to initiate play with others and have developed or are developing strategies to maintain play. An approach by another person, whether child or adult, to join in, can disrupt the play that is ongoing (Corsaro, 1997a, 2005). Children have been observed to use a variety of strategies to protect their play from unwanted ‘visitors’. One possible strategy is to ignore the ‘visitor’s’ attempts to join the play and in some cases, this may cause that child to leave. Another strategy is for the children in the existing play to affiliate together, making a stand that they are sharing this event and implying that no others are welcome. This stand is often verbal and acts to declare their sense of being united such as “We’re friends” (Corsaro, 2005). A further strategy is to verbally say ‘no’ to an attempt to enter into the play.
Protection of established play was seen in this study of one mixed-age setting, although only observed with Bronte, the oldest child, and not with either of the other two children.

Bronte, 4 years 7 months, regularly chose to protect her play. This occurred regardless of whether her play was part of a group or a conversation at the morning tea table. Generally, when other children tried to gain access to Bronte’s play, Bronte would ignore their attempts and deny access in this way. During the incident below from a morning tea time, Bronte used several strategies to avoid approaches by other children to join in a play event:

It is morning tea time and the children are sitting down to eat. Bronte (4yr 7mth), already seated, opens her lunch box and looks around, looking at the lunchboxes of others while she sucks her fingers. Bronte removes her fingers and calls out to an adult “Looks what’s in my lunchbox” holding up a packet of chips. The adult nods. Alexandria (3yr 2mth) tries to pull a chair around to sit but the chair gets caught in the leg of another chair. Alexandria struggles with the chair while saying “I want to sit by Bronte”. An older boy, Cooper (4yrs 11 mths) stands and helps Alexandria with the chair and she sits opposite Bronte. At the same time, Bronte calls out “Skye, sit by me” and Skye (4 yr 2 mth) moves a chair to sit on the other side of Bronte. Bronte puts the chips down and picks up some cucumber to eat. She looks over at Skye and asks “Are you going to open your lunchbox Skye?” She turns and sees a boy (3yrs) who tries to squeeze in beside her “No” she says. Bronte holds up her chips and says to no-one in particular “look what I’ve
got”. Another boy of 4yrs shows Bronte his chips. Bronte responds with “But I like mine better, they come from a green packet”.

Approximately two minutes later:

Alexandria, sitting to the side of Bronte calls persistently “Bronte, Bronte”. Bronte looks at Alexandria after Alexandria has called her many times. She sees the chips that Alexandria is holding up to show her. Bronte doesn’t comment and looks away. Bronte picks up her chips and pulls hard to open the packet and turns to look at the book being read which is Where the wild things are (0104:82).

It is clear that Bronte deliberately used the strategy of ignoring an interaction initiation to protect her space from others.

On another occasion, Bronte also chose to ignore the attempts of a younger child, Eden, to engage with her until an adult directed Bronte’s attention to Eden’s attempt to engage with her:

Bronte moves to show the adult her paper and Eden (2yr 0mth) follows. Eden has some cheese in her hand and is holding it out to show Bronte. Bronte does not look at Eden although it must be evident to Bronte that Eden is there. A nearby adult calls to Bronte “Bronte, Eden just wants to show you that she has some cheese”. Bronte stops, looks and smiles, and then walks back to her spot at the table. Eden walks down the bank away from Bronte (0104:232).
The above two examples demonstrate Bronte ignoring the attempts by younger children who wish to engage with her. Bronte eventually acknowledged each of the children, once at the direction of an adult. It is interesting to speculate on Bronte’s reluctance to acknowledge either child. As outlined in Chapter Two, Corsaro (Corsaro, 1985, 1997b) found that children use a number of strategies to protect their space though ignoring attempts was not among the strategies that he specifically discussed. Perhaps this reflected the fact that in his writings he was referring to refusing entry into group play. In the data excerpts above, Bronte was not engaged in existing group play; rather she was on her own – once, she was listening to a story and on the second occasion working individually on an activity. It could be that ignoring these attempts was her way of choosing not to engage; of protecting her space. However, it could also be that Bronte was exerting power, demonstrating to these children that she was in control. Further research into protecting individual space when not engaged in existing play would be an interesting aspect to pursue.

In the next extract Bronte’s ability to control the play around her is again evident. The extract is from a sustained episode of play that had been ongoing for approximately 10 minutes. Bronte had negotiated the roles of people in the existing play. An adult, engaged in the play, attempted to draw in two younger children who were watching the play; however Bronte used her affiliation with the existing play group to block out the younger children and keep the play intact:
The adult sees Kyle (3yr 11 mth) watching and calls out “Excuse me Dr Kyle”. Bronte says “No, we are the doctors”. “Oh” says the adult. Kyle walks to the typewriter and types. Bronte gets some pretend scissors from the Doctor’s kit and pretends to cut the adult’s hair. While Skye (4 yr 2 mth) attends to the patient, Kyle comes to watch as does Nigel (4 yr 8 mth) (his family member being wrapped in bandages). Both Nigel and Kyle turn and leave.

While Bronte did not directly exclude the two children who had just approached, she used role status to affirm her status as the doctor and her affiliation to the group. She also did not involve them in the play, effectively ignoring their presence after she had stated her affiliation. These two children tried to enter the play again by using onlooker presence but again their presence went unrecognised by Bronte. The two children eventually left. Bronte’s use of status, affiliation and ignoring kept the play as it was and excluded the newcomers. As Corsaro (1997) has described, group affiliation is an effective way for children to protect play and Bronte succeeded in protecting the play she was involved in.

Bronte was also protective of equipment. Just prior to this observation, Bronte had had a collection of buckets that she was filling and an adult had come and taken them from her to share with others, against Bronte’s verbal objection. Bronte’s play objective here appears to have taken priority over sharing:

Bronte is filling up small buckets with water and paint. She puts one down in front of her. A 3-year-old girl comes over, stops and looks in the small
bucket on the ground. She does not say anything. Bronte notices her and says “No, that’s for Skye (who is nowhere in sight and nor had they been playing together). Bronte picks up the bucket and holds the jug and bucket and walks down the bank to the slide (0104:136).

It would seem that Bronte had developed strategies that enabled her to be a very skilled operator in this mixed-age setting so that she could protect both “her” play and “her” equipment.

6.2.1 Summary

Protection of play was only evident through the actions of the oldest focus child of this study suggesting that this is an aspect that develops with age.

It is clear that Bronte, the oldest child in this study, had developed some strategies for ensuring the successful protection of her play and employed these to maintain and continue existing play. She employed a range of strategies including choosing to ignore attempts by others to join in, verbally saying ‘no’ and also choosing to affiliate with another to show their united play. Clearly Bronte was a very skilled social operator in her context and this enabled her to control social interactions.

The attempts to enter into Bronte’s existing play were generally made by children who were younger than Bronte herself. This would suggest that these younger
children were still developing strategies for successful engagement in existing play. Corsaro (2003) found that as children gained experience in access strategies to existing play, the balance between successful play entry bids and protection strategies shifted so that there were more attempts to successfully join in existing play rather than instances of children maintaining their play by protecting their interactive space. Entry into existing play is the focus of Chapter 7.

Furthermore as most of Bronte’s attempts to protect play occurred with younger children rather than children of the same or older age, this may suggest that Bronte was more willing to allow children of the same or older age group to enter into play that was ongoing when compared to children of a younger age. It may also indicate that older children in this setting had learnt strategies that enabled them to successfully enter into play with Bronte.

6.3 Summary

This chapter has considered how children interact with others in a mixed age setting, with a focus on initiating play with others and protection of play.

When considering how children engage others in play, two clear insights emerge, both of which relate to age. In other words, age does seem to make a difference to:
• the techniques and strategies children used to engage others were different by the age of the child and;
• there was an age difference in the preferred partner that children wished to engage with.

These findings not only support those of earlier research, that indicate that age makes a difference to the techniques and strategies used in peer interaction, but this study provides some detailed examples of how these technique and strategies are used in this mixed-age setting of a Playcentre. Various studies have described that as young children age, they develop and refine skills verbally, cognitively, physically and socially therefore impacting on how they interact with others (Musatti, 1993; Parten, 1932; Smiley, 2001). Similarly as children develop verbal language their ability for communication increases (Papalia et al., 2001; Smith, 1998). The average age in which children start to express themselves through words is “between 12-15 months” (Smith, 1998, p. 190) and by the age of two and a half, most children will be using 2-3 word sentences (Smith, 1998). In this study, the two older children, Bronte (4yr 7mth) and Stephen (3yr 3mth), both had verbal skills that enabled them to articulate their thoughts. The youngest child, Natalie (18mth), was in earlier stages of developing verbal ability and therefore this impacted on her ability to engage with others verbally. Instead of words, Natalie used non-verbal communication along with using objects as a method for engagement. It was this use of objects that predominated in the way that Natalie engaged with others; at the same time, research has also demonstrated that objects
are a typical means of engaging the interest of others as well but that as a child’s verbal ability and vocabulary increased, the use of objects decreased (Holmberg, 1980).

