Understanding choices in the grouping of children within early childhood education: An Auckland based study of same-age/multi-age grouping arrangements

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Abstract

The New Zealand early childhood sector is characterised by a diverse range of early childhood education settings. In grouping children, early childhood settings adopt one of two grouping arrangements - some centres choose to arrange children homogeneously in same-age groupings whilst others adopt heterogeneous, multi-age grouping arrangements. Historically, same-age and multi-age grouping arrangements have been left relatively unquestioned, particularly within the Aotearoa / New Zealand context. As participation in early childhood education continues to grow, it is timely that we question these grouping arrangements in order to best understand the issues and complexities associated with each of these approaches.

This study was designed as a qualitative investigation of teacher beliefs surrounding same-age and multi-age grouping arrangements in early childhood education within the bicultural context of Aotearoa / New Zealand. The aims of this study were to address teacher beliefs about the motives and values that underlie these grouping arrangements, to identify the advantages and disadvantages unique to each of these settings and the ways in which these two settings can be improved. To meet these aims, 23 early childhood teachers within Auckland participated in one of four focus groups from which data was collected and thematically analysed.

This thesis provides support for previous Aotearoa / New Zealand research into same-age and multi-age groupings and recognises that both settings offer children unique and differing learning experiences. Through a critical analysis of the data collected from the focus groups four key themes emerged – ‘The organisational perspective’, which is concerned with the underlying motives behind the on-going existence of same-age and multi-age groupings, ‘The teachers’ perspective’, that identifies the teachers’ beliefs in regards to the advantages and disadvantages of same-age and multi-age settings, ‘The cultural perspective’ that questions the relevancy of these grouping arrangements within the Aotearoa / New Zealand context and finally, ‘Improvements’ in which the teachers make recommendations for the improvement of practice in both grouping arrangements. These themes are used to categorise data and assign meaning to the findings.

This study acknowledges that further research is needed to understand the cultural nature of same-age and multi-age settings and suggests that the inclusion of a wider group of key stakeholders would provide more generalizable findings.
Acknowledgments

*He aha te mea nui o te ao? He tangata, he tangata, he tangata!*

What is the most important thing in the world? It is people, it is people, it is people!

To the Lord, my God, without whom I would not have made it this far, thank you for all of your blessings and enduring love throughout this time. Thank you for the people who you have brought into my life, that have contributed to this study and have been a real blessing. I am forever thankful for your mercy, guidance and support.

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Chapter One: Introduction

He Mihi

Ko Rae o Te Papa te maunga
Ko Waihou te awa
Ko Tohora te waka
Ko Tirohia te marae
Ko Hako te iwi
Ko Aroha Beach taku ingoa

My personal interest

My personal interest in multi-age and same-age settings started as a result of my experience working in different early childhood centres. As an early childhood educator I have had the opportunity to visit and work in several early childhood centres throughout the Auckland region. The centre where I work and where I have spent the majority of my time as a teacher, functions around a multi-age philosophy. The ages of the attending children vary between nought and five years with the youngest children moving freely throughout the centre during the day.

What I particularly liked about the multi-age philosophy was that it felt like a large extended family. Often, we would have three or four children of the same family, all of different ages attending. Parents and whānau often commented about the long relationships that they had had with the centre, with some of the parents having attended the centre as children twenty years earlier. Having such strong relationships with parents and whānau, I believe, assisted in settling children into the centre.

What I also liked about the setup of the multi-age centre was that it allowed the younger children to explore materials, equipment and numerous opportunities that would otherwise be seen as too complex or out of reach for them; thus the value of these experiences is subsequently overlooked. An example of this is skipping. A few years ago, we were teaching the older children within our centre to jump rope. The younger children, fascinated by the older children and new things, would make their way outside to watch and often made an attempt to join in. Over time the younger children, some as young as two became competent skippers. I believe that this is due in large to the nature of the centre, the
modelling of older children and the provision of equipment that would generally not be found within an infant and toddler setting.

As a teacher within a multi-age setting, I became interested in the choices made and the understandings other teachers had of same-age and multi-age settings. Recently, whilst speaking to a teacher who had been in the industry for over twenty years I asked why she had chosen to work within a multi-age setting. She explained that she had not given it much thought. Her children had attended the centre before she started working there and it had always been that way. In talking to other early childhood teachers, I have encountered the same explanation on several occasions. Thus, my interest in the differences multi-age and same-age settings offer young children in early childhood education has been a driving force in my selection of this research topic and the subsequent research questions.

**Background**

The New Zealand early childhood sector is characterised by a range of diverse early childhood education settings. In grouping children, early childhood centres adopt one of two grouping arrangements - some centres choose to arrange children homogeneously in same-age groupings whilst others adopt heterogeneous, multi-age grouping arrangements (Merry, 2007).

In the last few decades, the division of children into classes based exclusively on chronological grounds has become common practice in schooling systems throughout the world (Allen, 1989; Logue, 2006; McClellan, 1994; Wardle, 2008). As a practice, it is the division of children for homogeneity, where it is implied that there is a correlation between the chronological age of children and their intellectual ability (Aina, 2001; Di Santo, 2000; Evangelou, 1989; Fagan, 2009; Katz, 1993; Lloyd, 1999; Rasmussen, 2005). This method of grouping has become so common that it is perhaps taken for granted as the innate order of things (Arthur, Beecher, Death, Dockett & Farmer, 2005; Logue, 2006; Miletta, 1996; Wardle, 2008).

This practice, predominantly used in primary schools, has in turn, been adopted by the early childhood education community and is now considered a valid strategy in the education of children under the age of five (Evangelou, 1989; McClellan, 1994; Rasmussen, 2005; Wardle, 2008). The efficiency of this strategy of education within the early childhood setting
however is gradually gaining the interest of early childhood educators (Di Santo, 2000; Johnson, 1998; McClellan, 1994; Rasmussen, 2005). Justifications for and against the separation of children in early childhood education are numerous and research of both settings has had mixed (Song, Spradlin, & Plucker, 2009) and inconsistent results (Kinsey, 2001).

For the purpose of this study, multi-age grouping arrangements refer to the grouping of children in which the age span is greater than a year. Consequently, same-age grouping arrangements refer to a group of children who are of the same age.

**Rationale**

The use of same-age groupings in early childhood education has until recently, been left largely unquestioned (Logue, 2006; Wardle, 2008), particularly within the New Zealand context (Fagan, 2009). As a practice same-age groupings are often seen as an institutional give in, an inevitable choice (Logue, 2006).

Wardle (2008) states that “all professions have a canon of beliefs and practices. Some of these come from research and best practices; many simply develop and are passed on without critical examination. The early childhood field is no exception” (p.1). As early childhood educators our practice is governed by sets of values and practices. Some of these practices have their foundations in research and are informed; others are simply taken as truth and are left unquestioned. A literature search of the Unitec library, the online databases and the internet produced little, relevant information on same-age and multi-age settings within the early childhood education sector. Of the literature that was found, a large portion was not current and does not reflect current practice within New Zealand; a point New Zealand researcher Fagan (2009) acknowledges in her own study of same-age and multi-age settings.

Furthermore, there is a gap in the current literature as to how these choices in groupings are defined by those responsible for their delivery - the teachers. This is of particular importance, particularly within the New Zealand early childhood setting, as the body of research surrounding this topic was, on the most part, generated within the American context. This has the potential to pose a number of problems for early childhood educators teaching in New Zealand (Davis & Smith, 2007 as cited in Keesing-Styles & Hedges, 2007). The fact that the majority of literature surrounding same-age and multi-age groupings originates from America
means that it carries with it the values and belief systems held by the dominant culture within America (Aldwinckle, 2001; Davis & Smith, 2007 as cited in Keesing-Styles & Hedges, 2007) which may render them inappropriate in the unique, culturally diverse context New Zealand has to offer (Ministry of Education, 1996).

**Research aims**

The purpose of this study was to examine teacher perceptions of same-age and multi-age groupings in early childhood education. This study attempted to address teacher beliefs about the reasoning and values that underlie these grouping arrangements, the advantages and disadvantages unique to each of these approaches, their relevance within the New Zealand setting and the ways with which these two approaches can be improved.

**Research questions**

To achieve these aims, the following research questions were utilised in the study:

1. What reasoning and values lie beneath the practice of grouping young children in same-age and multi-age settings?

2. What are the perceived advantages and disadvantages of same-age and multi-age grouping decisions in early childhood education?

3. In what ways do same-age and multi-age grouping arrangements reflect the values of both Pākehā and Māori and our obligation to the Treaty of Waitangi?

4. What improvements to practice can be made in same-age and multi-age settings?
Organisation of the research chapters

This thesis has been organised into six chapters. In this chapter a short, concise background of same-age and multi-age grouping arrangements within early childhood education provided an introduction to the research topic and insight into its significance within the early childhood sector in Aotearoa / New Zealand. The aims of the study were explored and the research questions that guided this study were defined.

In chapter two, the body of literature surrounding same-age and multi-age grouping arrangements is reviewed. The historical context of these grouping arrangements is offered in greater detail, as are the motives and contributing factors behind their ongoing existence within the early childhood sector. The advantages and disadvantages of each of these settings found in the literature are explored and their appropriateness within the bicultural context of Aotearoa / New Zealand is questioned.

Chapter three includes a justification of the research methodology and methods employed in the study. The qualitative research design is explained and its appropriateness to the study is justified. A brief description of how the participating early childhood teachers were identified and recruited to participate in this study is also provided.

Chapter four presents the findings collected within four focus groups. The themes and sub-themes that emerged during the data collection process are drawn out and a first level analysis was used to make the collected data more manageable and thus, more meaningful.

Chapter five provides a discussion of the findings identified in chapter four and assigns meaning to them. The discussion takes place under four key headings, the ‘Organisational perspective’, the ‘Teachers’ perspective’, the ‘Cultural perspective’, and ‘Improvements’. A detailed explanation of these themes is provided further into this study.

Chapter six concludes this thesis with a summary of the key findings, an exploration of the study’s contributions, and a discussion of the limitations of this study. Recommendations for future research are made.
Chapter Two: Literature Review

Overview
This literature review is divided into four sections. In the first section, the historical origins of same-age and multi-age groupings in early childhood education are explored. Second, the motives behind each of these grouping arrangements are brought to the fore. The advantages and disadvantages of each of these grouping arrangements are then discussed and their relevance within New Zealand’s unique bicultural context is explored.

Historical origins
In order to fully understand same-age and multi-age practices in early childhood centres, their relevance within New Zealand and the repercussions they have on children within the New Zealand setting, it is essential to investigate where these practices come from. The beginnings of early childhood education within New Zealand can be defined largely by several broad key entities: foundling care and baby-farming, kindergartens and crèches (May, 1997).

The historical origins of these services have previously, “been left out of writing and teaching on the history of education in New Zealand” (May, 1997. p.xi). May (1997) suggests that this can be attributed to the scandals that plagued some of the aforementioned entities and the way in which early childhood education had been perceived by society during the early 19th century. New Zealand was slow to fully embrace early childhood education and its value was only beginning to be realised much later in the 20th century.

For New Zealand, the introduction of early childhood education represented a change in societal values; it was largely associated with feminism and came at a time when women’s rights were beginning to be challenged and redefined (May, 1997). “Concerns about children and recognition that some women had to work meant that kindergartens and crèches were slowly established” in the 20th century (Pollard, 2012. p.1). It was the introduction of kindergartens in New Zealand however, that initiated the slow but progressive movement towards the early childhood sector we know today.

British records attest to a number of New Zealand early childhood educators gaining formal training in Britain before emigrating to New Zealand and in 1889, Dunedin saw the first
officially recorded kindergarten open its doors to four-year-olds within New Zealand (May, 1997; Russell, 2012). Recognising the need for a safe and sanitary environment for the “waifs and strays… in the neighbourhood” (Russell, 2012. p.8), Rev Rutherford Wardell of the St Andrews church, set up this kindergarten on the church’s premises (Russell, 2012).

Wardle (2008) explains the beginnings of public schooling within the United States of America as a one room schoolhouse that catered for children of various ages. Older children were responsible for the care of the younger children whilst they themselves learnt to care for and serve others. During the Industrial Revolution however, the movement towards economic advancement drew larger numbers of people into the cities and often resulted in more highly concentrated populations (Konner, 1975 as cited in McClellan, 1994). The recurrent increases in population called for a more convenient method of educational delivery and translated into what Katz (1993) refers to as a “factory” model of education designed to make the education of children inexpensive and ultimately more convenient.

In 1843, Mann instigated the move towards same-age groupings within public schools (Wardle, 2008). Mann believed that every child was entitled to a basic education funded by local tax payers, something that had otherwise been unattainable by the lower class and that same-age groupings provided a cost effective way of achieving this (Horace Mann Educator Advisory Panel, 2007). Over the years, the separation of children into same-age groupings began to dominate the public sector of schooling (Rasmussen, 2005; Wardle, 2008). Gradually this practice was adopted by the early childhood education sector within the United States of America (Rasmussen, 2005; Wardle, 2008), to which Horace Mann’s wife Mary Mann and her sister Elizabeth Peabody contributed greatly (May, 1997).