In considering how other children in the setting responded to their peer’s behaviour, it was clear that in this mixed-age setting, children of all ages seemed to accept the different approaches made by other children regardless of their age. Object exchanges and non-verbal communication were acceptable techniques and generally accepted by others in this centre.

A further insight from the data presented in this chapter is that when selecting another child to engage with, there appeared to be a preference to engage with children who were older in age. Both the younger children in this study made more approaches to children who were older than themselves, rather than of a similar age or younger. The preference to engage with an older child was a factor in the approach. Even the oldest focus child in the study demonstrated a preference to engage with the older of the centre children (rather than the infants and toddlers) and generally did not engage with children under the age of three, unless prompted. It appeared that the older child was the ideal one to engage with.

Because the factor of age was an aspect when selecting a partner to engage with, it was not surprising that it was the oldest focus child who was most often the recipient of engagement attempts by young children. When requests for
engagement were made by younger children, this oldest child tended to choose to protect her play and exert power in this way, perhaps as a reflection on the number of requests for engagement that were made by others. As protection of play was only evident in the actions of this oldest focus child, I suggest that this was a tool that this oldest child used to abate these attempts for engagement.

Another aspect of the interaction behaviour that occurred only for this older focus child, and not for the other two focus children, was the ability to tailor approaches to children depending on the children’s ages. When this oldest focus child chose to engage with another, Bronte (4yr 7mth) altered her approach dependent on whether the child was younger or a similar age to herself.

Clearly, age was an important factor. It made a difference to the techniques children used to engage others in play; it made a difference to who was selected to engage with; and it made a difference to who children protected their play from.
7. Engaging with others: Allow me to play.

Alongside the desire for children to initiate and protect play as discussed in Chapter 6, was the desire for children to enter play that was ongoing. Children regularly made attempts to join in play or an activity that had already been established by other children. Doing so, required some knowledge of how to enter established play, a task that did not always end in success as other researchers have found (Corsaro, 1997a; Honig & Thompson, 1993; Lauter-Klatell, 1986; Munro, 1986).

Corsaro (2005) and Honig and Thompson (1993) have argued that children need to develop skills to enter ongoing play, particularly when initial attempts to enter are met with resistance. As noted earlier Corsaro (2005) examined access strategies (see Chapter Two) that children use including non-verbal entry, encirclement, onlooker response and direct entry. He found that a range of these strategies were used by children to enter existing group play and he argued that these access strategies “are clear precursors to adult skills that are used in similar settings” (Corsaro, 2005, p. 143). This would suggest that as children protect their play, other children can use this as an opportunity to practise strategies gaining access to the play thereby developing some essential skills.

In the mixed age setting used in this study, groups of children at play were rarely of the same age. Therefore, it was very likely that when the children in this study entered a group activity, they would encounter children of different ages. Not all of
the focus children made attempts to enter play that was already established. For example, the youngest child, Natalie (18 mth), did not make many attempts to enter pre-existing group play on her own. She would often watch these groups in play; Natalie’s actions and body language indicated that she was happy to watch from the periphery. As noted in the previous chapter, onlooker behaviour and awareness of others was a common occurrence for Natalie, particularly watching older children at play. Through this watchful behaviour, Natalie’s appeared to be building up her skills for initiating play with another child. Studies have shown that liked or popular children have more success in gaining access to group play (Putallaz & Gottman, 1981). This would indicate that children need to have developed relationships with the peer group to be considered liked and it may be that Natalie’s peer status would evolve with her successful initiations attempts. Additionally, Natalie’s ability to share joint understanding with other older children in the peer group seemed limited at times, and this may have prevented her seeking entry into existing play.

In the following example, Natalie (18mth) was part of the outer margin of the group. It shows her moving closer and listening to the conversation of the group of older children. Through this experience, she might have been learning what it meant to be part of a group; how to participate and how to continue the play:

Natalie walks over to the geodome where four children (all older than 3.5 years) are. She clasps her hands together and crouches nearby to listen to the conversation about a kiwi. (Jack, [3yr 8 mth] is dressed up as a kiwi and is
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coming towards them). The children run off and Natalie moves to climb down the steps. She sits on the top one and shuffles on her bottom to get down while watching the other children running off (0103:136).

One further example follows of Natalie self-selecting into an existing group play activity and making an entry bid:

The sandpit has not long been uncovered and there are two older children, Nigel (4yr 8mth) and Stephen (3yr 3 mth) present, who are digging in the sand checking for spiders. Natalie has been watching from a distance. She walks over and bends to pick up some sand and watches it fall as she turns her hand sideward. She claps her hands. She bends to pick up another handful of sand and walks towards Stephen – talking (excitable talk not words that can be distinguished) to him as she holds out her hands. She drops the sand and claps. Stephen looks and smiles. Stephen and Nigel continue digging; Natalie scoops up more sand (0201:189).

In this excerpt Natalie used ‘onlooker behaviour’ as she observed the group play before turning to show Stephen some sand, and thus making a bid to participate in the action. The bid was accepted through Stephen’s smile and this enabled her to become part of the small group and continued to engage in parallel play in the sandpit with the two older boys. This excerpt is particularly noteworthy as it was one of the few attempts that Natalie made to enter group play on her own. More commonly Natalie was drawn into existing play through an adult, and this was most often her mother as shown in this next observation.
Natalie’s Mother moves to console a child who is crying nearby. Natalie moves too, bending to look at Emma’s (1 yr 9 mth)’s face saying “ohhh”. When Mum sits, so too does Natalie. They push a train along the track. Natalie watches Emma. Natalie then tries to emulate Emma’s actions with her train but on a different track. She then moves her train to Emma’s track. Natalie sits and watches as Emma pushes her train down a ramp. Natalie moves in to have a go. Natalie pushes her train up the ramp. Mum picks her up and lifts her to the other side of the ramp. Natalie pushes her train down onto the track ramp but doesn’t release the train, by removing her hand, like Emma. She moves it hard and the train falls off. Paris (2 yr 1 mth) comes over to give Emma a tight cuddle and then Paris sits down at the track too. Natalie puts the train on the top of the ramp and Mum pushes it down. “Watch Emma’s” says Mum. Emma puts her train at the top of the ramp and lets it go; Paris does the same. Natalie giggles and then says “brrm” rolling her train up the track. “Wee” says Natalie as she puts hers at the top and lets it go – it rolls down. She laughs. She watches Emma do the same. Mum sings a song about a train and all three children stop to listen. The song stops. Natalie pushes her train down the ramp laughing. Emma stops moving her train to watch Natalie. Paris moves hers around the track. Natalie pushes hers down again. Tidy up time is called. Natalie continues with her train. Paris gets up and leaves. Emma continues pushing her train too (0101:344).

Natalie’s successful engagement with children around the same age as herself occurred through a series of steps. While initially following her mother to the group, Natalie made entry approaches by acknowledging the crying child,
observing the play, engaging in parallel play before moving over to track joining the play directly. Not only has this series of steps led towards successful entry into group play, the presence and facilitation of the adult, Natalie’s Mother, has provided essential help. Lauter-Klatell (1986) discussed the importance of the adult role in helping children interact together including focusing their attention as well as allowing them to engage. In Natalie’s case, her Mother moved her to a place that would not interrupt Emma’s play and also directed Natalie’s attention to the actions of Emma and Paris. The presence of the adult clearly helped sustain the interaction.

Overall, Natalie did successfully enter group play both by herself and with the assistance of an adult. The presence and facilitation of the adult ensured that the group play was lasting; in part this was because she assisted in regulating the children’s behaviour so it was suitable for the group play. As has been found in previous sections, Natalie seemed attracted to groups of children who were older than herself.

As would be expected from his age, Stephen made more attempts at entering into existing play. Stephen would regularly enter into existing play, observing first before slotting in and becoming part of it by taking an active role. Like his much younger peer, Natalie, Stephen also entered into play with both genders but generally when entering into a group, one, if not more, of the older boys would also be present suggesting that it was the older boys rather than the activity that Stephen was drawn to. The following excerpt illustrates Sean gaining successful entry to group play:
Stephen walks inside where a house is being built with interlocking blocks. He stands and watches. There are seven children of a range of ages present and one adult. All work together slotting the pieces in; Stephen starts building. The talk is about the house rather than where the pieces go. The blocks have been interlocked wrong and the construction is on a slant. Nigel kicks some of the pieces in to try and straighten the building. Bronte (4 yr 7mth) calls “no Nigel, it doesn’t say kicking”. Nigel (4 yr 8 mth) leaves. Bronte and Stephen continue to build. All children leave apart from Bronte and Stephen. This play episode continues for some time (0103:126).

On another occasion an adult facilitates Stephen’s entry:

Stephen is standing on the main carpet area watching two boys Aaron (4 yr, 9mth) and Kyle (3yr 11 mth) jumping on large foam equipment called playspace. An adult suggests to a wider group that they make a tunnel; one other child and Stephen join in. Stephen helps by pushing the foam mat along. He is at one end pushing and Aaron is at the other end pulling “We are moving it together, yeh, yeh, yeh, yeh”. The tunnel is complete with a foam bar raised above the mat. Stephen is the first to go under. He laughs as he goes through. It is Aaron’s turn and Aaron cartwheels over the tunnel. Stephen goes next and slides under the tunnel backwards. The adult says that they need some music and goes to put some one. Aaron and Kyle run to look as the adult selects some music. The boys run back. Stephen has been sitting on the foam mat watching. Stephen goes over the top of the foam structure. Aaron sings a rhyme about a duck and a poo. The boys all look at each other and giggle. Each boy waits in line, then goes over the top and does a forward
They start to be more active with their jumps/rolls and the tunnel falls down. Kyle says to the adult, his mother “they are being rough with it now”. Stephen stands to the side coughing. The adult reminds Stephen to put his hand over his mouth, which he does. Stephen leaves and goes to find his mother to say he is not well (0203:28).

On the whole, Stephen observed prior to moving into the group. When he moved into a group, he found himself a role such as pushing the foam mat along. It may be that through observing before entering the group, Stephen was looking for a way he could actively participate. By doing this, it removed the need for role negotiation and reduced the likelihood of his entry into the group being refused. Stephen also showed a preference for entering groups where older boys were present thereby suggesting that the older boys were an attraction for Stephen.

By comparison, there were very few observations of Bronte entering into existing play, and only one of her entering into existing pretend play. This is interesting as Corsaro (1985) found that children preferred to play with others rather than be alone and that if they were on their own, they would make attempts to join existing play. However this did not seem to be the case for Bronte.

Bronte is at the carpentry table with a piece of wood in a vice. She is holding a saw. There is also a group of children and adults sawing wood. She stands watching. The adult stops, Bronte takes hold and moves back and forwards. The adult helps her move her arm, she stops and Bronte stops and says “this is too hard” looking down at Kyle (3yr 11 mth). She sees Skye (4 yr 2 mth)
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at the water trough and moves over to look. Freddie (3yr 2 mth) is there and has a watering can. Bronte says, “You can pour with that Freddie”. Freddie (3yr 2 mth) looks up at her and leaves (0204:214).

Bronte joins the activity with a direct approach which appears to result in that child leaving the play. However, Bronte and her friend Skye remain engaged at the activity for a few minutes.

On another occasion:

Bronte wipes her hand together then walks to Nigel (4yr 8mth) who is cutting up paper by the typewriter. He appears to be having problems and is looking at the paper, then at the scissors then trying to get the scissors to cut. She reaches over and takes Nigel’s paper from him then asks, “Do you want me to cut this?” Nigel nods. Bronte cuts the paper while Nigel is writing on another piece of paper. Bronte says “there” and passes it back to him. Bronte pushes some keys on the keyboard. Nigel does this as well. The typewriter starts to beep. Bronte stops and she winds paper in it and turns it around. Nigel is trying to cut paper, stands, looks around and leaves (0304:79).

Like in the previous example, a direct approach was used to gain entry. By taking the scissors from Nigel, Bronte did not allow Nigel an option but for her to ‘join in’ his activity. Possibly, Bronte did not want to be denied entry into Nigel’s space and structured her approach in a way that she would be involved immediately. Nigel left the area as Bronte becomes involved with the nearby typewriter.
Bronte also used a direct approach with adults when wishing to join an existing activity. Here, Bronte can be seen telling an adult that she would like to participate in an activity:

Bronte stops at the table where the crayon activity was taking place. She kneels with one knee on a chair; she leans over and says to the adult there “I would like to do one”. Adult quietly explains what to do. The one other child, Stephen (3yr 3mth), who was present, leaves. Bronte stands and watches while the adult cuts the cellophane. The adult gives the Bronte the cellophane and Bronte stands and holds this while the adult irons another child’s completed crayon art between two sheets of paper. Three more children arrive at the group and sit around the table. Stephen returns to see his picture which the adult finishes ironing and gives to him. Bronte is still watching the adult and the other children (2, 3, 4 years), the older two who are grating crayons. Bronte picks up a crayon and draws on the cellophane saying, “I need paper”. Adult sees Bronte doing this and points to the grater, which she used to grate the crayons. The adult then picks up the grater and shows Bronte how to grate crayons. Bronte selects a different coloured crayon and moves it up and down the grater – the adult’s hand is on top of the grater holding it down. Bronte moves the crayon slowly. The adult removes her hand from the grater and returns to ironing. Bronte stops grating, draws on the cellophane and finishes, handing the cellophane to the adult. The adult takes the paper and irons. Bronte reaches her hand across the table to the iron and the adult lets Bronte help move the iron around the paper. When they have finished ironing, the adult holds it up for Bronte to
see. Bronte smiles, takes it, unfolds the two layers of cellophane and looks at
the wax image (0104:54).

Unlike the previous examples of Bronte gaining access to group play, where the
focus seemed to be on interaction with another, it seems that in this case it was the
activity that was of focus, as it turned out to be a solitary activity for Bronte; while
others joined the group, Bronte did not interact with them.

In this next extended extract from Bronte’s observations, Bronte can be seen to
attempt to gain access to existing play by being a ‘character’. This is the only
recorded observation of Bronte attempting to enter existing pretend play.

Bronte is ‘working in the zoo office’ and is listening to a conversation behind
her about the doll (called Lulu) being dressed. “Who’s Lulu?” asks Bronte.
Neither the adult, nor Alexandria (3yr 2mth) responds. Bronte returns to
typing. Alexandria takes her baby for a walk and returns to stand by Bronte
who ignores her. Alexandria continues to stand and watches Bronte typing.
She asks “Can I have a turn” pointing to the typewriter. Bronte does not
respond but looks briefly at Alexandria. The adult calls out to Alexandria
“Yes, you can after Bronte”. Bronte types and the adult leaves telling
Alexandria “don’t watch Bronte type”. Bronte says “Oh no” looking at the
play telephone and then picks it up saying “hello”. She has a ‘conversation’
on the phone to Mrs. Sands. Alexandria stands watching. The typewriter
beeps continuously (indicating a problem) and the adult returns and asks
“What is happening here Bronte?” Bronte says “I don’t know” and carries on
with her phone conversation. The adult tries to fix the typewriter but says
that “I don’t know how to fix this and stop the beeping”. Bronte says “Oh well, we’ll just have to use it like this”. Skye (4 yr 2 mth) comes over and stands beside the desk with the typewriter. Bronte says “no” to Skye but is not looking at her. Bronte adds “Alexandria is next”. Skye leaves. Bronte continues her phone conversation. She sees and hears that Alexandria is being dressed in dress-up clothes by the adult. Bronte turns and says “no, you have to go to the doctor”. “Oh do I?” says adult. Bronte asks the adult to get the doctor’s kit but the adult finishes dressing Alexandria. Bronte waits, watching. Kahu (4 yr 3 mth) comes and shows the adult (his family member) his mobilo creation. The adult smiles at Kahu. Bronte asks the adult again using a stronger, more commanding tone “can you go and get the doctor’s kit?” The adult says “I’m just off now”. The adult leaves. Bronte says “oh no, the phone again”. She answers it with “hello, Bronte speaking”. “Well yes, we can fit you in”. Alexandria (3 yr 2 mth) is in the background watching. A different adult comes in and says “Oh what do we have here, a doctor’s office”. “Yes” says Bronte. Alexandria had followed the adult but has now returned. Bronte looks at her and says “Come in, and I will fit you in”. Kahu leaves and Nigel (4 yr 8 mth) and Skye (4 yr 2 mth) arrive. Bronte hangs up the phone and types. Skye reaches over to the typewriter. Bronte is turning the typewriter roller and lets Skye take the paper out. Skye says “this is two papers” while holding the paper. Bronte says “two appointments I need to type”. Bronte puts it in and types. The adult draws Bronte’s attention to Alexandria who is waiting. “Oh no, she’s not got an appointment. I’d better make one”. Bronte takes out one piece of paper and puts in another piece. She types away. Alexandria puts on high heels and gets a bag. She put the baby back in the pushchair and wheels into the doctor’s room. She looks and then leaves. Bronte is typing away, rolling the paper up. Emma (3yr 8 mth) leans over the table to watch the typewriter.
Alexandria returns carrying her “baby”. Bronte gets up and waves the paper saying “Alexandria, this is your appointment”. She gives the paper to Alexandria and tells her to wait in the waiting room, pointing to a chair. Bronte tells Skye “there is lots of work to do. I bless (as said) you to do it”. Skye sits down, types, then answers the phone. Bronte walks Alexandria in the waiting room, and asks her to sit on the chair. She then returns to work at the desk. Skye stands and moves as Bronte approaches. Bronte sits and answers the phone. She looks up as she sees a Father (who is in the centre for the day) and she says “who are you?” The Father answers, saying his name and the name of his child. Bronte returns to work saying “Oh, I’ve got patients waiting”. She stands and calls Skye who is told “there is lots of work, I bless you”. She walks to the waiting room and gets Alexandria by calling her name and leading her to the bed. She takes Alexandria’s baby and puts it under her top. It doesn’t fit and both she and Alexandria (3 yr 2 mth) both try to push it under without a word being exchanged. Bronte pulls the baby and asks Alexandria “can you unzip your top”. The baby is put inside the top and the top zipped. The baby is pulled out. Bronte says “there’s your baby”. Bronte gets a white sheet and wraps the baby in it giving it to Alexandria saying “you need to be careful with it”. She looks at the wrap and says “Oh, it’s not tight enough” and takes the baby back from Alexandria and rewraps it. Alexandria is not talking but watches Bronte. Bronte holds the baby and walks to the adult and says “Can I make your appointment”. The adult agrees by nodding and Bronte takes her and the baby to the waiting room and returns to the typewriter. Skye (4 yr 2 mth) stands. Bronte sits and puts paper in and types. Skye (4 yr 2 mth) moves to the nearby keyboard. She stands and walks holding paper. She goes to the collage area and gets some other paper. She folds it, returns saying to an adult who is looking “You can come in”. The adult says “I’ll just finish
Bronte stands waiting for a minute. Alexandria has moved away with her baby. Bronte waits, holds the thin piece of paper up and says “This is my gun and I’m going to shoot you with it if you don’t come in my room”. The adult moves to come in and Bronte says “I’ve just got to text someone” and moves to the phone pressing the numbers. The adult waits nearby.