The historical origins of same-age groupings within the British and American education sectors are important to consider, this is due to the fact that New Zealand’s education system was influenced largely by overseas trends (Ministry for Culture and Heritage, 2012) with the New Zealand government striving to match the policies and principles set in place by British (Barrington, 2008) and American colonies (May, 1997). Under the Education Act introduced in 1877 the New Zealand government introduced the first state funded, free and compulsory primary schools nationally (Barrington, 2008; Simon, 1998; Simon & Smith, 2001) and children were divided into same-age groupings to align with overseas practices. In turn, this practice was adopted by New Zealand’s early childhood sector when the first kindergarten opened its door to four-year-olds in 1889 (May, 1997; Russell, 2012).
Motives behind same-age and multi-age groupings

As time has progressed, same-age and multi-age grouping arrangements have prevailed in early childhood settings throughout New Zealand. Several factors for their on-going existence have emerged in the literature. These include government involvement with ‘funding, inspection and regulations’ (Howell, Georgeson & Wickett, 2012, p. 20), family and community needs (Weaven & Grace, 2010), ‘social normality’ (Lloyd, 1999; Logue, 2006; Wardle, 2008) and the way in which societies view the child (Goodfellow, 2005; Nyland, 2007).

Government involvement

In the United Kingdom government involvement in early childhood education reinforces the trend of separating children into same-age groupings (Howell, Georgeson and Wickett, 2012). The designation of funding, regulations and inspection encourages practitioners to plan for and think about the separate needs of each age group (Howell, Georgeson & Wickett, 2012). Similarly, early childhood education within New Zealand is governed and guided by a legislative and philosophical framework that provides early childhood centres throughout New Zealand with structural support (Gunn, 2003).

In response to the scandals associated with baby farming in New Zealand, the government “brought childcare centres under the responsibility of the Child Welfare Division of the Department of Education” and legislation was created that “made a distinction in the needs of children based on their ages” (Merry, 2007, p.45). Current legislation within New Zealand still reflects this and inadvertently encourages early childhood centres to think and plan for each individual age group. This was further supported with the introduction of Te Whāriki - New Zealand’s first early childhood curriculum in 1996 and more recently, the 2008 regulatory framework and the majority of government funding being directed towards three and four-year-olds through the introduction of 20 free hours.

An in-depth look at how current legislation within New Zealand encourages early childhood centres to think and plan for each age group is provided below:
In 1996 the New Zealand Ministry of Education released *Te Whāriki*, New Zealand’s first early childhood curriculum (Alvestad, Duncan & Berge, 2009; Blaiklock, 2010; Cullen, 2008; Duhn, 2008). The release of *Te Whāriki* marked a milestone for early childhood education in New Zealand. Through rigorous discussion and negotiation, *Te Whāriki* was developed reflecting three key voices: the interests of the New Zealand government, early childhood professionals and families, and knowledge of early childhood development throughout the world (Carr & May, 2000).

*Te Whāriki* differs from other curricula in the sense that it does not set out to direct teachers in content or method. This flexibility means that early childhood centres throughout New Zealand can be governed under one national curriculum (Alvestad et al., 2009). In order to maintain this flexibility, *Te Whāriki* assists teachers by offering examples that are age-appropriate and divides children into three overlapping age groups – infants, toddlers, and young children (Taguma, Litjens, & Makowiecki, 2012). The inclusion of age-appropriate examples and the significance that they are given in New Zealand’s first and only early childhood curriculum may influence the grouping decisions of centre owners and management.

**2008 Regulatory framework**

Teacher-to-child ratios and an increase in licence size set by the New Zealand government in the 2008 regulatory framework offer encouragement for centres to divide children into same-age groupings. Ratios serve to ensure centres provide the minimum number of carers necessary to guarantee the safety of children whilst maintaining an acceptable level of quality. In New Zealand, teacher-to-child ratios differ depending on the age of the child. Centres must employ one teacher for every five under-twos enrolled in their centre. For children two-years and over, centres can have as many as 10 children for every one adult employed (Ministry of Education, 2011a).

Whilst this may seem insignificant on its own, recent changes to the regulations have seen the licence size grow. Centres can now have as many as 75 under-twos and 150 children two-years and over in a class (Farquhar, 2012). In a multi-age setting however, particularly when centres have children of multiple ages in the same room, the number of children that a centre can enrol decreases drastically. In centres where under-twos and over-twos attend together,
the allowed group size drops by 33% and centres are allowed a maximum of 50 children (Ministry of Education, 2011a).

For businesses, whose “social responsibility” is to “maximise profit” (Kay, 2004 cited in Wannan, 2007, p.121), same-age groupings provide a means with which to achieve this. This is because same-age settings provide an environment in which large numbers of children can be easily managed (McClellan & Kinsey, 1997) and ‘packaged’ together (Viadero, 1996, p.1).

**20 Free hours**

In 2004, the Labour-led New Zealand Government announced their plans to provide additional government funding for all three and four-year-olds throughout the country, on the provision that centres chose to opt into the scheme (Ministry of Education, 2011b). Through this initiative, three and four-year-olds attending centres that had chosen to opt in were entitled to twenty hours of free education within teacher-led early childhood services from July 1st, 2007 (Ministry of Education, 2011b; Mitchell, 2008; Smith, 2009; Woodhams, 2008). This initiative made early childhood education available for three and four-year-olds within New Zealand; regardless of the income of their family (Bushouse, 2009; Smith, 2009; Woodhams, 2008). In order to gain this funding parents were encouraged to enrol their three and four-year-old children in early childhood services for a full 20 hours per week (Woodhams, 2008) prior to starting school (Mitchell, 2008). The rationale behind this funding was to intensify participation in early childhood services, particularly for three and four-year-olds (Bushouse, 2009; Mitchell, 2010 & Davison; Te One & Dalli, 2010; Woodhams, 2008).

Statistics recorded by the Ministry of Education show that participation in early childhood settings within New Zealand has increased consistently in the last decade (Ministry of Education, 2013). Children are spending increasingly long hours within the early childhood setting (Bacigalupa & Ceglowski, 2002; Nyland, 2007) with more parents opting to enrol their children in early childhood centres that offer all-day services (Ministry of Education, 2013). In the year ending July 2011, approximately 194,101 children were enrolled in early childhood centres throughout New Zealand. This figure rose by approximately 2.7% or 5,177 children since 2010 and more noticeably by approximately 13% or 22,363 children since the introduction of 20 free hours in 2007 (Ministry of Education, 2013).
Due to its ‘tremendous success’, 20 hours has become the “biggest, most expensive early childhood programme in the country” accounting for “approximately 70% of the $807 million Vote Education early childhood education budget for 2007-2008” (Bushouse, 2009, p.58). In the 2008-2009 fiscal year, the new National led government set aside a further $90 million dollars to the early childhood education budget. This however, was accompanied by a change in policy in which National stopped fully funding the ‘20 hours’ and merely subsidised it. Instead, the extra funding was used to further expand 20 hours to previously excluded early childhood services such as playgroups and Kohanga Reo (Bushouse, 2009; Te One & Dalli, 2010). This funding however has not been expanded to include children under the age of three, thus encouraging greater participation by three and four-year-olds in early childhood settings. This trend is reflected in statistics collected by the Ministry of Education and in 2011 a combined total of 120,725 three and four-year olds attended early childhood services throughout New Zealand compared to a combined total of 34,916 one and two-year-olds (Ministry of Education, 2013).

Although the introduction of 20 hours in 2007 is not directly related to same-age and multi-age settings its presence within early childhood education has had significant effects on early childhood care and education centres and the way in which they structure themselves throughout New Zealand. The introduction of this scheme inevitably capped the profitability of three and four-year-olds lessening the potential profit for privately owned and operated early childhood settings (May, 2008; Mitchell, 2008). “Many centre owners claimed that the funding was not sufficient” and that “the scheme would undoubtedly curb the profits of privately owned centres” (May, 2008, p. 77). Centres responded to this discrepancy in several ways; perhaps the most significant of these, was the transferral of these costs into the fees of children who were ineligible for 20 hours (Mitchell, 2008), infants and toddlers.
Family and community needs

Another determining factor behind owner and management decisions to group children in same-age and multi-age groupings are the needs of the community (Weaven & Grace, 2010). In the Western world during the twentieth century the ‘ordinary’ family was perceived to consist of two heterosexual parents joined by the union of marriage and their children. Commonly, the role of the father in this family was primarily that of the bread winner. He went out and made a living while the mother stayed home, reared the children and took care of the house (Callister, 2000). During the 1980s New Zealand was experiencing “a long period of extensive economic, political, social and demographic change” (Cotterell, von Randow & Wheldon, 2008, p.6) and as a result the needs of the modern family and community changed drastically (Callister, 2005). Increasing levels of de-facto relationships, sole-parent families, mixed families and a delay in readiness to get married are now common place in today’s society (Callister, 2000).

These demographic and economic changes have inevitably led to the increased participation of women in the workforce (Domenico & Jones, 2006). With increasing numbers of women entering the workforce, society’s view of women changed (Domenico & Jones, 2006; Education Review Office, 1996). “Historically, society believed a woman’s place was in her home, caring for her husband and children, rather than in the workplace” (Domenico & Jones, 2006, p.1). In addition, this increased participation by women in the workforce is no longer seen as a deviation from the norm rather, it has become the norm (Rainey & Borders, 1997). Inevitably, these changes in family structure and an increase in maternal employment (Callister, 2000) have contributed to an increased demand for early childhood care and education - particularly in centres that offer all-day services (McLeod, 2002; Ministry of Education, 2013). In turn, this increase in participation of children within early childhood education (Bacigalupa & Ceglowski, 2002; Ministry of Education, 2013; Nyland, 2007) has contributed to an increased demand for early childhood centres (Ministry of Education, 2013).

As a result, the early childhood sector has seen a marked increase in early childhood centres throughout New Zealand (McLeod, 2002) and by July 2011, there were 5,258 early childhood centres within New Zealand, a 2.0% increase than at the same time in July, 2010. Privately owned and operated centres responded to this shortfall and were responsible for the highest growth of services within New Zealand (Ministry of Education, 2013) owning and running
fifty-eight percent of all early childhood centres within New Zealand in 2008 (May, 2008). Between 2007 and 2011, the number of privately owned centres grew by 48% (Ministry of Education, 2013).

The advantages and disadvantages

One common point of debate in regards to the effectiveness of same-age and multi-age settings is that the learning opportunities offered to children that participate in same-age settings differ substantially to those offered within multi-age settings (Hartup, 1978; Katz & McClellan, 1999; McClellan & Kinsey, 1999). Moreover, each setting is said to offer children a range of unique academic, social, emotional and developmental benefits (McClellan, 1994).

Same-age settings

Focused teaching

Same-age groupings attempt to narrow the range of developmental levels within early childhood groupings (Arthur et al., 2005). “The pedagogical rationale for this approach is to target curricula content and instruction to specific age groups” (Wardle, 2008, p.1). This is considered advantageous because it allows teachers to provide an environment that caters specifically to the needs and development of a particular age group (Arthur et al., 2005; Wardle, 2008), making same-age settings ideal for the provision of age-appropriate resources (Ministry of Education, 2010). This assumes however that all children develop at the same rate at the same time (Aina, 2001; Arthur et al., 2005; Fagan, 2009; Rasmussen, 2005) and also that children “have similar developmental needs, interests and learning capacities” (MacNaughton & Williams, 2009, p.107). This views learning as a linear, discontinuous process that occurs in pre-defined stages (Berk, 2004; Gerard, 2005) and fails to take into account the disparities that may occur between children of the same age (Arthur et al., 2005).

The reality is that individual differences may well outweigh similarities. There can be a wide range of differences even when all children are the same age. Children who are 18-months-old, for example, will vary enormously in their use of language, their physical prowess and their relationships (Arthur et al., 2005, p. 274).
Furthermore, teachers within same-age settings are more inclined to have set expectations of children dependant on their chronological age. This makes it tempting for teachers to compare children to their same-age peers (Arthur et al., 2005). As a result, same-age groupings are often associated with higher levels of competitiveness, competition and egocentricity (McClellan, 1994; Viadero, 1996).

**Economic**

Another noteworthy advantage of same-age groupings are that they are cost effective, convenient and simplify administration processes (Arthur et al, 2005; Katz, 1995; Paradini, 2005). With growing numbers of children accessing education services, it is becoming common practice to divide children into common age-bands to make this more manageable (McClellan & Kinsey, 1999). Same-age settings provide a means with which to package large numbers of children into early childhood centres (Katz, 1995) and make educating children en masse possible (Paradini, 2005).

**Multi-age settings**

**Diversity**

The benefits associated with multi-age settings rest on the supposition that the differences which make children unique individuals are in fact, a source of rich intellectual and social benefits (Katz, 1995; McClellan, 1994; Song, Spradlin & Plucker, 2009; Viadero, 1996). Multi-age environments are created specifically for and are centred on the children within the group (Katz, 1995; Smith, McCarthy & Scala, 2002) allowing children to grow and develop at their own pace (Aina, 2001; Gerard, 2005; Oesterreich, 1995; Seir, 2012; Song et al, 2009). Multi-age settings enable teachers to draw on the unique differences children of differing ages and stages bring into early childhood centres (Aina, 2001; Carter, 2005; Katz, 1995).

As an approach it acknowledges the different abilities, skills and capabilities each child offers the centre and releases them from the expectations that are commonly associated with children when they are grouped depending on their chronological age (Barr & Dreeben, 1983; Katz, 1995; Smith et al., 2002.:). Because multi-age settings are centred on the child and not their chronological ages, teachers are more inclined to see the children within the centre as having diverse needs and interests (Lloyd, 1999; Smith et al., 2002). This view recognises
children as individuals and encourages teachers to provide individualised, developmentally appropriate experiences (Aina, 2001; Lloyd, 1999; Miletta, 1996; Stone, 1996; Viadero, 1996).