This very lengthy and detailed example of imaginary role play highlights several key discussion points. As entering into existing play is the focus of this section, this will be addressed first. As noted earlier, Bronte did not make many attempts to enter into other children’s existing play. This makes the extract above quite unique; in it Bronte attempted to enter into existing dramatic play between an adult and a younger child. Initially this was not successful, and Bronte subsequently chose to ignore Alexandria’s attempt to join in play with her. However, Alexandria’s persistence, along with the arrival of another child, may be the reason that Bronte eventually chose to invite Alexandria to join in by assigning her an active role in the play. The two children became involved in a lengthy episode of pretend play, over the course of which drew others of mixed ages for sustained activity.

Throughout the above extract, Bronte led the course of the play. It was evident that Bronte had an agenda for play and assigned roles to children as they arrived, with these children either following the assigned flow of the play or leaving the area. Interestingly, when an adult did not respond immediately, Bronte’s tone changed, and she tried another method of coercion by holding up a piece of paper as a ‘gun’.
and vocalising her intentions ‘to shoot’ if her request is not followed. When the adult makes an immediate response following Bronte’s ‘invitation’, Bronte then made the adult wait, effectively ignoring her. Again, Bronte is using control and power in her interactions.

A further interesting point in terms of the above extract is the detail in this imaginary play episode. Clearly, this was a busy doctor’s office with telephone calls being taken, appointments being made, patients waiting and a baby being born; a real-life context created within this mixed-age setting. Imaginative play has been much researched (i.e. Corsaro, 2005; Duncan & Tarulli, 2003; Frost et al., 2001; Smith, 1998) with Vygotsky stating that it is through play that “the child behaves beyond his average age” (Vygotsky, 1978, p. 102) and further stating that imaginative play “is a major source of development” (Vygotsky, 1978, p. 102). Together the children explored the nature of a doctor’s office where they became characters in the environment that they visit in real-life, possibly allowing them to theorise about these roles.

An awareness of literacy is also evident in the above extract. Use of the typewriter through the typing of individual letters and characters, use of the telephone for numbers and the ‘reading’ of text showed traditional literacy and numeracy development occurring. Technological literacy, so important for 21st century learning, was seen developing with the use of the typewriter, the phone for calls as well as texts.
In terms of entry into existing play, it seems that all Bronte’s attempts at entry into this play used a direct approach, questioning or assigning herself a role vocally. She selected small groups or individuals rather than large groups to join. While research would indicate that children generally prefer to join in, rather than play alone (Corsaro, 1985), during this study Bronte did not indicate a preference for joining big groups. There could be many reasons for this including factors such as personality or birth order which have not been explored in this research. Another possibility may also be that as Bronte was one of the oldest children in the centre, she was regularly involved in group play that she had established with the result that she had no need to enter into ongoing play as others were attracted to her activities.

7.1 Summary

Children’s entry bids into ongoing play with others have been the focus of this chapter. Many of the strategies and techniques that children used to initiate play with others, as discussed in Chapter 6, were evident when attempts were made to enter existing play with others. However, as noted above, entering established play was not straightforward and required practice in order to develop skills. Encountering other children, who protected their play, assisted the development of these skills and strategies.
The data presented in this chapter make clear once again that age was a factor when children attempted to enter into established play. Clearly, each of the focus children in this mixed-age setting used different approaches to enter into existing play with the older the child displaying a wider the range of strategies than the younger ones. Natalie, who at 18 mths, was the youngest focus child, used onlooker behaviour before making a direct attempt at entry into established play, which generally involved older children. If this bid was accepted, she would engage in parallel play. It may be that these older children recognised that Natalie’s presence would not disturb the ongoing play so it was ‘safe’ to accept her entry. On the whole, Natalie tended to be drawn into established play through being with her Mother. This adult presence not only drew Natalie into the group play, but also tended to sustain the play episodes particularly when play occurred between toddlers. The adult acted as a facilitator ensuring that everyone’s needs were met so that the play ran smoothly.

Like Natalie, Stephen (3yr 3mth) used an onlooker stance before making a direct entry bid. His next strategy generally was for him to assign himself an active role in the play, rather than negotiate his presence with the group, suggesting that his experiences had led him to believe that becoming active in the play was the most successful way to engage in an established group.

Bronte (4yr 7mth), the oldest focus child, generally did not join into existing play. However, when she did make play entry attempts, they were generally verbal entry
bids that were very direct with a clear purpose in terms of her role, often structured so there was no option but for the group to accept her entry. Clearly, this strategy worked effectively for her regardless of whether she engaged with adults or children.

In this mixed age setting, it seemed that the younger two focus children were attracted to existing group play that involved older children – age once again being a factor. This may explain why Bronte, the oldest child, did not make many attempts to enter existing group play. Bronte was the oldest, and set the direction of the play, with others coming into the play, rather than entering others’ pre-existing play.

Overall, the data and examples on entry into existing play presented in this chapter have once again highlighted the impact that older children have on the nature of interaction in a mixed-age setting, as younger children generally made more approaches to established play when older children were present. In this way, both older and younger children were afforded the opportunity to develop skills and strategies that would allow them entry into this play.
8. Being Together: Just the two of us

A friendship is a relationship between two children and “best friendships are special relationships in childhood” (Sebanc et al., 2007, p. 81). In childhood, friendships are initially thought to develop because children are within the same proximity and have similar interests in play. Dunn (2004) and Ladd (2005) both noted that friendships evolve over time and are the first relationships that children have outside of the family. Dunn (2004) further argued that it is through friendships that children develop their independence as they begin to negotiate and regulate behaviour of both others and themselves.

As children develop and age, the quality of friendships deepens and children cultivate a special friendship; this is often referred to as a best friendship by the children involved. Erwin (1998) noted that by the age of four, “children understand the concept of best friend and apply the term to a select member of their peer group” (p. 60).

As noted in Chapter Two, friendships have been observed to occur with infants. For the purpose of this study, I have used the term special friendships to refer to dyadic interactions that are maintained and that children would possibly term “best friends”.

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While each of the case study children interacted with others, one clear special friendship was noteworthy. This was for the oldest child, Bronte (4yrs 7 mths), who engaged with many children during all three observations but appeared to consider Skye (4yr 2mth) as her special friend with whom she shared many reciprocal actions. Stephen (3yr 3mth) possibly was also trying to develop a closer friendship with Kahu (4yr 3mth) but as initiations were generally made by Stephen towards Kahu, this relationship seemed one-sided rather than reciprocal and therefore I did not deem this to be a special friendship.

Bronte and Skye demonstrated a number of behaviours that were not evident in the interactions of the two younger focus children. These behaviours included a number of actions that would be consistent with a special friendship including greeting each other, playing together, conspiring together, conflict and sharing an on-going connection.

8.1 Greeting each other

During the sessions that Bronte and Skye attended together while I was undertaking the observations, they greeted each other with the child arriving last finding the other and saying ‘hi’. They did not necessarily play together immediately after this but the initial hello appeared to be a regular ritual. The data excerpt below is typical of this behaviour:
Bronte is at the playdough table with an adult and a number of other children of mixed age. Skye (4 yr 2 mth) arrives and runs to hug Bronte’s back. Bronte turns and says “hi Skye”. Skye wanders off. Bronte continues kneading the playdough (0204:20).

This seeking out to say hello did not occur for any of the other focus children during my observations. It would suggest an on-going connection between these two children.

8.2 Playing together

Friends interact together – they play, laugh, talk, and have fun together. Friends seek each other out to play (Munro, 1986). As the friendship develops, and as children age and develop, the signs of friendship become more evident in everyday play (Corsaro, 2005; Erwin, 1998).

Bronte and Skye engaged in many activities together. In the following example, they were jointly engaged in painting as well as singing a made-up song together. They engaged in dialogue, negotiated the structure of the activity and giggled and smiled together.

Skye is at the painting easel. Bronte starts painting on the easel next to her.

“Bronte, Bronte, do you like this colour” calls Skye (4 yr 2 mth) who has used three different shades of blue. “Which one?” asks Bronte (referring to
which shade of paint). Skye points and Bronte says “yeah”. “It’s like the sky,” says Skye. Skye moves to look at Bronte’s painting. Nigel (4 yr 8 mth) stands by watching. Bronte finishes and tries to unpeg the painting from the easel but can’t. Skye puts some of her blue paint on Bronte’s painting. “Skye” calls out Bronte in a sharp voice. Skye stops her painting. Bronte returns to painting on the same picture. Skye is singing. Bronte says “Skye, don’t sing until I’m finished painting”. Bronte starts singing, then stops again to tell Skye to stop singing. Bronte then starts singing again, stops to say “I’m nearly finished painting” and then starts singing again. Nigel has moved to the other side of the easel and is painting. Both girls sing ‘over the Rainbow’. They sing ‘1,2,3’ and wiggle hips side-to-side, giggling, singing and looking and smiling at each other as they do so. Bronte goes to Skye’s easel and says, “Hey your picture looks really good”. They return to singing with some made-up words to a tune. Bronte continues painting. Skye gets some wood to paint from the nearby carpentry table. In a little while, Bronte finishes her painting and moves to the carpentry table as well (0204:186).

Some very clear characteristics of friendship are shown in the above example including ongoing conversation and a made-up song which both girls jointly sang. Consultation occurred as Skye checked the paint colour, and Bronte later gave support to Skye by saying “Hey your picture looks really good”. This is consistent with the qualities of friendship that Townsend (1992) identified as important to successful friendships; behaviours such as co-operation, consultation and positive support. Occasionally, Bronte appeared to seek to control Skye by telling her not to sing. Bronte also alerted Skye that soon Skye will be able to sing. This behaviour
suggests also that Bronte may be working out aspects of the friendship, but also wanting the play to continue, she lets Skye know that very soon she too can sing. Skye’s compliance with Bronte’s request is also indicative of a friendship as friends are more likely to comply with each other’s directives (Newcomb & Brady, 1982). It appeared that the two were mutually enjoying this interaction and having fun, an important component of friendship.

8.3 Conspiring together

In another display of special togetherness Bronte appeared to conspire with her friend Skye. This did not occur with any other person. This conspiracy could be seen as their friendship attempt to “achieve autonomy from the rules and authority of adult caretakers and to gain control over their lives” (Corsaro, 1997a, p. 131). It was also something that these two shared, similar to a secret, that no one else was part of. It was special to them.

For example, the morning tea routine was standard across all sessions. The children selected their lunch box and sat down to listen to one or more stories, generally selected and read by an adult. Children were encouraged to remain quiet during the story reading. There was little change to this routine. However, as can be seen in the following excerpt, Bronte and Skye turned this routine into a special time of togetherness when they attempted to control an aspect of the routine by selecting their own rubbish bowls:
At the morning tea table, Bronte looks at the rubbish bowls and says to Skye (4 yr 2 mth) in a quiet voice “let’s change over bowls. Let’s get the blue”.
The green one is closer to them. Skye stands and reaches the bowls moving them around so that the blue one is closer. Bronte smiles. (0204:143).

By whispering together and the small act of changing the rubbish bowls, the two have conspired together to alter their environment.

Another example of the same friendly “conspiratorial” action occurred one morning when the two girls tried to go outside. Outside play was a much-favoured activity but was not offered prior to morning tea. On this particular day, it was not offered at all. Towards the end of the session, Bronte and Skye worked together to attempt to go outside:

After finishing painting at an art table on the deck, Bronte whispers in Skye’s (4 yr 2 mth) ear and they try to loosen the deck covers leading to outside. They start to sneak out through a small opening they have made. An adult says, “Don’t go outside”. Bronte says, “It’s not raining”. The adult says “It’s slippery, too much for the little ones”. “We are old enough,” says Bronte. The adult says “But if you go out, so will the others”. Bronte, persevering, says “we’ll be quiet”. A spider distracts Bronte. The adult and other children, who have arrived, discuss this spider (0204:254).

This attempt to control aspects of their environment together gives an indication of how Bronte and her special friend, Skye, were strengthening their relationship.
8.4 Conflict

A number of writers have argued that conflict is essential to the developing notion of friendship (Corsaro, 1985; Dunn, 2004; Hazen & Brownell, 1999; Stephen, 1994) and that learning about, and managing conflict is imperative to developing sustained friendships as children learn to share and negotiate with each other, balancing out their own desires with those of their friend (Dunn, 2004; Erwin, 1998; Hazen & Brownell, 1999). Conflict that is resolved is a clear indicator of friendship as friends want to resolve differences in order to interact together once more (Newcomb & Bagwell, 1995). Therefore, when considering friendships and special friendships, it is necessary to consider conflict and how disputes are resolved.

In the following excerpt, Bronte and Skye appeared to be having a disagreement. Several items of ownership were mentioned when sharing their displeasure with each other.

Bronte (4yr 7 mth) is on the rocking horse/chair in the main carpet room. There is lots of space and the floor is clear. Nigel (4yr 8mth) is nearby and has just handed Bronte the phone that she had asked him for. Bronte has placed the phone beside her. Skye (4yr 2mth) comes over. Bronte is saying “on your marks” then changes voice to a whine “Skye, move, that’s where I am going”. Skye moves backwards and Bronte says “No Skye” an even whinier tone “No, I want that space, don’t stand there”. Skye moves a little further back leaving a big gap between Skye and Bronte. Bronte says “Skye, don’t”. Skye says, “You are not coming to my house”. Bronte says, “You’re
not coming to mine and you won’t get to see Lewis (Bronte’s baby brother)”. Skye says, “you’re not my friend” as she walks away. Bronte calls out “You not mine ever again” as Skye walks to the dough table and Nigel follows Skye. Bronte rocks the rocking chair so it moves forwards and she moves it across the inside carpeted floor (0304:52).

It was not clear what this disagreement had emerged from and it may have been carried over from a previous interaction together. Children of this age are developing these friendships as “relationships that last across time and space” (Edwards, 1986, p. 46) as children’s peer interactions develop sustainability and continuation rather than the more immediate ‘here and now’. It is clear that these two children’s relationship extended beyond session times as each stated that they would no longer be going to each other’s house. Bronte also brought in a valuable ‘item’ into the discussion by informing Skye that she will no longer get to see Lewis who is Bronte’s baby brother. This dispute ends as Skye walked away and Bronte continued rocking in the rocking chair. Hazen and Brownell (1999) write that unresolved conflicts in dyadic peer groups are likely to be ended through the use of “aggression or in one or both children leaving the scene of the play” (p. 238). In this case, aggression was not used but one child did leave the play area.

Within twenty minutes of the above observation, Bronte had completed some painting on her own before approaching Skye again:

Bronte moves back to the archway then out to the deck where five children are playing with a flour and water gloop mixture. Skye (4yr 2mth),
Alexandria (3yr 2mth), Nigel (4yr 8mth), Kahu (4yr 3mth) and Hayden (1yr 1mth) are around the table. Bronte stands by Skye and just watches. Bronte says, “Even I’m not doing that”. An adult appears with a bowl; Bronte takes it and kneels at the table. She watches, but does not say anything. Bronte turns to an adult and says, “Skye’s not sharing”. Hayden leaves. The adult asks Skye to share. The adult facilitates a discussion about what they are doing. It is quiet, everyone is working. Bronte watches, stands and reaches for a jug, pours water and says, “I need a spoon for mixing”. An adult says, “Skye, you’ve taken Bronte’s spoon”. Skye says “But it’s for the flour”. The adult explains that there is a shortage of spoons and that everyone has to share. Bronte has her hands on her hips during this conversation. She smiles (as if in triumph) at Skye as the spoon is handed to her by the adult, who has taken it from the flour bowl after Skye had returned it. Alexandria leaves the group. They continue to stir and mix, each busy with their own bowl (0304:101).