Diversity in multi-age early childhood centres is encouraged and fostered and younger children within the centre are provided with opportunities to partake in activities or experiences that would otherwise be unavailable to them in a same-age centre (Smith, et al., 2002; Viadero, 1996). These experiences, that would generally be provided to children deemed to have acquired a higher level of intelligence purely because they are chronologically older, provide younger children with opportunities to observe, imitate and eventually initiate (Evangelou, 1989; Katz, Evangelou, & Hartman, 1990 cited in McClellan & Kinsey, 1999; Stone, 1996;). This is consistent with practices in many non-Western cultures (Berk, 2004, Rogoff, 1990) and reflects what Barbara Rogoff refers to as “guided participation” (Rogoff, Mistry, Göncü & Mosier, 1993).

In a multi-age early childhood setting, children of all ages and abilities experience and participate in activities that have the potential to be more complex than those which they could initiate alone (Gerard, 2005; Gray, 2011; Slavin, 1987; Smith et al., 2002; Stone, 1996) and because the group of children is much more diverse in multi-age settings, it is probable that children will be functioning within their “zone of proximal development” (the difference between what a child can achieve on their own, and with the assistance of others) whilst encouraging others towards reaching theirs too (Carter, 2005; Gray 2011; Slavin, 1987). The obvious advantage Viadero (1996) suggests is that all of the children in one area or another will be given the opportunity to extend themselves academically as they learn and participate in activities alongside other children. It also provides those children who have mastered the skill at hand, an opportunity to reinforce these skills by helping other children acquire them (Carter, 2005; Gerard, 2005; McClellan, 1994; Viadero, 1996).

Such diversity in age however, also has the potential to be problematic (Ministry of Education, 2010). When the ages of children differ so greatly, particularly within the early childhood setting, it becomes challenging to provide an interesting array of equipment, experiences and materials needed to accommodate the different age groups within the setting; because of this, centres often aim towards suiting the lowest common denominator or age group so as to ensure the environment is safe for all. In turn this approach fails to meet the needs and challenges appropriate for the children within the older age group. Another
tendency aims towards providing equipment, materials, and experiences with an aim for the middle ground. However this approach still fails to reach the needs of the older children, whilst ultimately creating an unsafe environment for younger children (Greenman & Stonehouse, 1997).

Contrary to this, a study in which 12 Australian early childhood teachers shared their beliefs surrounding multi-age settings determined that the participating teachers believed young children benefited from exposure to more advanced equipment that would otherwise be reserved for older children. The teachers interviewed reported that the young children, primarily toddlers, had learnt to safely use and manage the equipment which included climbing frames and carpentry tools and have become proficient users of these advanced materials. It was also believed that the younger children’s observation of more advanced members of the group contributed to their overall level of proficiency and mastery of skills (Edwards, Blaise & Hammer, 2009).

**Social development**

Same-age and multi-age settings are said to contribute to the social development of children in distinct ways (Winsler, Caverly, Willson-Quayle, Carlton, Howell & Long, 2002). Each of these settings provide children with unique social experiences that contribute to the advancement of different social competencies (Aina, 2001; Hartup, 1978; McClellan, 1994; McClellan & Kinsey, 1999; Rasmussen, 2005). In same-age settings, children have a tendency to display higher levels of aggression, competencies in developing friendships and playfulness (McClellan & Kinsey, 1999; Whiting & Whiting, 1975). They are also more likely to report a greater feeling of social isolation and bouts of loneliness when placed in homogeneous settings (Asherm, Hymel & Renshaw, 1994 as cited in McClellan & Kinsey, 1999). In contrast, children that participate in multi-age settings tend to demonstrate behaviour that is more prosocial including greater levels of altruism, nurture, cooperation and caretaking (Rasmussen, 2005; Whiting & Whiting, 1975). Whilst McClellan and Kinsey (1999) acknowledge that same-age peers often behave pro-socially with one another, they note that there is evidence to suggest younger children are more likely to induce or elicit pro-social behaviours than same-age peers and evoke within older children more tolerating and nurturing behaviours.

McClellan (1994), a multi-age educator and representative of the multi-age movement in the United States of America, notes that she is frequently asked whether or not children in same-
age settings can learn to care for friends and peers of the same age. Her answer: yes and no. There is no substantial evidence that suggests children who participate in same-age classes do not demonstrate pro-social behaviour when interacting with one another. However, research suggests that older children within multi-age settings have a higher inclination to respond in a nurturing manner to children younger than themselves.

McClellan (1991) proposes that this inclination to provide younger children with nurture may occur for several reasons. One reason is that younger children tend to have a more baby-like appearance often eliciting from older children the desire to nurture. Another possible and highly probably reason is that younger children will often seek help from more mature members of the class as opposed to peers of the same age. This occurs because the younger child recognises the older child as someone that is more knowledgeable than them and can therefore provide the younger child with the help they need. Research evidence has found children are generally aware of the differing abilities and attributes associated with age (Evangelou, 1989). As a consequence of this, Evangelou suggests that both older and younger children learn to adjust their behaviour according to the skill levels and ages of other children whilst interacting with them.

**Peer learning**

Multi-age settings also provide children with more definitive roles of responsibility (McClellan, 1994); because a multi-age environment is inclusive of a vast array of children with differing capabilities the teacher can choose to utilise the skills of the children that are more knowledgeable and have more experience (Carter, 2005; McClellan & Kinsey, 1999; Tangaere, 1996). It also means that older children within the group can model the appropriate behaviours to the younger, newer members of the group (Carter, 2005; McClellan, 1994; Stone, 1996).

Research has found that within multi-age settings younger children were visibly less reliant on their teachers than that of their peers in same-age settings where the only person who possessed greater maturity was the teacher (McClellan, 1994). It could be argued that a skilled teacher in a same-age environment could also provide opportunities within the centre that allowed children to demonstrate care for each other. McClellan (1994) acknowledges this possibility but suggests that the type of care would more than likely be of a different nature and stem from a different intent than that which occurs somewhat naturally in a multi-age setting. When peers of a similar age expressed kindness towards each other there was an
expectation that it would be reciprocated; in contrast, children in multi-age settings were less likely to seek anything in return (Youniss, 1980 as cited in McClellan, 1994).

Peer learning or the act of a more advanced member of the group helping another towards mastery can be an effective method but this may also have serious limitations and shortcomings. Peer learning poses a number of threats to both the child assisting and the child that is being assisted (Nikiforuk, 1993). Nikiforuk (1993) draws attention to the learning process. Although a child may have the ability to coach another towards the mastery of a skill they may not necessarily be passing on an accurate understanding.

Katz (1995) also acknowledges that multi-age education is not without its flaws. Katz highlights the possibility that when one child assumes the position of teacher over another, there is the risk that the child will pass on inaccurate information, offer inappropriate advice and deliver poor suggestions. This however, may be advantageous in other ways, for it is in these situations that teachers can determine what knowledge the child has grasped and where, if necessary, this knowledge can be strengthened or built on (Katz, 1995). Carter (2005) concurs with this and goes on to suggest that in heterogeneous groups, younger or less able children are given the opportunity to learn from those more capable. Through peer teaching, Carter suggests that she is better able to observe and witness the weaknesses and strengths of her students that become readily apparent and in turn, provide the necessary learning experiences.

**Family atmosphere**

Another unique feature of multi-age settings is what several authors refer to as the “family atmosphere” (Aina, 2001; Carter, 2005; McClellan, 1994; Viadero, 1996). Multi-age settings “provide a homelike closeness and intimacy associated with family life” (Smith et al., 2002, p. 26). Due to the nature of multi-age groupings, and specifically within early childhood centres, it is highly probable that children will participate in the setting for a time frame considerably longer than the one year same-age settings offer. As a result, children can be secure in the sense that their environment will remain the same for a considerable amount of time. It also means that they have the unique opportunity to grow alongside each other, co-construct learning and develop long lasting, meaningful friendships with one another, as would occur in a family environment (Carter, 2005; McClellan, 1994). The Ministry of Education (2010) however, disagrees with the notion that centres can act as one large family and suggests that early childhood centres with a group size of twenty to thirty children could
not possibly be described as creating a ‘family’ environment. To try to emulate a family in such a large environment, the Ministry of Education says, would place particular stress on the younger members of the group and should not be attempted except where the group size is relatively small.

McClellan (1994) does not concur with this belief but rather implies that multi-age settings are now more crucial than ever. As society changes, children have less opportunity to interact with other children outside of early childhood settings and schools (Gray, 2011; McClellan, 1994). This has taken place as a result of several factors. One reason is that the structure of the ‘ordinary’ family and our perception of ‘the family’ has changed over time with increasing levels of divorce, urbanisation, reduced fertility rates, an aging population (Durie, 1997), de facto relationships, single parent families, mixed families, and a delay in readiness to get married (Callister, 2000). These changes in the family structure bring with them a change in circumstances. For instance, solo parents who are surviving on one income may not have the means to keep in touch with family members who are not within a close distance of them and people who delay marriage to pursue their careers may decide to have only one child. These circumstances can greatly affect the social interactions available to the child (Callister, 2000).

A common concern for parents and the Ministry of Education (2010) is that children who participate in multi-age settings have the potential to feel overwhelmed. For parents of younger children, the existing concern is that their children may be intimidated by the academic ability and development of the older children around them (Viadero, 1996). McClellan (1994) and Katz (1995) suggest however, that the younger children within multi-age settings learn to accept that in time, they will become the older, more able members of the class and in turn will be able to emulate the behaviours of the current older children within the environment when they become the older children within the class.

On the other hand, Katz (1995) suggests that the fears for older children lie in the possibility that younger, less experienced members of the group will overwhelm older children in their need for guidance and assistance. Katz goes on to suggest however that this is the perfect opportunity and the makings for parental education as children learn to care for those younger than them. It is also a unique opportunity for teachers to equip children with the skills necessary to protect and assert themselves. Teachers can provide children with appropriate yet meaningful language such as “I can’t help you right this minute, but I will as soon as I
finish what I am doing” (Katz, 1995, p.2). This contributes to greater levels of reciprocal, respectful and caring attitudes towards one another (Lipsitz, 1995 as cited in Katz, 1995).

New Zealand’s bicultural context

The purpose of this theme is to look at same-age and multi-age approaches within the New Zealand context. The importance of this lies in the fact that New Zealand is founded on the agreement between Māori and the Crown to create a bicultural nation (Adams, Harmon, Reneke, Lott Adams, Hartle & Lamme, 1997; Gunn, Child, Madden, Purdue, Surtees, Thurlow & Todd, 2004; Penrose, 1998). Te Tiriti o Waitangi was the mutual agreement between Māori and the British Crown over the future chieftainship of New Zealand. (Jenkins, 2011; Ritchie, 2008). A translation into English of article two of the Māori version of Te Tiriti o Waitangi states: “The Queen of England agrees to protect the Chiefs, the sub tribes and all the people of New Zealand in the unqualified exercise of their chieftainship over the lands, villages and all their treasures” (Orange, 2004. p.282). “To honour the spirit of that agreement, we need to include the Māori dimension in all areas of the early childhood programme to the best of our ability” (Penrose, 1998, p, 42).

It is argued “that most examples of mainstream schooling and education in New Zealand historically and in the present constitute a colonising experience, marginalising Māori by uncritically reproducing dominant and subordinate power relations” (Morehu, 2009, p.1). The critical examination of prevailing discourses in early childhood education is needed to discover ways of opening up meaningful possibilities for all children (Ritchie & Rau, 2010). A culturally responsive curriculum in early childhood settings should reflect te ao Māori (Ministry of Education, 1996; Penrose, 1998) and te reo me ngā tikanga Māori (Jenkin, 2011), making them evident and recognising their value, not just for Māori, but for all children within New Zealand (Ministry of Education, 1996 as cited in Ritchie, 2003a).

Recognition of these values serves to emphasise the notion that “there are ethnically linked ways of thinking, feeling and acting which are acquired through socialisation” (Phinney & Rotharam, 1987 as cited in MacFarlane, 2004). It is therefore necessary to restate that of the available literature available on same-age and multi-age settings the majority of writings were written in and for the American context and what little New Zealand literature that did exist, made no mention of te ao Māori or Te Tiriti o Waitangi. The disadvantage of relying on
literature written outside of New Zealand is that it carries with it the values and belief systems held by the dominant culture in which it was derived and may not be appropriate to put into practice within contexts that differ from that of its origin (Aldwinckle, 2001; Davis & Smith, 2007 as cited in Keesing-Styles & Hedges, 2007).

For Māori, human development is underpinned significantly by three values – wairua, manaaki and whanaungatanga (MacFarlane, 2004). These values are sustained and kept alive through the use of rituals and are lived in everyday contexts (MacFarlane, 2004). Furthermore, for Māori, there is the expectation that that which they treasure will be protected and sustained so it will continue to be passed down through the generations. As educators it is our role to ensure that these treasures are protected within the education system and that in turn, the ‘taonga’ or more simply put, ‘that which is highly prized’ by Māori is present and exemplified in our practice. This is protected under article two of the Māori version of Te Tiriti. One of the most important of these treasures for Māori is people. For it is through people that “nga taonga a o tatau matua, tipuna” (the highly prized practices and beliefs of our forebears, our ancestors) is sustained (Pere, 1994. p.69). The retention of these ‘taonga’, according to Pere (1994) is the responsibility of all, both young and old, from the moment from which one is capable.