In this exchange, Bronte approached the group using a variety of access strategies rather than a direct entry bid because she may have been tentative about the response she would get from Skye. First Bronte watched, placing herself in the area of play. Secondly, she attempted to become involved by stating that “even I’m not doing that” but her later actions demonstrated that in fact, she did want to be involved in the activity. Bronte continued to watch and then attempted to become involved by trying to control Skye’s behaviour and telling an adult that Skye was not sharing, when in fact all of the group, apart from Bronte, were busy with their own gloop. Using this strategy, Bronte managed to gain access to the group via an adult. The access strategy has also meant that Skye had to share her gloop mixture.
with Bronte. There was not a lot of interaction between Bronte and Skye in this example and although Bronte did smile at Skye, this was not reciprocated; possibly due to the triumphant nature of Bronte’s smile. It was not until a little later, at morning tea-time, that the conflict appeared to be resolved:

Bronte goes and gets her lunchbox and wanders to sit next to Skye (4yr 2mth). “Skye we have the blue rubbish bowl” Bronte says pointing. They sit quietly and eat (0304:107).

By moving to sit beside Skye, and pointing out the blue rubbish bowl, Bronte was calling on a history that Bronte and Skye shared together at other mealtimes when they had purposely ensured that they had the blue rubbish bowl to use. This item is a shared item in the friendship, an item of affiliation that they had negotiated before. It would appear that the conflict had ended.

Edwards (1986) states that children need to understand how to re-engage with a friend after a fight and that doing so can involve considerable problem solving skills. It is these conflict resolution skills that are indicative of a friendship (Newcomb & Bagwell, 1995). After the original dispute, Bronte had attempted to interact with Skye and tried a number of approaches before finding one that worked.
8.5 Summary

I have argued in this section that Bronte and Skye appeared to have formed a special friendship which appeared to exist outside the Playcentre setting as well as within it. These two children had rituals that existed only between the two of them such as greeting each other every session and sharing the ‘special’ rubbish bins. They engaged in play together, seemingly maintaining joint attention as they created nonsense songs, supported each other with comments, and found ways to resolve disputes.

The data in this chapter would suggest that special relationships can occur in a mixed-age setting. In this case, the special relationship was between two children of a similar age. This is consistent with Walden, Lemerise and Smith’s (1999) finding that similarity in age and gender were “strong predictors of friendship” (Walden et al., 1999, p. 364). Within this study, special friendship was only observed to occur within the same-age group rather than cross-age, suggesting that within a mixed-age setting, it would be important to ensure that there are sufficient children of similar age and gender so that these friendships can be formed.
9. Conclusion

“I end with a plea for adults, youth and kids to break down the barriers of age segregation that exist in modern societies” (Corsaro, 2003, p. 217).

9.1 Introduction

There have been many developments in the world since industrialization; in some ways the two historical times of the 1800s and the 2000s are unrecognizable – new ways of working and living have changed the Western world. The traditional one-room school house would no longer work for the masses of children in education settings. Education, in both its both learning and teaching functions, has shifted focus with there now being a need for people to be life-long learners to keep up with the pace of changing technology and discoveries. Not only has there been a shift in what we teach, but there is also a shift in the way we group learners, particularly in primary and secondary classrooms which cater for high numbers of learners, with age-band groups being used for manageability.

Change is not a bad thing but are children missing out by spending so much time with same-age peers? Are there benefits from mixed-age education? This study does not fully answer these two questions but, by setting out to consider the nature of children’s interactions in one mixed-age Playcentre, this explorative qualitative
study has produced evidence to suggest that indeed, there are benefits to mixed-age early childhood education.

9.2 This Study

This study aimed to explore what life was like for children when interacting with children of differing ages in one early childhood setting. It also aimed to provoke thinking within the early childhood sector about the learning experiences that may come from mixed-age interactions.

In reporting the results, I have presented a collection of snapshots from the children’s experiences in the hope that this would enlighten the life-world of the Playcentre as inhabited by the three focus children, Natalie, Stephen and Bronte. As a result, the findings say as much about the individual focus children as they do about mixed-age education; through the pages of this thesis, the life-world of the focus children should have become a little familiar and ‘known’ to readers.

9.3 Summary of findings

The data from my study provides the following insights about the nature of social interactions among the children in the mixed-age setting of the study Playcentre.
Firstly, age made a difference to:

- Who spent time observing and imitating others;
- Who was observed and imitated;
- The techniques and strategies children used to engage others;
- The preferred partner that children engaged with;
- The perceived leaders of the centre.

Secondly, the mixed-age setting of this study appeared to offer benefits to children of all ages, most specifically providing models and teachers for younger children and leadership opportunities for older children.

Thirdly, a sense of togetherness was evident and demonstrated through the social interactions by the children in this Playcentre community.

Fourthly, special friendships occurred; in this instance between older children of similar ages.

Furthermore, this study has highlighted that all children were safe in the mixed-age environment. In other words, younger children were not in danger from the older children, nor was the older children’s play disrupted by the younger children; both of which can be common and unfounded concerns about a mixed-age environment.
9.3.1 Watching to learn

It was evident that younger children were drawn to older children, and that age was a factor when children were choosing which peer to observe or interact with. The first two data chapters considered how children in this study centre interacted together, watching and learning from each other; this highlighted that older rather than same age or younger children were more likely to be the focus of younger children’s attention. For Natalie (18mths), the youngest of the three focus children, imitation and observation of older peers was a notable feature of her time in this environment. When selecting a peer to observe, the element of age became more apparent with all three of the focus children choosing to observe, and in the case of Stephen imitate, actions of the older Intermediate School children next door to the Playcentre.

The factor of the age was also evident when selecting a peer to imitate. Again, it was the older child who was likely to be imitated. As was noted in Chapter Four, delayed imitation may have meant that there were instances of imitation that occurred but were not recorded by this researcher. However, the instances that were recorded supported the notion that it was the older child who was the model for the younger child. With older children present, children did not choose to imitate others of the same age. Further study would help determine if this type of observation and imitation can lead to more complex play as has been suggested by other researchers (e.g. Di Santo, 2000; Mounts & Roopnarine, 1987).
9.3.2 Rules and responsibility

Each of the three focus children was able to exhibit a sense of social responsibility within their mixed-age setting. The youngest of the three focus children was able to regulate others behaviour effectively while the two older focus children seemed to take extra responsibility for ensuring the safety of younger members; indicating that they were aware of age differences that existed.

9.3.3 Engaging with others

The aspect of age was further highlighted when considering how children engaged with each other: Older children were the preferred partner to engage with. Clearly, the strategies used to initiate play developed with age. The youngest focus child, Natalie (18mths), was developing her vocabulary and therefore tended to use objects to engage others. The older two focus children, Stephen (3yr 3mth) and Bronte (4yr 7mth), who each had a developed vocabulary, were both observed to initiate play with others verbally; with Stephen showing a preference for joining in existing group play. All of these approaches were a way of initiating play with others in the centre.

Furthermore, the eldest focus child, Bronte (4yr 7mth) showed an awareness of age as she tailored her approaches when engaging other children. Her more direct and commanding style of engaging older peers was softened to an invitation approach that she used with younger members of the centre.
9.3.4 Togetherness

As noted in Chapter Two, togetherness is about community; it comes from a sense of belonging to and maintaining the group (Van Oers, 2003). Van Oers and Hannikainen (2001) argue that people show “signs of an awareness that they belong together” (p.103) in their context including through playful activity, use of language and concern for one another. These signs of togetherness were evident in this study as the children participated in centre life through adaptive behaviour of the children, the regulation of others’ behaviour, watching others, imitation of others and pro-social behaviours. Each of these factors contributed to the group sense of community while the acceptance of unspoken rules showed evidence of the shared understandings (Rogoff, 1990) among this group of children. Research has shown us that children learn better co-operatively, and that learning is enhanced when children are in an environment where they feel safe and trusted (McClellan & Kinsey, 1997; Van Oers & Hannikainen, 2001); the children of this study Playcentre had indeed created such an environment.