The transmission of these taonga in Māori society generally occurred from birth; children were exposed too, lived in and learnt from a community of all ages. The generations of these ages spanned from the first generation to the fourth, with each generation responsible for implanting unique learning. Communal living such as this, Pere espouses, reinforced in children knowledge of their ‘whakapapa’ or ancestry whilst helping the child to find his or her place in the natural ‘order of things’ (Pere, 1994. p.59). This act of communal living and shared responsibility were once common practice within Māori society.

Emphasis was placed on working collectively, generally within extended family units or tribes, as opposed to working as individuals (Pere, 1994; Tangaere, 1996); the purpose of which emphasises the needs of the group and stresses group goals over those of the individual. It functions to ensure the survival of the group by working towards a mutual purpose. Living as a collectivist society also enabled the group to share valuable resources (Berk, 2004; Gonzalez-Mena, 2008; Tangaere, 1996).

Moreover, according to Katz (1995) and McClellan & Kinsey (1999) children, particularly those attending early childhood education, are spending increasingly greater amounts of time
outside of the home environment and are alternatively spending more time within early childhood centres. Katz goes on to suggest that this shift is inevitably replacing much of the child’s time spent within his or her family and “spontaneous neighbourhood groups as contexts for child-to-child interaction for large portions of children’s waking hours” (Katz, 1995, p.1) and because children are generally spending more time outside of their families, there is a growing need for an institutional and societal response to support children and their families (Coleman, 1987; Gray, 2011).

Several writers have suggested that the schooling system provides the most efficient setting in which to deal with children’s academic, affective, and social needs outside of the home environment before they presented serious causes for concern (Coleman, 1987; Parker & Asher, 1987 as cited in McClellan & Kinsey, 1999). Children that participate in multi-age settings enter into an environment that somewhat replicates or acts as a non-biological extended family (Carter, 2005; Evangelou, 1989; McClellan, 1994; McClellan & Kinsey, 1999; Stone, 1996; Viadero, 1996).

Furthermore, children are spending longer amounts of time in the same environment, or in this case, within the same early childhood centre, they may be given the opportunity to, and therefore be more inclined to, feel a greater sense of comfort within the environment and build more meaningful, longer lasting relationships with their teachers and the other children within the centre (McClellan & Kinsey, 1999; Viadero, 1996); an important aspect Pere (1994) suggests in fostering a positive sense of self. For children that participate in same-age settings however, this means that they are increasingly missing out on the heterogeneity that was once a common occurrence within society and a fundamental preference for the education and development of Māori throughout their younger years (Pere, 1994).

Multi-age settings also acknowledge children as capable of both learning and teaching. The Māori concept of ‘tuakana / teina’, is founded on two principles; that is ‘whanaungatanga’ and ‘ako’ - with whanaungatanga portraying the importance of kinship ties between whānau or family and ako meaning both to learn and to teach (Ministry of Education, 2009; Pere, 1994; Tangaere, 1996). In te reo Māori, ‘tuakana’ literally translates as ‘older sibling’ and ‘teina’ is defined as the ‘younger sibling’. This concept however does not require the participants to be biologically related but merely uses the older / younger sibling as a model for the mentoring process. This concept therefore denotes one’s ability to teach another and in turn, be taught. This was acceptable and often encouraged within Māori culture from a
very young age. The role of the *tuakana* therefore, was to guide and assist the *teina* in their learning; this act of support by the *tuakana* or older sibling aided in facilitating the process of learning for the *teina* or younger sibling (Ministry of Education, 2009; Tangaere, 1996).

As multi-age settings, particularly in early childhood education accommodate children up to five years, it is not uncommon for siblings and other *whānau* members to attend alongside each other, nor is it uncommon for older children to assist younger children thus creating situations for the concept of *tuakana / teina* to present itself (Carter, 2005; Evangelou, 1989; McClellan & Kinsey, 1999; Ministry of Education, 2009; Stone, 1996; Tangaere, 1996; Viadero, 1996). Same-age settings do not afford children the same opportunities to attend early childhood centres with their older or younger siblings or family members as multi-age settings do.

**Summary**

This review has revealed an absence of literature on the nature of same-age and multi-age settings, particularly within the New Zealand context. It has highlighted our unquestioned reliance on same-age groupings and has identified several influences on their on-going existence within the early childhood sector. Allied to this, there is a common belief amongst authors that although studies have been carried out on the nature of same-age and multi-age settings, findings have been inconsistent and varied and thus, more research is needed into each of these grouping arrangements. Additionally, the literature has presented contested views of the nature of same-age and multi-age groupings and their influence on children’s holistic development. Furthermore, how stakeholders - particularly those responsible for program delivery, perceive and understand the value of these settings remains unclear. Thus, this research is timely in gaining an understanding of the complexities and issues associated with same-age and multi-age grouping arrangements in New Zealand’s unique early childhood settings.
Chapter Three: Research Methodology

Epistemological approach

The epistemology that guided this research can be defined through the use of this Māori whakatauāki:

\[
Nā tō rouro, nā taku rouro ka ora ai te īwi:
\]

With your food basket and my food basket the people with thrive.

This whakatauāki represents the power of co-operation in enhancing the outcomes of the group. In my belief this whakatauāki can also be applied to the very nature of knowledge and the way in which knowledge is acquired. It suggests that knowledge is not your own, rather, it is to be shared amongst the people and emphasises the richness that can be derived from doing so. In this way I align myself with the notion that knowledge is subjective; that people give meaning to and extract meaning from everything around them.

It was important that this research reflected and acknowledged the value of shared knowledge, the value of the teachers that participated and the input that they had in the overall research. In order to do so, it was crucial that the research methods used in this study reflected this epistemology and enabled the appropriate exploration of the research aim and research questions. Given this, a qualitative strategy was utilised and the research design used explorative research methods. A detailed account of the research processes including a detailed description of the qualitative nature of this study and the selection of an interpretive approach is provided in this chapter. The chapter then states how the research site was selected, how and why the participants were approached and the ways in which their input was elicited.
Interpretivism approach

The research paradigm that has framed this study is the interpretive approach. An interpretive approach was selected for the way in which it enables the researcher to view the world, the people interacting within it and the way in which knowledge is produced and understood. It recognises that social situations can only be defined by human interaction, that humans are social beings, giving meaning to, and making sense of the world around them (Davidson & Tolich, 2003). An interpretive approach seeks to describe how a “group’s meaning system is generated and sustained... good evidence is embedded in the context of fluid social interactions” (Davidson, et.al, 2003. p.10). Thus, the nature of the interpretative approach made it ideal for investigating the research questions as it is concerned largely with understanding people as individuals, making sense of the “subjective world of human experience” and the “different conceptions of theory” that people create (Cohen, Manion, & Morrison, 2007. p. 39).

As Orlikowski and Baroudi (1991) suggest, an interpretive study assumes that people develop and correlate their own subjective and intersubjective meanings as they function in the world they are embedded in. The core function of the interpretive view is ultimately concerned with how people construct meaning in their social world. The role of the interpretive researcher is then to endeavour to understand phenomena through an interpretation of the meanings which the research participants had assigned to them.

In likeness, Walsham (1993) emphasises the contextual nature of interpretive methods of research, espousing that because of the nature of interpretive research there is no ‘objective reality’; instead, one’s reality forms the basis for human action which alters the environment in which they exist. This position attempts to explain human behaviour whilst noting that individuals differ greatly from one another. It acknowledges that no two people are the same and that these differences will ultimately have an impact on the way in which they attach meaning to things and in turn, respond to their surroundings. Ultimately, it is not the surroundings that are most powerful, but the people within them. For this reason, an interpretive approach was selected for use within this study to identify the theories of practice each of these teachers attach to same-age and multi-age settings. A qualitative research strategy was then necessary as “qualitative research is a situated activity that locates the observer in the world” (Denzin & Lincoln, 2011, p.3).
Qualitative research as a methodological choice

Qualitative research seeks to examine aspects of the social world that are not easily examined through the quantification of data (Jupp, 2006). As a research strategy it has three noteworthy characteristics. Firstly, it provides an inductive view whereby theory, is generated out of research. Second, it emphasises the importance of understanding the social world by seeking to understand it through an examination of the interpretations of its participants and third, it recognises that “social properties are outcomes of the interactions between individuals, rather than phenomena ‘out there’ and separate from those involved in its construction” (Bryman, 2008, p.366).

Other noteworthy traits of qualitative research are that it offers a holistic, all-encompassing approach that emphasises the importance of context upon social interactions. This holistic approach allows for the exposure of patterns from which theory might derive and grow (Coolican, 1999; Davidson & Tolich, 2003; Denscombe, 1998; Mertler, 2006; Mutch, 2005; Neuman, 1997). Another definitive point in qualitative research is that it does not attempt to make a generalisation about the whole population. It emphasises no universal truths but rather, aims to provide an accurate description of what people said or did within any given context. The strength of this method lies in its ability to view or focus on an event from several different angles, ultimately viewing it in a holistic way (Davidson et.al, 2003). These traits were an important requirement of the research strategy as one of the primary aims in this study was to find out what reasoning lies beneath our decisions as early childhood professionals to divide young children into same-age and multi-age groupings. In order to do so, this study had to draw upon the unique experiences, beliefs and values of the participants. Thus, a qualitative research strategy was employed.
Data collection method: Focus group interviews

Researchers within educational contexts are increasingly depending on the utilisation of focus groups in order to gather qualitative data (McLachlan, 2005). Sharma (2005) credits this to the nature of focus groups in that they are a quick and inexpensive means of collecting data. Focus groups provide a means with which researchers can “identify a groups’ beliefs about a particular issue in a non-threatening environment” (McLachlan, 2005, p.113). Due to the nature of focus groups and their ability to probe and obtain “rich contextual information” (Sharma, 2005, p.41) focus groups were selected as the primary source of data collection within this study. Data was collected from four focus groups – two focus groups with teachers from same-age settings, one focus group with teachers from a multi-age setting and an additional focus group was held with the teachers of a local Māori bilingual, also a multi-aged setting.

A Māori medium bilingual early childhood centre was selected due to the nature of its service – the aim of which is to produce children who are “Māori / English bilingual bicultural citizens”, active participants in both the Pākehā world and te ao Māori (Skerrett, 2010, p.7). The curriculum is delivered either completely in te reo Māori or in a proportionate mix of Māori and English (Ministry of Education, 2009 as cited in Skerrett, 2010) and reflects Māori ways of thinking and being. This setting was also selected for the core Māori values with which it emulates. The majority of staff identified themselves as being of Māori descent and placed great importance on the use of te reo me ōna tikanga in their practice with children. Thus, all staff within the Māori medium bilingual early childhood centre were involved in the final multi-aged focus group.

The inclusion of local Māori medium educators within a focus group recognises the right of Māori to contribute to and influence the direction of education within Aotearoa New Zealand. Ritchie (2003) states that “enlisting Māori support in determining and delivering early childhood programmes is a means for delivering to Māori a capacity for self-determination regarding their children’s education and in overseeing the protection of the taonga (treasure) of te reo” (p.1); a right of Māori as recognised by article two of the Treaty of Waitangi (Ministry for Culture and Heritage, 2012; Orange, 2004).

Further reasons for the selection of focus groups include the way in which they function. One of the primary aims of this study was to identify the values and reasoning teachers had behind same-age and multi-age groupings – this required a method that emphasised the personal
opinions of its participants and enabled them to share their beliefs. Focus groups provided the ideal environment for such interactions as they are concerned largely with the promotion of investigating the social world through the life experiences of the participants (Davidson et al., 2003). Focus groups provide an environment that participants can collectively discuss an aspect of their lives, probing into it and meeting one another’s disagreements (Corbetta, 2003). Blumer (1969) suggests that this, “will do more to lift the veils covering the sphere of life than any other device” (as cited in Corbetta, 2003, p. 276) an aim not easily achieved through the quantification of data (Davidson & Tolich, 2003).

Hinds (2000) elaborates further by explaining that due to the nature of focus groups they can be used to “gain information relating to how people think... explain perceptions of an event, idea or experience and aim to seek the perspective of the client” (p. 50). As this study is concerned with the theories of practice that teachers in same-age and multi-age settings hold, focus groups provide an ideal method of extracting valuable data.

Another advantage of focus groups is that they allow participants the opportunity to question practice– to bring to the fore issues surrounding same-age and multi-age settings that they think are important and valid (Bryman, 2008). The use of a research method within this study that allowed participants to question and bring forward issues associated with same-age and multi-age settings was important as it reflected the second aim of the study. The participating teachers were asked to identify the advantages and disadvantages that they experienced or felt arose within same-age and multi-age settings.

**Principles and practices for application**

The structure of the focus group questions, in that they are open ended, gave the participants license to take charge of the direction in which the topic takes and venture into aspects of the topic that the researcher might not view as being important (Bryman, 2008). During data collection, participants referred to several issues that I had not anticipated and placed great importance on varying characteristics and traits of same-age and multi-age education. Hinds (2000) emphasises the importance of the researcher assuming the role of a facilitator rather than a director. In assuming this role, I was able to steer participants towards an elaboration of the paths with which they chose to explore.
Krueger (1994) suggests that because of the unique nature of focus groups researchers must approach them with caution. What looks like a straightforward, simple task should be handled with forethought. According to Krueger a typical “focused interview” will include a dozen or so questions which when asked on a one to one basis would last only a few minutes. In a focus group however, participants have others to draw from. One participant within the focus group may voice an opinion triggering another participant to make a connection and formulate a new idea. This connection may ultimately sustain and fuel the conversation for a significant amount of time, with the potential to extract more relevant information. I was aware of this possibility when facilitating the focus groups and observed several occasions with which this prompting or triggering of thought occurred and resulted in the teachers leading the conversation in another direction. It was also evident that this interaction with one another in a group setting provided the necessary environment with which teachers were able to reflect on their thoughts, go back to a statement and refine or elaborate on it. This was evidenced on a number of occasions where teachers would make a statement and having heard the opinion of another teacher, referred back to their previous statements.

Krueger (1994) suggests the key principles of a focus group can be narrowed down into several distinct types of questions. These distinctions between questions provide a structured basis for obtaining material that is relevant to the study (McLachlan, 2005). Guided by the works of Krueger (1994) and Sharma (2005) and McLachlan (2005) four distinctive types of questions were utilised:

1. To open the focus group the teachers were asked to tell the rest of the group a little bit about themselves and how long they had been in the early childhood industry. Designed to be answered quickly the opening questions were used to illuminate the characteristics shared between the members of the focus group, thus creating common ground.

2. Introductory and transition questions were then used to introduce the topic and move the point of discussion into greater depth. The teachers were asked where they position themselves in the same-age and multi-age debate and what had influenced this preference. Although they work within one of these settings, it was not appropriate to assume each teacher preferred the setting with which they work and clarification was necessary. The teachers were then asked whether or not this preference would affect the way in which they looked for or chose work should they choose to change early childhood centres. The aim of these questions was to provide the participants with an opportunity to share their experience
with the group and identify what had influenced and contributed to their preference and their overall association to the topic. These introductory questions were designed not necessarily to gain important information but to encourage conversation and rapport among the members of the focus group. They were used to move the conversation away from the introductory phase and towards the key issues of the study.

4. The focus group was then presented with the key questions. These questions reflected the aim of the study and the nature of the research. Krueger (1994) explains that key questions serve to drive the study. They are generally the only questions that are developed within the focus group and it is from the answers to these questions that most of the analysis takes place.

The teachers within the study answered six key questions. The first question was concerned with the motives underlying the continuation of same-age and multi-age groupings. The second and third questions were concerned with the advantages and disadvantages of same-age settings, the fourth and fifth questions were concerned with the advantages and disadvantages of multi-age settings and finally, the fifth and sixth questions sought to answer how same-age and multi-age settings reflect the bicultural nature of New Zealand and our obligation to the Treaty of Waitangi.

5. A sole ending question was used to close the discussion and was just as crucial to the study as the key questions. The teachers were asked what recommendations or improvements can be made to rectify or minimise the disadvantages identified by the key questions. This question was used to offer the participants in the focus group time to reflect upon their beliefs and opinions and provide recommendations as to how practice in same-age and multi-age settings could be improved. The participants were then provided with a short summary of the key points before the group was asked if they had anything else to add. Krueger (1994) acknowledges the importance of this as it is within this time period that people really define their ideas and positions.

A complete schedule of the questions used in the focus group interviews can be found in Appendix three.
Identifying and recruiting participants

Early childhood teachers made up the sum total of participants within this study. According to Ryan and Goffin (2008) there is a need for the early childhood sector to move away from studying the effects early childhood programs have on child development; rather, they emphasise the importance of understanding the way teachers think. As the key participants involved in delivering the program, a focus on how same-age and multi-age settings are chosen, defined and experienced by teachers will aid in identifying the challenges and issues that arise within these settings (Edwards, Blaise & Hammer, 2009).

When identifying participants, it was not enough however, to randomly select teachers. Because same-age and multi-age settings contrast significantly, it was crucial that each of these settings was fairly represented. In order to do this, it was necessary to utilise a form of sampling that would enable me to strategically identify participants from both same-age and multi-age settings within the early childhood community. Purposive sampling provided me with a means with which to do this. Bryman (2008) describes this approach towards sampling as an effective way of gathering the right participants, allowing for the deliberate selection of early childhood teachers who could provide the information necessary to achieve the studies aims by “virtue of knowledge and experience” (Bernard, 2002 as cited in Tongco, 2007, p. 147).

The inclusion of Māori

When conducting the focus groups a Pōwhiri model of engagement was utilised. This model of engagement was selected because it is based on tikanga Māori principles and promotes respectful relationships amongst Māori, Pākehā and the researcher. This model, developed by Hatcher, Coupe, Durie, Elder, Tapsell, Wikiriwihi and Parag (2009) consists of nine steps; these steps were used to guide the focus group and ensure cultural sensitivity was maintained. These steps were:

1. Karanga / Recruitment of Participants

When inviting Māori of the bilingual early childhood centre to be a part of the study they were supplied with detailed information sheets (See appendix two). The information sheets outlined the direction of the study, how their participation was requested, how much input
they were to have and how much time it would take. The information sheets and subsequent consent forms were delivered prior to the focus groups (See appendix three).

2. Karakia / Opening prayer

To begin the focus groups, participants were asked if they were comfortable with participating in karakia or prayer. This act was used to unite everyone present and bless the occasion. However, participation was voluntary to ensure cultural safety.

3. Whanaungatanga / Introduction

The second stage of the focus group consisted of whanaungatanga or introductions. I approached and gained the consent of a local Kaumātua who guided me in local tikanga. Following this, I introduced myself, as the researcher, with reference to where I come from – my tribe and my ancestors. In this way, I sought to make connections with the Māori participants. The purpose of the study and my interest in it was defined again. I offered the participants an opportunity in which to introduce themselves and where they come from. In this way, I welcomed them and their families whom they represent, into the study.

4. Whaikōrero / Discussion

The whaikōrero or discussion is where the data of the focus group was collected. Participants were asked to share their experiences / thoughts and theories regarding same-age and multi-age settings.

5. Waiata / Debriefing

Waiata in this instance was used to thank the participants for their contribution to the study. As the researcher I asked the participants how they were feeling. For Māori, this allows the participants / speakers of the group to return back to normality from being in a state of tapu.

6. Koha / Act of Reciprocity

As an act of reciprocity, a koha was gifted to each of the participant centres. They were each given a small selection of resources that they could take back to their centre. This was important as it was an acknowledgement of the value of their contribution to the study and the koha was an act of giving something of value back to them.
7. Hōngi / Relax
Participants were then given the opportunity to relax and talk amongst themselves whilst the hakari or feast was being prepared.

8. Hākari / Feast

Hākari is the act of ritual feasting that traditionally applied to the eating of cooked food. Symbolically, the hākari recognises the transition from the spiritual realm of the pōwhiri back into the physical world where food is shared. This act however, is generally applied to all hui (meetings) in which Māori hold and participate within. It is also a means of fulfilling the cultural obligation of manaakitanga. It is for this reason that at the completion of each of the focus group sessions participants were offered food and drink.

9. Poroporoaki / Farewell

A thank you letter was sent to each centre or teacher thanking them for their participation within the study. It detailed how they could access a copy of the final study and my appreciation of their input.

Data validity

Thematic analysis

According to Mason (1996) validity in qualitative research is met when you “are observing, identifying, or “measuring” what you say you are” (as cited in Bryman, 2008, p.376). The implementation of a thematic analysis contributed to the validity of the study. This is due in large to the nature of thematic analysis in that the feelings and thoughts about the emerging themes within the findings are irrelevant when analysing data thematically (Anderson, 2007). Thematic analysis seeks to identify the views of the research participants, whilst bringing their theories of practice and individual reasoning to the forefront.
Repetition of focus group questions

The questions selected to guide the focus groups were replicated within both the same-age and multi-age settings. In this way, both of the settings were given an equal footing thereby increasing the reliability and credibility of the findings (Bryman, 2008; Yin, 2011). The continuity with questions in the focus groups also ensured that the study can, for the most part, be replicated in the near future.

Transcription of focus groups

Each of the four focus groups was recorded and later transcribed. The purpose of this was to increase the accuracy of the findings; providing direct quotes from the transcribed raw data. Bryman (2008) espouses that it would be extremely difficult to remember all that is said during a focus group interview and equally impractical to attempt to write notes. Transcribing focus groups allows the researcher to identify the contributions of individuals, identify the strength of a belief amongst the group and “study the processes whereby meaning is collectively constructed within each session” (Bryman, 2008, p.476).
Data analysis

Once data was collected it was then analysed. Analysis is the process in which raw data is turned into results or findings (Lofland, Snow, Anderson, & Lofland, 2006). This process involves, at an undeveloped level, sorting the data collected into broad categories in order to draw out reoccurring and essential themes (Wolcott, 1994 cited in Lofland, et. al. 2006). In order to sort data and turn it into meaningful results and findings, a thematic analysis was employed.

Anderson (2007) describes thematic analysis as a “descriptive presentation of qualitative data” (p.1). Thematic content analysis is concerned with the extraction of ideas embedded within the findings. In order to extract these ideas, the raw data collected from the focus groups was coded. Lofland et al. (2006) describe the process of coding as consisting of two steps, initial coding and focused coding. During the initial coding process, the data was organised and assigned to categories; these categories were determined by drawing out the reoccurring trends and themes. The reoccurring trends and themes were then given names and classified by their similarities. These names were derived largely from the word selection of the participants within the research process as this reflects a more accurate view of the meaning behind these themes and their intended purpose.

One of the key characteristics of the initial stage of coding however is that it tends to produce large quantities of varying codes (Lofland et. al, 2006). It was therefore essential to refine these codes and make them more meaningful (Lofland et. al, 2006); in order to do this, the categories developed within the initial coding stage were then refined further by implementing a more focused coding process. The focused coding process intertwined larger chunks of similar information together, narrowing the focus and eliminating any unnecessary information.

Although content analysis requires some degree of interpretation, thematic analysis ensures that the researcher’s interpretation is kept to a minimum as the researcher’s feelings and thoughts about the themes within the findings are largely irrelevant to a thematic analysis (Anderson, 2007). Minimising any input I had on the findings was important as the study was concerned with teacher perspectives and their theories of practice. A thematic analysis of the data was therefore ideal because it allowed the perspectives and theories of practice that
the participants hold to be uncovered and brought to the forefront with minimal intervention from myself as the researcher.

**Ethical issues**

The importance of considering ethics in research serves to minimise any potential harm to participants (Cardno, 2007). To minimise any potential harm participants may be exposed to within this study, Unitec’s Research Protocol (2009) was adhered to and care was taken whilst recruiting participants, gaining access to early childhood centres, making sure consent was informed and voluntary, maintaining confidentiality and avoiding any conflict of interest.

**Recruiting participants**

In the initial phase of recruiting teachers to participate in the study I approached local early childhood centres that were either same-age or multi-age settings. I called each of the centres individually and spoke to management. I asked for permission to go into the centre to introduce myself and the study and drop off some information sheets. Where this was ok, I took morning tea to each of the centres and spoke with both management and staff. I left information sheets with the centre with all of my contact details and gave them the option of responding. Where there was a response, organisational consent was sought.

Participants were also approached in several other ways. I contacted teachers that I had had the opportunity to network with, asked my colleagues if they knew of anyone that might be interested and posted a brief message on an early childhood teaching blog. Altogether 23 early childhood teacher were involved in this study; 10 teachers worked within same-age settings, six from a mixed age setting and seven from a local Māori bilingual. The relatively small group sizes served to make the focus groups more manageable - a point Bryman (2008) notes is essential as having too large of a group can become hard to manage. The participants recruited also worked within the Auckland district. This made the attendance at the groups more feasible for both the participating teachers and for myself as the researcher.
Access

Wilkinson (2001) suggests that the key topic in research ethics is how we should treat others. Gaining access to information and participants required the appropriate approach. When working with Māori participants, recognising the rights of Māori to tino rangatiratanga, self-determination over taonga, in Te Tiriti o Waitangi and being respectful of these rights was essential. Thus, consultation with local Kaumātua and other knowledgeable persons was undertaken to ensure Māori participants were approached respectfully. Through their guidance, contact was made with management of a local Māori medium bilingual early childhood centre and the focus group was conducted using a Pōwhiri model of engagement.

Informed consent

To ensure participation was voluntary and well informed, the teachers were provided with detailed information sheets. The information sheets served to explain the nature of the study and inform participants of how their participation was required (Cardno, 2007) and the participants were informed on several occasions, about what defined same-age and multi-age groupings. They were given the opportunity to contact the researcher via phone, text, or email with any questions that may have arisen.

To align with Unitec’s (2009) policy, informed written consent was gained from every participant. The teachers were provided with a consent form when first approached and again prior to the commencement of the focus group. The consent forms contained brief statements acknowledging that the teachers had been fully informed of the study and what it entailed, assurance that confidentiality and anonymity would be upheld, information about withdrawing from the study and of the complaints process.

Confidentiality and the preservation of anonymity

According to Unitec protocol, “participants in a research project must have their rights to confidentiality and anonymity protected” (Unitec, 2009, p. 19). In order to do this, the participating teachers’ names were replaced with pseudonyms. Any other identifying information, such as company names and unique services offered, were also left out of writing. Teachers were also informed that although the focus groups were transcribed, access to the transcriptions would be limited to the researcher and the researcher’s supervisor. An electronic copy of the thesis, information sheet, consent forms and focus group transcriptions
are stored in a secure file within my home where they cannot be accessed by anyone other than the researcher.

**Avoidance of conflict of interest**

To avoid any conflict of interest, colleagues from my own centre have been excluded from participating within this research.
Chapter Four: Findings

Overview

Focus groups used in this study produced a wealth of qualitative data that reflected both same-age and multi-age grouping arrangements. The purpose of this chapter is to present the findings of the four focus groups in a way that allows the reader to draw initial conclusions from the data collected. It also enables the researcher to identify the themes and sub themes that emerged during the data collection process. This first level analysis is used to make the collected data more manageable and thus, more meaningful.