9.4 Implications for the children of this setting

So, what do the above findings mean for the children of the centre? And what do they say about the nature of children’s interactions in a mixed-age setting?
9.4.1 The younger children

As seen through the experiences of Natalie (18mths), being in a mixed-age setting provided opportunities for her to observe, imitate, interact with and practise engaging older, more experienced others in the centre environment. She also tended to make more approaches to the older children than to children her own age: Research has shown that this is beneficial (Howes & Farver, 1987; Katz et al., 1990; Mounts & Roopnarine, 1987) as it is linked to strengthening cognitive development. Additionally, the younger children, including Natalie, did not seem ‘at risk’ of being hurt in this environment. They were kept safe and able to participate when they chose to and did not appear to be overwhelmed by the older children which Katz (1995) has noted to be an unfounded concern that parents often have.

9.4.2 The older children

Like Natalie, both Stephen (3yr 3mth) and Bronte (4yr 7mth) were active members of their Playcentre world. Both were skilled operators at entering into play with others, with Bronte demonstrating a vast range of skills and expertise. Stephen appeared to be attempting to develop a special friendship with an older boy, Kahu (4yr 3mth) and demonstrated persistence as he used a number of strategies to attract this boy’s interest. On the other hand, Bronte had already developed a special friendship, which was with a girl of a similar age to herself, Skye (4yr 2mth). Bronte shared many interactions with Skye and both these children had the opportunity and the skills to engage with children of all ages.
Not only did these two older focus children engage in play with others but both were the subject of observation and imitation by younger members of the Playcentre setting. There were no obvious signs from the older children that they were bothered by this attention and their play continued uninterrupted. Although it would be speculative if I were to draw conclusions about the impact of being the focus of younger children’s attention, it is worth noting that Mounts and Roopnarine (1987), who extensively investigated this aspect, reported that older children find it rewarding to be the subject of this attention.

As well as being the subjects of observation and imitation, the older children of the setting also scaffolded younger children’s learning. Taking on the “Tuakana role” (Pere, 1987), the older children assisted the younger, the “teina”, to help them achieve. While of the occurrences of Tuakana-Teina interactions, or scaffolding, were not as numerous as the literature would lead one to believe (Katz et al., 1990), some occurrences of this nature were observed.

Additionally, children showed an awareness of age differentiation. Older children accepted the non-verbal approaches of the younger children; and did not seem to object to being the focus of these children’s attention from time to time. This awareness of age was also evident in the way that the oldest focus child, Bronte (4yr 7 mth), initiated play with others, using different approaches depending on the age of the child – a nurturing approach with the younger members of the centre, and
a more direct approach with older or same-age peers. Certainly, it did not seem that being in the presence of younger peers disrupted the play for the older children. It has been this ability for age differentiation that has been noted to be associated with an increase in pro-social skills for older children in mixed-age environments (McClellan & Kinsey, 1997).

Furthermore, the older children seemed to carry a leadership role among their peers, which I argue, was an unspoken assignment made through the attention of the younger children. Bronte (4yr 7mth), the oldest focus child in this mixed-age study, appeared to be a leader in the world of this Playcentre. Bronte, and other older children, were the attraction and the draw card for interaction and observation. Bronte chose whether to accept the initiation attempts of the younger child and this gave her some power. Leadership in mixed-age settings has been found to be a notable benefit for older children with Katz, Evangelou and Hartman (1990) arguing that facilitative leadership is more evident in a mixed-age setting when compared to a same-age setting.

Age and its significance for social experience in a mixed-age setting has been the focus in this study; the observations indicate clearly that age did indeed make a difference to the interactions that occurred within the mixed-age setting studied. Yet when it came to having a special relationship, in this study, the only relationship of this kind was formed between two similarly aged children (Bronte 4yr 7mth and Skye 4yr 2mth). This leads to the suggestion that there need to be
children of similar ages and genders on session together so that these special relationships can be built.

Many families within the Playcentre Community wonder what social interaction opportunities there are for older children in playcentre sessions and this study has made a start towards answering this question. Learning leadership skills and how to be socially responsible are two such skills arising for the oldest child of this study.

9.5 Insights for mixed-age early childhood settings

Reflecting on the insights summarised above, the following points are relevant to practice in mixed-age early childhood settings:

- A need for balance in the make-up of the mixed-age settings seems indicated so that not only are there children of different ages within the setting, but also children of similar ages. This would possibly cater for special friendships, allowing them to develop as children age. It would also ensure that there is a range of peers to interact with, observe and to lead;

- Observation and imitation of peers, particularly older peers, provide valuable learning opportunities;
Initiating play with others can provide valuable learning opportunities for children to develop skills and strategies to initiate or enter into protected play. It is through observation and initiation attempts that children develop effective strategies to initiate and maintain successful interactions; watchful adults will recognize the children who need additional support.

Conflict is essential for peer development and special friendships. Children need to learn how to successfully resolve conflict. Once more, adults need to be ever watchful but allow children the opportunity to resolve disagreements themselves, where possible.

Opportunities for children of mixed-ages to interact are beneficial for children. If a mixed-age environment is not possible, it may be feasible to find some time during the day/week when mixed-ages can be brought together. It may be that in a full day care centre, an under 2 centre and an over 2 centre can mix together for an afternoon thereby experiencing some of the benefits that arise from mixed-age interaction.

9.6 Limitations

As with any study, this study has its limitations. It is a small scale observational study with findings that cannot be generalized. The purpose of this study was to explore the nature of children’s interactions in a mixed age environment, detailing their social experiences. This exploration has produced insights into some aspects of interactions that occurred within one mixed-age setting. Further research, on a
larger scale and across a number of settings, would be needed to illuminate aspects such as to whether more complex play would result for younger children through observation of older, more experienced peers as well as any benefits that may come from being observed including increased self-esteem.

It is important to note that this has not been a comparison study. For this reason I recommend a comparative study considering both same-age and mixed-age settings and an analysis of any differences in interactions that may occur between the two.

### 9.7 Conclusion

Children actively create and participate in their peer culture. Mixed-aged settings have their own uniqueness and this study has shown that such a setting provides opportunities for the development of a sense of social responsibility and a sense of togetherness. The nature of children’s interactions in mixed-age settings are empowering for each individual as they provide opportunities for the younger to learn from older, while older and more experienced peers can lead the group.

In the opening quote for this chapter, Corsaro (2003) pleads for the end to age segregation. Read in context, his quote refers to age barriers of all kinds from grandparents to young children so that all ages may mix freely and learn from each other. Early childhood settings are no exception: children can learn together regardless of age. This study has shown some of the richness of children’s interactions in one such context.
References


Peters, S. (2003). "I didn't expect that I would get tons of friends ... more each day". 
children's experiences of friendships during the transition to school. *Early Years*, 23(1), 46-53.


Appendix A: Information and Consent for Playcentre Association
INFORMATION SHEET FOR ******** PLAYCENTRE ASSOCIATION

Project Title: Mixed Age Settings: Younger and Older learning together

Researcher: Tara Fagan, School of Education, Victoria University of Wellington

I am a Masters of Education student at Victoria University of Wellington. This letter and information sheet is an invitation for the Wellington Playcentre Association to participate in my study.

My research is about young children’s interactions within a mixed-aged early childhood setting. As part of my study I would like to observe children interacting using pen and paper notes and video recording. My fieldwork will involve spending a total of 11 sessions in the Playcentre. I will also discuss with parent/educators my interpretations of collected data and seek their feedback.

If you agree to participate in my study this means you:

- Are happy for me to invite a Playcentre in your association to be the participating centre in the study.
- Agree to allow me to invite parents/educators from the chosen Playcentre to consent to recording (using a video camera) and transcribing their interactions with children, and interactions among children. Parents/Educators and their children will have the right to withdraw at any time until the end of the data collection.
- Permit my Supervisors, Dr Carmen Dalli and Dr Margaret Brennan, both of Victoria University of Wellington, to view original field notes and findings.
- Will receive a summary of the findings of the study when this is completed.
Agree to the publication of the findings of this study in academic or professional journals and/or presentations at academic or professional conferences with the understanding that any references that could identify the parent/educators, children, or the name of the centre, will be altered or removed.

The parent/educators of the centre may withdraw from the study at any time until the end of the data collection period. In this case the parent/educators may ask for the data to be returned or for it to be destroyed. Parents may also request that specific parts of the data are to be excluded from the study.

My research is being conducted under the supervision of Dr Carmen Dalli and Dr Margaret Brennan, Victoria University of Wellington. Their contact details are: Institute for Early Childhood Studies, P.O.Box 600, Wellington. Telephone: (04) 463 5166.

Please use the attached Consent Form to indicate your decision. If you have any further questions about this study or the Information Sheet, please ring me (telephone *** ****) or email me at *********. Thank you.