This chapter is organised into five consecutive sections with the data collected from each focus group presented individually. Data from each of the questions is presented in the order in which they were asked. The findings are then analysed across all four focus groups and an overall presentation of the findings is offered. The purpose of this is to examine whether teacher beliefs differ between same-age and multi-age settings.

This chapter relies on the use of quotes to reflect the teachers’ voices as accurately as possible; using their own words to provide evidence. In this way, the researcher’s own bias and interpretation of the research findings is diminished as much as possible. In order to present these findings a first level analysis was undertaken to identify the emerging themes and patterns in the data collected. The results are reported and analysed under the following headings:

I. Preferences;

II. Motives;

III. Advantages of same-age groupings;

IV. Disadvantages of same-age groupings;

V. Advantages of multi-age groupings;

VI. Disadvantages of multi-age groupings;

VII. New Zealand’s bicultural context;
VIII. Improvements to practice.

**Same-age focus group one**

This section reflects the data collected from seven early childhood teachers that participated within the first same-age focus group. Of these teachers, there were six females and one male. The attending participants worked in various centres and service types throughout the Auckland region. Of the seven teachers, five worked in privately-owned, for profit centres. Of the two remaining teachers, one visited multiple centres teaching music and the other worked within a community based kindergarten that was initially a same-age setting, but had recently changed to accommodate both three and four year olds at the same time.

**I. Preferences**

**Stakeholders**

When asked whether or not a preference existed between same-age and multi-age settings, two of the participating teachers expressed that they thought it was a “tough question” to answer because each setting offers unique advantages. It was also suggested that these advantages were applicable to different stakeholders in early childhood education and answering would reflect the priorities of the teacher.

Susan: “It's a tough question, because if you're talking specifically from a teacher’s point of view, it is different than a parent’s point of view and it is also different from a child’s point of view and if you’re looking at what is easier for a teacher or what is better for the child I think they’re all very different answers”.
**Teacher strengths**

For five of the teachers, their preference was determined largely, by where they felt their strengths lay.

*Ethan:* “*I am aware of the advantages and disadvantages of having mixed-age and same-age but the question of preference; yeah I prefer to be with same-age, especially the older children because my strengths lie in literacy and numeracy and those are appropriate for that age group*”.

*Jan:* “*I’m the same. I teach the transition to school programme at my kindy so I just have four-year-olds and that’s all... having the four-year-olds together is really good, because I’m primary trained as well and I used to teach new entrants so it sort of gives me an idea of what they should be doing when they get to school, well, it’s what I think they need to get ready for school*”.

These teachers expressed confidence in their abilities and sought opportunities where these skills could be used. Four of the teachers however, felt that these preferences had the potential to limit their employment opportunities in the future.

*Amy:* “*I think as time and your skills and your knowledge develop, so too does the age group you like working with...I think it has changed quite a bit in the last few years. About three or four years ago it was all preschool teachers needed and you struggled to find baby teachers; where now, it’s turning around because a lot more preschool teachers are struggling to find a job*”.

*Ethan:* “Well it’s limited my choices. *At this point I’m looking for work at other centres and I look at the ads and I see, most of them are looking for teachers for toddlers, for nurseries and I prefer to be in the preschool room or with preschoolers; so it has limited my choice*”.

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Familiarity

Moreover, five of the seven teachers identified that they had spent a limited amount of time within multi-age settings and cited teaching practicums as their only real experience within this setting.

Ethan: “I think it’s a difficult question to answer really, because I never got to work in a mixed-age, well, except for my experience here during my practicum days”.

II. Motives

Profit

There was a strong consensus amongst teachers within this focus group as they identified one key motive behind same-age grouping arrangements. Four out of seven teachers believed that same-age settings were often large business operated, for profit early childhood centres.

Sally: “I think there are ‘now’ a lot of privately owned childcare centres out there. I work for one. Let’s be honest, the main, we’re looking at ABC, we’re looking at Lollipops, their main focus is a business run centre. They’re looking at profit. So they’re looking at ‘what’s the maximum number of children that we can have in this space? If we go mixed-age, obviously we can’t have 100+ in one centre. If we have same-age we’re more flexible in having obviously more profit, more money’.”

Philosophical beliefs

Four teachers believed that decisions behind multi-age groupings however, were often associated with the philosophical beliefs and preferences of the centre owners. These grouping arrangements were more likely to reflect owner attitudes about child development and best practice than same-age settings.

Amy: “The owners at my centre, they opened up another centre, well two actually, where they were multi-age. It was one space where it was two to five year olds but that was based on their likes, they like that kind of grouping. So sometimes I think it’s based on owner or management likes or preferences”.

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Sally: “Cultural preferences too, like the language nests, they’re mixed-age but they are again smaller centres”.

Susan however, expressed weariness and suggested that the philosophy of centre owners and management had to pass down through a series of layers and that in some cases, the philosophy defined by centre owners and managers, was not always a true reflection of the philosophy that was being put into practice.

Susan: “Philosophy is a tricky one. The philosophy of the centre filtered down through so many layers before it reaches the child, like the teachers and teachers’ personal philosophies as much as, that, yeah. From what I’ve experienced; I’ve read the philosophy of some centres and I look at how the teachers work and it does not quite line up with the philosophy”.

III. Advantages of same-age groupings

Planning

There was a unanimous agreement amongst the participating teachers within the focus group that it was easier to plan for children within same-age settings. Seven out of seven of the teachers agreed that the developmental levels between children of the same-age were smaller than that of multi-age settings and thus, were easier to cater to.

Ethan: “A same-age group setting will help the teacher to become more focused on the general needs of the children, whereas if you have a mixed-age, like she said, it’s hard with the proportion of the skills”.

Age appropriate curricula

The participating teachers also unanimously agreed that one of the main advantages of same-age settings lay in their ability to provide children with age appropriate curricula and activities.

Susan: “As a teacher going into a same-age setting, I know that I’m going to have a certain developmental age bracket that I’ll be working with”
This was also seen as strengthening the practice and responsiveness of the teacher to that particular age group’s needs and development and provided greater opportunity for teachers to recognise differences in children; allowing them to identify where there might be delays in language and speech.

_Ethan: “You tend to set a standard for all; because you know the norm, you know what is developmentally appropriate. You can clearly see what children need help with, language or speech and that’s an advantage”._

**Learning from same aged peers**

Furthermore, four out of seven teachers believed that same-age settings provided an opportunity for children who may be experiencing delays to learn the appropriate behaviour and skills relevant to their age from peers of the same age. The exclusion of younger, less proficient children was said to encourage the child with delays out of their comfort zone and towards a higher level of operation.

_Paige: “The flipside to having the same-age groups, say, all four-year-olds and some aren’t as socially capable as the others... They pick up quickly and understand that this is how things happen here, everyone is doing it, this is the culture; this is how we do it and why we do it. Whereas if you’ve got the three and four-year-olds together there are more operating at perhaps the lower lever, so a four-and-a-half-year-old operating at say a three-and-a-half-year old level, if you haven’t necessarily had the input where you haven’t had the communication where you haven’t been interacted with and you come in its easier to attain that level when there aren’t a group of children operating at the level you’re at now”._
IV. Disadvantages of same-age groupings

Of the disadvantages identified by this group of teachers, three arose most frequently - the stigmatisation of children, exclusion and profit over quality.

Stigmatisation

Amongst the teachers, three believed that same-age settings can in fact stigmatise children by expecting them to reach a certain level at a certain age.

_Ethan: “One disadvantage of same-age is you tend to set a standard for all, for that age group and as a teacher you tend to at times, expect everyone to follow the same norm and standard of behaviour and standard of learning... you could also stigmatise children who are lacking or lagging behind”._

Furthermore, these three teachers felt that there is the potential for teachers to expect all children in a same-age setting to have the same abilities. Because the differences are less obvious in same-age settings, there exists an increased risk of teachers not recognising the individuality of children, their skills and level of development.

_Jan: “I think there is the assumption that when you’re at the same age you’re going to be at the same level. Like in the primary curriculum we say “you’ve got to be at level one”, when it is not really like that at all and I think the same goes in ECE like you’re four, you should be able to write your name, use scissors, sit on the mat, read a story book but not everyone can do that and I think if you’re going to have it in a same-age setting you’ve got to be really aware that even though everyone is four, they’re not all at the same stage; it is not going to be the same at every level”._

Exclusion

There was a common belief amongst six of the teachers that this expectation could lead to the exclusion of less able children who did not meet the predetermined standards and expectations of the teacher. For two teachers this was a cause for concern. They shared the belief that the exclusion experienced by children who did not meet these standards had the potential to have negative effects on their sense of self.
Susan: “One centre that I was at, the children didn’t move up to the next room for example, until they were toilet trained, out of nappies and that was sort of, more a marker rather than age”.

Ethan: “You tend to, at times, expect everyone to follow the same norm and standard of behaviour and standard of learning so that could be a disadvantage... Well of course that will have negative effects on the children”.

Two of the teachers believed however, that this could in fact, be seen as an advantage of same-age settings. Not only did it encourage children to adopt more appropriate behaviours, but depending on the nature of the early childhood centre, there was the potential flexibility to leave a child in a lower classroom for a longer period of time. This meant that the child had access to equipment that was more suitable and appropriate for their needs and developmental level - even if they were chronologically older than the rest of the children in the room.

Sally: “For our centre, with the same-age, we are split into age groups but at the same time, we do look at our transitions; it doesn’t go on age... For a little girl that we did have in our classroom, she couldn’t walk, she needed the equipment (of the infant room) to be able to pull herself up”

Paige: “I was going to say the flipside to having the same-age groups, say all four-year-olds and some aren’t socially capable, if you consider culture of a standard way of being, that culture of that group, if its same-age it tends to be more stable...They pick up quickly and understand that this is how things happen here, everyone’s doing it, this is the culture here of how we do it and why we do it, whereas if you’ve got the three and four-year-olds together there are more operating at perhaps the lower level”.
Profit over quality

The third disadvantage identified amongst the teachers was that same-age settings were commonly associated with business orientations. There was concern that this orientation had a tendency to prioritise profit over quality and where this was the case, it often came at the detriment of the children.

*Sally: “Unfortunately, there are lot of big centres out there that are privately owned and are focused on making money, rather than actually offering quality childcare. At the end of the day, they’re customers and obviously we’re delivering a service”.

*Paige: “I know the changes that we have had (kindergarten), it’s not for the benefit necessarily of the children and families... There’s a big change in funding going from sessional, going from a three hour session to a four hour session; a huge change in funding - a lot of money”.

V. Advantages of multi-age groupings

Of the advantages identified by this group of teachers, four arose most frequently. Multi-age settings provided an environment where children learn to adjust to and accommodate differences whilst younger children had the opportunity to learn from more experienced peers. Multi-age settings were also seen as having higher teacher to child ratios.

Children learn to adjust to and accommodate differences

All seven of the teachers expressed the belief that multi-age settings presented children with unique social experiences non-existent within same-age centres. Children in multi-age settings have greater opportunities to develop the skills necessary to adapt their behaviour to differing age groups. In multi-age settings, children learn to negotiate, interact with and alter their expectations in their interactions with children of different ages.

*Susan: “I think being in a mixed-age centre, the children have the opportunity to develop social skills with different ages. You are learning how to negotiate, interact with and be able to alter your expectations and the way you play with different aged children. I think they learn such a valuable skill for life”.

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Younger children learn from more experienced peers

All seven of the teachers also agreed that multi-age settings provided greater opportunities for children to learn from differing age groups. There was strong consensus amongst the teachers that the nature of the learning gained from such a setting, differed depending on the age and development of the child. Younger children were more likely to develop more advanced skills whilst working alongside more advanced peers and older children, had greater opportunities to learn tolerance, responsibility and empathy.

*Ethan:* “One advantage would be the cognitive benefits, because the younger children will be exposed to stimulation coming from the older children. For the oldest children, being in that setting, that would translate later on into having a better sense of responsibility and more tolerance for differences because in a mixed-age group there’ll be different needs to cater to and hopefully they’ll be more accommodating of those differences and needs”.

Higher teacher to child ratios

Five of the teachers identified that multi-age settings often had higher teacher to child ratios. To comply with licencing, multi-age settings are required, by law, to have higher levels of staff and fewer attending children than same-age settings. This was seen as an advantage of multi-age settings but also as a necessity.

*Sally:* “In same-age the amount of children that can be in a particular classroom is quite different. Once you with a multi-age classroom I think that you do obviously need less children in a particular classroom because obviously you’re dealing with the infants and at the same time you have got the older children together”.

Paige, whose centre has recently transitioned from a same-age centre that catered to four-year-olds to a multi-age setting that now caters to three and four-year-olds noted the impact this change had on the ratios and in turn, on the interactions within the centre environment.

*Paige:* “With the extra teacher and better ratios, it was a natural thing... It actually worked out really well, having a big space where they can go their own way and work on their own projects and to have an extra teacher to cover that so everybody was completely supervised and everything was covered all the time and
actually, you know what? Children could come in nappies and you might get three in nappies and that takes two teachers so you've got one teacher covering everybody else, so that makes a difference”.

VI. Disadvantages of multi-age groupings

Safety

Of the disadvantages identified amongst this group of teachers, issues of safety, particularly for younger, less able children arose most frequently. All seven of the teachers believed that multi-age settings exposed younger children to greater levels of risk through the nature of their interactions with older, more capable children and the provision of equipment that was too advanced or inappropriate for their age group.