Yours sincerely

Tara Fagan
CONSENT FORM FOR ********** PLAYCENTRE ASSOCIATION

Name of Centre: ____________________________________________

As Co-President of the ********** Playcentre Association, I have read and understood the Information Sheet detailing the purpose, aims and requirements of this study. The Association agrees to one of our centres being invited to participate in this early childhood research project as outlined in the Information Sheet.

This means the ********** Playcentre Association:

1. is happy for Tara to invite a chosen Playcentre to be the participating centre in the study.
   Yes ☐ No ☐

2. agrees that Tara may invite parent/educators from a chosen Playcentre to consent to me undertaking pen and paper narrative observations and well as video recording observations
   Yes ☐ No ☐

3. understands that the parent/educators of the chosen Playcentre have the right to withdraw from this project at any time until the end of the data collection.
   Yes ☐ No ☐
4. will receive a summary of the findings of the study when the study is completed
   Yes ☐  No ☐

5. understands that the data will be used in the following ways:
   • data will be reported anonymously or by pseudonyms
   • there will be no identifying features of the centre or child and adults
   • the video will be shown at a discussion with the parent/educators of the centre and excerpts approved by parents may be used in presentations on the project
   • For thesis and publications
     Yes ☐  No ☐

Name: ________________________________

Signature: ________________________________

Date: ____________________
Appendix B: Information sheet for Parent/Educators in the Playcentre
INFORMATION SHEET FOR PARENT/EDUCATORS IN THE PLAYCENTRE

Project Title:  Mixed age settings: Younger and Older learning together
Researcher:  Tara Fagan, School of Education, Victoria University of Wellington

I am a Masters of Education student at Victoria University of Wellington. As part of my studies I am doing a thesis on young children’s interactions within a mixed aged early childhood setting and be collecting data for this in your Playcentre.

My fieldwork will involve up to 11 sessions in the Playcentre during which I will observe children interacting using pen and paper notes and video-recording. I will be focusing on three target children and speaking directly to their parents about this. As you and your child may also be present in the sessions I will be observing, your interactions and that of your child may also be recorded as part of my data. Any references that could identify you, your child or the name of the centre, will be altered or removed. If you do not wish to appear in this data, can you please notify me by 21 July 2006. If I do not hear from you, I will assume there are no objections.

At the end of data gathering I will invite you to a meeting to discuss the study and seek your input. Excerpts for the video data will be shown as part of this discussion.
You or your child may ask not to appear in any data until the end of the data collection period. You may also ask for specific parts of the data to be excluded for the study.

My research is being conducted under the supervision of Dr Carmen Dalli and Dr Margaret Brennan, Victoria University of Wellington. Their contact details are: Institute for Early Childhood Studies, P.O.Box 600, Wellington. Telephone: (04) 463 5166.

If you have any further questions about this study or the Information Sheet, please do not hesitate to ring me (telephone *** ****) or email me at ************. Thank you.

Yours sincerely

Tara Fagan
Appendix C: Consent for Parents/Whanau of Focus Children
INFORMATION SHEET FOR PARENT/EDUCATORS OF TARGET CHILDREN

Project Title:  Mixed age settings: Younger and Older learning together
Researcher:  Tara Fagan, School of Education, Victoria University of Wellington

I am a Masters of Education student at Victoria University of Wellington. This letter is to provide you with information about my study and to seek your permission to include your child and your feedback in my study.

My research is about young children’s interactions within a mixed aged early childhood setting. As part of my study I would like to observe children interacting using pen and paper notes and video-recording.

My fieldwork will involve spending up to 11 sessions in the Playcentre. At the end of data gathering, I will invite you to a meeting to discuss the study and seek your input. Excerpts from the video data will be shown as part of this discussion.

If you agree to participate in the study this means you:

☐ Are happy for me to observe and talk with you, and your child, and other children at the Playcentre.
Agree to allow me to video record and transcribe children’s interactions. Parents/educators or children may ask that the video be switched off any time.

Will receive a summary of the findings of the study when completed.

Agree to the publication of the findings of this study in academic or professional journals and/or presentations at academic or professional conferences with the understanding that any references that could identify you, your children, or the name of the centre, will be altered or removed.

You or your child may withdraw from the study at any time until the end of the data collection period. In this case you may ask for the data to be returned or for it to be destroyed. You may also ask for specific parts of the data to be excluded for the study.

My research is being conducted under the supervision of Dr Carmen Dalli and Dr Margaret Brennan, Victoria University of Wellington. Their contact details are: Institute for Early Childhood Studies, P.O.Box 600, Wellington. Telephone: (04) 463 5166.

Please indicate whether you are willing for your child to participate on the attached Consent Form. If you have any further questions about this study or the Information Sheet, please do not hesitate to ring me (telephone *** ****) or email me at ********.

Thank you.

Yours sincerely

Tara Fagan
CONSENT FORM FOR PARENT/EDUCATORS OF TARGET CHILDREN

NAME OF PARENT:____________________________________

NAME OF CHILD: ____________________________________

I have read and understood the Information Sheet detailing the purpose, aims and requirements of this study and agree to participate in this early childhood research project as outlined in the Information Sheet. This means:

2. I give permission for pen and paper observations of myself to be included in this project
   Yes ☐  No ☐

3. I give permission for video observations of myself to be included in this project
   Yes ☐  No ☐

4. I give permission for pen and paper observations of my child to be included in this project
   Yes ☐  No ☐

5. I give permission for video observations of my child to be included in this project
   Yes ☐  No ☐
6. I understand that I may withdraw myself or my child from this project without prejudice, at any stage until the end of data collection

Yes ☐ No ☐

7. I understand that the data will be used in the following ways:

- data will be reported anonymously or by pseudonyms
- there will be no identifying features of centre or child and adults
- excerpts from the video will be shown at a discussion with the parent/educators of the centre; you will be asked if any excerpts from the video are able to be used in presentations on the project.
- For thesis and publications

Yes ☐ No ☐

7. I will receive a summary of the findings of the study when the study is completed.

Yes ☐ No ☐

Name: ________________________________

Signature: ____________________________

Date: __________________________

NOTE: Please keep one copy of the Information Sheet for your records and return one copy to me with the signed and dated Consent Form.
Appendix D: Sample Data Page and Coding

Categories
Friday 4 August 2006

Fine day, chilly start

21 children on session,

Bronte

Bronte’s parent did not have time to stay and spend a little time with Bronte this morning, as would normally happen. Bronte is not ready for her to leave and an adult takes Bronte to make playdough to settle. I do not observe.

9:15

Four children – Alexandria (3 yr 2 mth), Nigel (4 yr 8 mth), Bronte and Hayden (1 yr 1 mth) – and one adult are at the playdough table. The playdough has just been made and is still warm. “I’m going to make chocolate chip cookies” says Bronte. The adult responds “is that your favourite”. Bronte nods. She is sitting between Nigel (4 yr 8 mth) and Alexandria. There is lots of sprinkling of flour, kneading and rolling. Skye (4 yr 2 mth) arrives and runs and hugs Bronte’s back. Bronte turns and says “hi Skye (4 yr 2 mth)”. Skye leaves. Bronte continues kneading and says to the adult “Do you remember when we had the pajama party?”. The adult responds say “yes. Wasn’t it lots of fun with everyone coming in their pajamas”?
They discuss this event; no other children join in the discussion. Bronte stands up and puts her dough on a plate and in the over. She talks about it cooking (to no-one in particular, I can not hear exact words) and pulls it out. She goes to sit but an adult has joined the group and is sitting there. “You are sitting in my chair” says Bronte. “Oh” says the adult who gets another chair and sits by Bronte and Alexandria (3yr 3 mth). Alexandria is watching Bronte. Bronte pretends to eat the playdough. Alexandria does the same and they both are pretending to eat using the playdough as food. The other children at the table are watching. “It’s so delicious” says Bronte. The adult asks for tomato sauce. Bronte finds an implement and explains to the adult that this is the tomato sauce showing the adult how it works. The adult talks to Alexandria about her baking. Bronte offers to help Alexandria with her baking.
Extract of Coding Categories

1. Younger watching Older
2. Showing objects to another
3. Watching Older
4. Modelling Older
5. Sustained mixed-age interaction
6. Older enforcing rights with younger
7. Vocalizing the actions of others
8. Older approaching Younger
9. Empathy/Support
10. Older Taking younger’s equipment/pushing/saying no
11. Younger enforcing rules/rights
12. Older directing younger’s play/involving them
13. Watching younger
14. Watching same age
15. Modelling same age
16. Playing/engaged same-age
17. Older helping younger with equipment
18. Younger taking older’s equipment
19. Older having safety concerns for younger
20. Younger engaging interactions with older
21. Same age enforcing rules/rights
22. Younger exploring/playing after older leaves
23. Modelling younger
24. Greeting each other