Susan: “There are challenges, being that you’ve got to intervene with older children and younger children and teach the older children how to be gentle around them... Coping with young children who want to participate in the older children’s games but are just too little and you just see that they’re going to get hurt... Where is the line?”

This finding was supported by Paige whose observations of her own practice led her to comment on the complicated nature of multi-age settings. Paige expressed that often, she was torn between a desire to work with and extend on the learning of older children whilst still meeting the needs of the younger three-year-olds.

Paige: “I feel really sorry sometimes for my big four-year-olds because the younger ones take... just a little bit more teacher work and we have a philosophy of children leading their own planning... you’re going to be a part of it and because you need to be here (with three-year-olds), you can’t because this is need, this is what I want to be doing, but this is need”.
VII. New Zealand’s bicultural context

When asked how the nature of same-age and multi-age settings reflect Māori aspirations outlined in the Treaty of Waitangi, there was a general reluctance amongst the group to answer this question. Of the seven that attended, only Sally and Ethan provided an answer.

Equally reflected in both settings

Sally believed that the Treaty could be reflected equally within both of these settings.

*Sally:* “The main source of the Treaty, what was promised to Māori, was that they’d have the same rights as Pākehā at the time. I think that’s what we all have to remember at the time. When they sent this pilot study out to all Māori families, all that came back was that all those parents wanted was their children to succeed in the education system. Obviously still implementing the tikanga and te reo; but at the end of the day, what they wanted for their children was to succeed and build their self-identity. Stuff like that when it comes down to same-age and mixed-age”.

Partnership and accommodation

Ethan referred only to the Treaty of Waitangi’s relevance within multi-age settings and believed that the very nature of multi-age settings taught children to work in partnership with each other and to accommodate the needs of others.

*Ethan:* “The Treaty’s about partnership and accommodating other people’s needs. That’s what happens in mixed-age settings; you have to accommodate the needs, it’s like a partnership, everyone’s needs are being met; tuakana / teina - the principle of learning from siblings”.
VIII. Improvements to practice

This group of teachers identified two key improvements to practice - teacher to child ratios and space.

Ratios

There was a general consensus amongst the teachers that improved ratios in both same-age and multi-age settings would enhance practice within both settings in unique ways. Multi-age settings were identified as having higher teacher to child ratios than same-age settings and three of the teachers identified experiences within their practice where the higher ratios of multi-age settings enabled the teachers within those settings to adopt more meaningful practices.

Ethan: “Ratios would matter, because you are dealing with so many personalities, so many needs and having the right amount of teachers for the children”.

Sally: “It comes down to numbers, the ratio, how many children and teachers are in the setting”.

In multi-age settings, increased teacher to child ratios were suggested particularly in settings where infants and toddlers were present.

Sally: “Depending on the children’s age, they need different experiences at different times... I think it’s very hard if you’ve got a mixed centre to be able to offer that specific... And ratio wise too, infants and toddlers need particular ratios to be classed as ‘quality teaching’ and will you still get those same ratios if they are in a mixed-age setting?”
Space

Space was also seen as a necessary improvement, particularly within multi-age environments. Four of the seven teachers believed that having space specifically for infants and toddlers, where they had the opportunity to retreat to, was necessary to ensure that infants and toddlers had a space of their own where they felt safe.

Susan: “Given the mixed-age centres, you’ll find that there is a baby exclusive area within those centres, and that’s a necessity. Especially for the little ones, they need to have a safe place; where they’re not going to get hurt”.

Maata: “It’s a requirement now from the MoE that every infant and toddler centre, well every centre in fact needs a separate place for infants, as being a safe zone where they can have tummy time without obviously being in the way”.

Same-age focus group two

This section reflects the data collected from three early childhood teachers that participated within the second same-age focus group. All three of the teachers worked within the same privately owned centre in Auckland.

I. Preferences

Familiarity

In defining their preferences between same-age and multi-age settings, two of the three teachers referred to their limited experience in multi-age settings. They cited their practicums whilst training as their only real experience within the multi-age setting. Of these teachers, Megan preferred same-age settings and Emily did not have a preference for either setting as long as she could work with two-year-olds.

Emily: “Not necessarily for either setting but I do have an age group. I’ll admit to that. I could probably do mixed. I haven’t had much to do with a mixed-age centre. I think I’ve had maybe two practicums? That’s about six weeks? Six weeks out of six years”.

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Personal philosophy

The remaining teacher, Siuati, who had spent lengthy amounts of time in both same-age and multi-age settings, expressed a preference for multi-age settings. Siuati referred to her own experience within a multi-age setting and cited the helpful relationships between older children and younger children as a factor.

Siuati: “I enjoy working with the mixed because the older ones can be helpful for the young ones and pick up instructions and get it; so the old ones can show the young ones. I came up from the over twos so I used to work with the older twos then I went back to the young ones so I enjoy the young ones too”.

II. Motives

Profit

When asked what motives underpinned same-age and multi-age settings, only one answer was given. Megan, a head teacher referred to her experience within her own company. This company divided infants and toddlers homogeneously but had a multi-age grouping arrangement for three and four-year-olds. This structure had a significant influence on the answer that she provided.

Megan: “I’d say having fifty three and four-year-olds; you’ve got that higher ratio of children; whereas if you have fifty two-year-olds, you’ve got to have more staff in there. So if you’ve got a mixed-age centre, it must be easier to get the ratios. It’s one to 10 (adult to child ratio) over there; it is one to six in here. So he (the manager) has to have more staff here than he does next door”.

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III. Advantages of same-age groupings

Age appropriate curricula

All three of the teachers believed that one of the key advantages of same-age settings lay in the teachers’ ability to provide age appropriate experiences and resources without fearing for the safety of younger, less capable children. In this way, the teachers did not have to cater to large differences and were able to strengthen their practice with the relevant age group.

*Emily:* “An advantage to being same-age is you’re not having to teach one level and then having to extend it off to the others. You can sort of teach them all at the same time. You’re not doing colours as well as shapes all at the same time with the kids that are more experienced. You can just focus on the one little learning area”.

IV. Disadvantages of same-age groupings

This group of teachers identified two key disadvantages unique to same-age settings – the absence of more mature role models for younger children and finding passionate staff.

Absence of more mature role models

Of the disadvantages identified within this focus group, all three of the teachers believed that younger children often imitated the negative behaviours of their peers. The absence of older children who had the potential to demonstrate more mature, positive behaviours meant that younger children had less exposure to more sophisticated experiences in social competency.

*Siuati:* “In the morning, when we settle them in and one cries, then they all cry and then we need another staff member”.

*Megan:* “Same thing, if you’ve got one that’s splashing in the water, they’re all going to splash in the water you know? Whereas a mixed-age setting, the little ones might do it but then they’ll see the older ones playing; using the cups and then the little ones will all follow. It’s like when we take our young ones over to preschool, they constantly watch the older ones and they try to do what they’re doing”.

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**Passionate staff**

Finding passionate staff, was also seen as a disadvantage by all three of the teachers. There was common consensus amongst the group that finding staff that had passion, particularly for working with infants and toddlers was challenging and that infants and toddler centres required a special type of teacher.

*Emily:* “It’s about getting staff into the centre that are passionate. It’s no use getting a staff member into a same-age setting who doesn’t want to be there. Two-year-olds aren’t an easy setting”.

**V. Advantages of multi-age settings**

Three key advantages were identified as being unique to multi-age settings. Multi-age settings were commonly associated with greater levels of peer scaffolding, were seen to strengthen teacher practice and were considered less structured.

**Peer scaffolding**

All three of the teachers within this focus group cited peer scaffolding as one of the key advantages that occurs within multi-age groupings. In these settings, younger children have the opportunity to learn from older, potentially more advanced children within the centre.

*Megan:* “The younger ones learn from the older ones; whereas same-age, they’re all learning the same behaviour – good and bad behaviour. So when they’re in multi-age age, the little ones are learning from the older ones”.

*Emily:* “Scaffolding, they’re always learning from each other, than us having to teach everything. The two-year-olds have the four-year-olds and the three-year-olds have the four-year-olds and all that”.
Strengthens teacher practice

All three of the teachers believed that multi-age settings provided a positive challenge for teachers. Working with varying age groups meant that teachers had to learn to adapt their practice to the varying needs and developmental levels present in a multi-age setting.

Megan: “The staff are also learning because here (same-age) you sort of learn to teach a certain age group, whereas with a mixed setting you’re constantly having to learn for all age groups because four-year-olds want something different than a two-year-old. You’ve got to be able to cater to all age groups”.

Less structure

Furthermore, all three of the participating teachers associated multi-age settings with fewer routines and more flexibility than same-age settings. They believed that this was due to the greater diversity of children within multi-age settings and the fact that teachers had to cater to greater variances in developmental levels and needs. This flexibility was associated with greater freedom, free play and learning.

Megan: “Our centres very routine based, so its morning tea, nappies, lunch, sleep. It’s all very bang, bang, bang, bang! But with a mixed-age setting you’ve got more freedom, play time, a lot more learning time because you’re not stuck with that routine of nappies and toileting and stuff like that”.

VI. Disadvantages of multi-age settings

This group of teachers did not identify any disadvantages unique to multi-age settings.
VII. New Zealand’s bicultural context

Equally reflected in both settings

When asked how the nature of same-age and multi-age settings reflect Māori aspirations outlined in the Treaty of Waitangi, all of the teachers appeared uncomfortable; this was evidenced when this question was initially met with ‘ooohing’ and laughing. This group of teachers believed however, that their obligation to the Treaty was not met by a single setting, but rather, could be incorporated equally into both same-age and multi-age settings and was dependant on the efforts of teachers within each of these settings.

Emily: “... it’s more the setting, like where the centre is, what the communities got more than same-age / mixed-age”.

Recognition of diverse cultures

All three of the teachers believed that their recognition of the multi-cultural nature of their centre fulfilled their obligation to the Treaty of Waitangi. This group of teachers identified that they made the effort to greet each of the children in their native language, include culturally appropriate songs during mat time, and encouraged children to be culturally responsive.

Siuati: “We do Māori songs, you know, when we sing it using Māori words they say ‘sing it again, sing it again’. They might know other languages you know. I speak different languages and I know the Treaty of Waitangi and sometimes I speak to them in Samoan. We’ve got good relations with them”.

Connections with whānau

Furthermore, all three of the teachers emphasised that one of their greatest strengths, existed in their ability to maintain strong connections with children, parents and whānau. This took the form of cultural days, parent involvement with things like baking, family picnics, sleepovers that older siblings could attend and family evenings.

Siuati: “…during the year, we have a day that, a culture day where we can have families”.

Emily: “Share their culture with everyone else”.
VIII. Improvements to practice

Opportunities to interact with other age groups

Megan believed that providing children in same-age settings with experiences to interact with children of different age groups would enhance their learning experiences. Megan referred to practice within her own centre as an example. Siuati and Emily agreed.

*Megan: “Well, one of the benefits we’ve got here is that we often mix with the other preschool centres... they join us for games and play, so we get that older interaction. Our children are always talking through the fence and so they have that sort of learning with the older kids”.*

Professional development

Furthermore, Megan believed that participation in continuous professional development enhanced the abilities of teachers in both same-age and multi-age settings. Megan also thought that it was important for teachers of both same-age and multi-age settings to participate in professional development that gave them an in-depth knowledge of working with all age groups. Siuati and Emily agreed also.

*Megan: “Professional development always helps. Get in somebody so you’re always learning how to work with all age groups, all genders, all special needs. Always do professional development. Bring it into mixed-age groups so you can learn certain age groups”.*
Table I: Key findings derived from the data collected from two same-age focus groups

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Multi-age focus group one

This section reflects the data collected from six early childhood teachers that participated within the first multi-age focus group. The attending participants worked in various centres and service types throughout the Auckland region. Of the six teachers, three worked in privately owned, for profit centres. The remaining three worked within community-based services. The types of community based services reflected, differed significantly in the types of services that they offered, with one teacher delivering parent-led playgroups, one working within a not-for-profit special character Christian pre-school and one working in a teen parent unit offering early childhood care and education to children of teenage parents attending the adjoining high school.

I. Preferences

Familiarity

When asked whether or not a preference existed between same-age and multi-age settings it became evident that the teachers’ preferences were determined largely by their familiarity with each of these settings. Three of the teachers within this multi-age focus group readily identified that their limited practice within same-age settings could possibly be a determinant of their preference.

Maata: “I’ve only ever worked in a mixed-age centre, which is where I am at now, but I did do practicums in same-age settings. I am a bit on the fence because I’m as you say; I can see the benefits of having mixed-age settings... but more towards mixed-age settings”.

Marie: “Well having only worked for a mixed-age centre, I guess I kind of see the positives of it but I really see the frustrating sides of it... I’m a little bit half and half because I’m sure if I got to a same-age I’d go ‘oh gosh, I want to go back to mixed-age’ you know?”
Furthermore, there was confusion surrounding what constituted a same-age and multi-age setting – with one of the teachers classifying themselves as same-age whilst working within a multi-age setting. For one particular teacher, the centre with which she worked separated under-twos from over-twos; because of this, she viewed her centre as being same-age and answered in the following way:

Chloe: “Well I like same-age from the teacher’s perspective. Because as you said before, you can focus more on what they’re (the older children) doing and extend them more without having the toddlers coming and they’re building (the older children) a great thing and all of a sudden they’ve (toddlers) just bashed it down”.

II. Motives behind same-age and multi-age settings

Of the motives identified as underlying owner and management decisions to provide same-age or multi-age groupings, profit, philosophical beliefs and the culturally bound nature of same-age and multi-age settings arose most frequently. All six of the teachers identified that although the motives behind same-age and multi-age settings were the same, the way they looked in practice however, differed significantly.

Profit

Same-age settings were associated with money and profit gain and seen as more convenient for centre owners in terms of administration and structure by all six of the participating teachers.

Katie: ‘From my understanding, it would be harder to have a centre of all three and four-year-olds that might only attend for the ‘20 free hours’ subsidy as opposed to babies because babies generally bring in more money in the areas I’ve been working in... I don’t know why they wouldn’t have a centre for just babies, I guess because they’ve got to go somewhere after so. I guess they want the stricter, more structured. It could be that it’s their personal philosophy on how children learn best or that it’s a marketing tool to parents because that’s what it seems like around Remuera. If we start a centre that’s for three and four-year-olds to do ‘real learning’ then we can make money doing that’.”
Philosophical beliefs

Multi-age settings were associated with the philosophical beliefs of centre owners and managers by four of the teachers. Ina referred to the nature of her own centre and the vision of her manager in support of this.

Ina: “Our management, we’re Christian-based, started with the vision of one person who was like a Sunday school teacher... Her philosophy was to have something for those who worked in a centre and have somewhere for her children to come, like in a church and eventually we went off the church and her vision just kept growing and the management that we have got really do look after us and really have got a passion for our whānau and for our tamariki. We’ve got the playgroups alongside us, we’ve got the afterschool, we’ve got holiday programmes... So we’ve grown from this little day-care centre, with this one woman’s vision just reaching the heart of the community”.

Culturally bound

Same-age centres were also associated with meeting the needs of the community, although these needs differed to those identified in multi-age settings. Three of the teachers within this focus group believed that same-age settings were favoured by certain ethnicities, such as Europeans and Asians and were said to reflect the aspirations of these parents.

Katie: “I don’t know how to put this in a politically correct way, but is it more common to put same-age centres in Pākehā areas? Is that what you guys would think? Or are there same-age centres throughout? Like an equal distribution? Because there seems like there’s a lot around Remuera where there’s a lot of European people. A lot of our, even though we were in Remuera, at our centre a lot of Chinese families really wanted that same-age group. So for them... same-age suited them. Different cultures value different things, so for some cultures, having same-age suits them better and what they think will be better for their child. Definitely it would lean towards an environment where more structure is better”.
III. Advantages of same-age settings

The participating teachers identified two key advantages unique to same-age settings. Children within same-age settings generally were generally similar in their levels of development, enabling teachers to provide age appropriate curricula. Same-age settings were also considered safer, particularly for younger children.

Age-appropriate curricula

Of the advantages that arose during this focus group, the most commonly identified was that children within same-age settings were likely to be operating at the same developmental level. All six of the participating teachers expressed this belief and answered in the following way:

*Marie*: “I kind of think like, they’re all at the same level? You know? From what I can see, they can move with each other a lot easier”.

*Maata*: “Yeah, because they’re the same age they’re around the same developmental level and you can focus on that”.

All six of these teachers believed that this provided the ideal environment for teachers to focus on age-appropriate practice for a particular age group without having to worry about the needs of another.

*Maata*: “They’ll have the same interests and you can focus them on that one thing and not have 10 million things at once. Like for each age group”.

*Chloe*: “I like same-age from the teacher’s perspective... You can focus more on what they’re doing and extend them more... Like with younger kids it’s like you’re torn between, ‘oh, I’ve got to go and change a nappy but I was just doing...’ it’s like being torn in two”.

Safety

Four of the teachers also agreed that same-age settings provided safer environments for infants and toddlers as they excluded older, more physical children from the room.

*Katie*: “The babies would be safer, than if it was all mixed... Sometimes it’s hard with two-year-olds and just a little, little baby”.

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IV. Disadvantages of same-age settings

Several disadvantages were associated with same-age settings. The most common of these included a lack of community due to centre size, the frequency of transitions, the separation of siblings, fewer social experiences with other age groups and the potential for less developed or more advanced children to be held back.

A lack of community due to centre size

Of the disadvantages identified by this group of teachers, a lack of community due to centre size arose most frequently. All six of the teachers associated same-age grouping arrangements with larger, more impersonal centres. They identified that same-age centres often had higher child ratios than multi-age centres and noted that this was backed by government licensing requirements.

Marie: “I feel like same-age centres are really big centres you know? Because they’ve got higher ratios, whereas in a mixed-age we have eight teachers, well nine teachers on staff at the moment but you know it is different days for different people but it's only licensed for 35. I don’t know if you’d have any really small same-age centres with such a low, licence... When they’re in a mixed-age centre, you can only have a maximum of 50 per centre. When they’re separated, you can have 150”.

Furthermore, this form of grouping contributed to a decrease in community, with one teacher suggesting that you would be considered just another number.

Katie: “There would just be no community, because how would you get to know all the parents and all of the children from the other areas?”

Maata: “You’d just be a number”.

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Frequent transitions

All six of the teachers also believed that children in same-age centres were subject to more frequent transitions than children in multi-age settings this is because children in same-age settings change classrooms at the beginning of every year; this is less frequent for children in multi-age settings.

*Katie*: “Transitioning children would be hard in same-age because if you’re constantly, if it is year by year…”

*Chloe*: “They’re just constantly transitioning”.

Furthermore, the frequency of these transitions, were thought to hinder the development of meaningful relationships between children, their teachers and their peers. This was because the time they spent within the same setting was considerably shorter than that of children attending multi-age settings.

*Chloe*: “You’re not building relationships with the teachers like you’d get in a mixed-age setting”.

The separation of siblings

For four of the teachers, same-age settings represented a separation of the family; particularly for siblings of varying ages. This was seen as a disadvantage as children were likely to ‘miss out’ on the benefits that sibling relationships offered because they were in separate rooms.

*Marie*: “Yeah, we have a lot of siblings as well, you know, more come through, you know the relationships are great, they look after them so well, they miss out because they’re in a different segregated room really, like ’you can’t go over there and see your brother’”.

Fewer social experiences with other age groups

Five of the participating teachers also believed that children in same-age settings had fewer opportunities to engage with children of varying ages. This was considered a disadvantage because it meant that children in same-age settings had fewer opportunities to learn from their interactions with both older and younger peers.

*Maata*: “When you’re in a same-age setting you don’t have that feel with the younger children learning from the older children”.

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Less developed or more advanced children are held back

Same-age centres were also seen as having the potential to hold children back. All six of the teachers believed that children who did not meet the expectations of teachers and staff had the potential to be held back in a younger classroom. Children with developmental delays were identified as particularly vulnerable.

Maata: “When it’s a same-age grouping, the children that are less developed or mentally or physically challenged, or that are more developed, they’re either held back or put into a place where they’re not ready; they can’t go to the toilet by themselves or something they’re not comfortable with. They’re getting pushed into that space when they’re not ready to get there. Or they’re three and they’re quite intelligent or they’re physically being held back because they’re three but physically or developmentally, they should be in the four-year-old group”.

Katie: “That’s one of the scary things I’ve heard from parents that want to get their children into same-age preschools, this is around Remuera, is that there are some centres that say that their children ‘have to be’ toilet trained. Which I know legally, you’re not allowed to do but somehow these centres manage to; these private kindergartens and so these parents are really pushing children to toilet train before they’re ready and I think that it’s not ok”.

V. Advantages of multi-age settings

When asked what advantages were unique to same-age settings, two key findings emerged most frequently. Multi-age settings were seen to promote tuakana / teina relationships and allowed siblings to attend the centre together.

Tuakana / teina

Multi-age groupings were identified by five of the teachers as providing a basis with which children of differing ages could create meaningful relationships with one another. Younger children had the opportunity to learn advanced skills from older more proficient children, whilst older children had the opportunity to learn how to care for and nurture younger, less able children.
Maata: “I think for me, I like the relationships between the younger children and the older children... We usually feed our younger ones under-five months in the room where everyone is. We’ve got like a separate part for the little children and the big kids know that this is baby area but they can come in if they want too. The older boys, every day they come in and help feed the younger babies... The bonds they’re starting to build with the younger babies, like you don’t get that in same-age settings and the tuakana / teina relationships. The older children helping the younger children put their jackets on or helping them get their foot in their shoe or just special moments like that”.

Siblings

Multi-age settings were also seen as a means with which siblings could attend early childhood centres together. This was seen as an advantage by five of the teachers due to the nature of the relationships between siblings.

Marie: “We have a lot of siblings as well, you know, more come through and they, you know the relationships are great, they look after them so well, they miss out because they’re in a different segregated room really, like ‘you can’t go over there and see your brother’”.

VI. Disadvantages of multi-age settings

This group of teachers identified three key disadvantages of multi-age settings – siblings, the play of older children disrupted and safety.

Siblings

Of the disadvantages identified by the teachers within this focus group, four believed that having siblings in the same setting could also be seen as a negative. Multiple teachers referred to their own experiences with siblings within the centre.

Chloe: “I’ve seen where the sibling holds the other one back. I’ve got a pair, a brother and sister and she will not leave her brother’s side and he can’t go off and do his thing because she’s basically holding onto his t-shirt. She’s not, like
she loves coming to day-care, she really enjoys it, but they’re like glue, she just won’t do anything without him. Or let him go anywhere where she’s not”.  

Alice: “Yes, we’ve had that, being in a multi-age centre... we’ve had new ones come in where the older brother wants to go off and play on the bikes and the sister is running along beside the bike because she can’t get on with him. Because she’s following the brother around on the bike and the brother’s getting hōhā with her, you know, getting frustrated with her and wanting to go do other things and that’s when the teachers have to take the child and put her away so he can go do his own thing for an hour or whatever and then she’ll go look for him, and that just gives him a break from her and that and helps her develop a relationship with the other teachers”.

**Older children disrupted**

All six of the teachers also agreed that a disadvantage of multi-age settings was that the play of older children was often disrupted by younger children. This was seen as having the potential to hinder the quality of this play.

*Maata:* “I’ve noticed recently that the three and four-year-olds, the pre-schoolers are missing out on a lot of learning because they get distracted or disrupted by the younger children”.

**Safety**

Safety was also a concern for four of the six teachers in multi-age settings. Younger less mobile children were seen as being at greater risk of getting hurt by older more mobile peers.

*Maries:* “Where I am, we apparently have indoor / outdoor flow but I told my boss ‘look, honestly, it is not happening. You can think that we’re having indoor / outdoor flow but it is not happening’ because the babies, if it’s really hot outside, we keep our under-twos back inside and then that room is used for a ‘free for all’ for the other children coming in and out and it’s not fair we’ve got, now we’re hitting eight to 10 to 12 babies a day... I think that’s probably one of the biggest things that irks me. Trying to open up another room so that the babies have their own time and then they can come in with us, if we have another room open that’s cool but they don’t have to be overcrowded by everyone else”.”
Alternatively, the play of older, more advanced children was also considered to be at risk as younger children often disrupted this play.

Maata: “Yeah I agree. Like they don’t get their own safe space like a place where they can just be babies and are away from everywhere else. I think that’s a disadvantage. Like the same thing with the older children, if they’re in a focused play like building a massive tower and little babies come around and knock it down, their learning has been stopped because the younger children are disrupting them so their learning is being hindered by the younger children”.

VII. New Zealand’s bicultural context

When asked about same-age and multi-age groupings, their relevance within the New Zealand setting and the ways with which they reflect the Treaty of Waitangi there was initial reluctance amongst the teachers within the focus group to answer. However, the teachers were honest and the majority admitted to knowing very little of Treaty and what it entailed. When the question was reworded and the teachers were asked whether or not same-age and multi-age settings reflect *te ao Māori* and if so how, they were able to draw on their own experiences of the application of *Māori me ōna tikanga* within their centres.

Culturally bound

During the focus group, three teachers suggested that same-age and multi-age settings were culturally bound and reflected different parental aspirations for their children.

Katie: “I don’t know how to put this in a politically correct way. But is it more common to put same-age centres in Pākehā areas? Is that what you guys would think? Or are there same-age centres throughout? Like an equal distribution? I would say more Asian families honestly, from what I’ve experienced. Because even though we were in Manurewa, we were in mixed-age and we didn’t attract them. It seems like the free play, mixed-age group was less attractive than a structured, sit down, group of three and four-year-olds at a private kindergarten. Whereas where I used to work in Remuera, on the same street I can tell you the number of private kindergartens which was a lot. They (the children) have to be toilet trained. They have to go at three and four and learn how to go to school.
Then they would leave us and go and do real learning at other centres... things like homework, reading sheets, homework sheets. So that’s kind of grouped with same-age centres”.

Whānau oriented

The answers surrounding multi-age settings reflected a greater level of whānau orientated values. Multi-age settings were seen as a natural way of including the whole family in the child’s learning.

Chloe: “Isn’t it like more of the whānau? Whānau oriented. Yeah, so it’s not, you’re doing that and we’re doing this, separated”.

Maata: “Yeah, it’s more like home would be like if you’re bringing your home into the centre. It’s that feel because it’s the brothers and sisters, the siblings with each other and also the tikanga - like the tuakana / teina relationships, those are able to be fostered with the mixed age centres”.

Furthermore, Katie, a teacher who works in a predominantly European centre, suggested that same-age centres have the potential to limit opportunities to explore the cultural differences within their centre. Katie refers to a sole child within her own centre as an example:

Katie: “I was also just thinking like, our centre has like one Māori kid, so if you had like each year segregated then he wouldn’t be in all those years so all the other children wouldn’t get to learn from him. Of all ages, it would always just be that one year that he’s always going to be with”.
VIII. Improvements to practice

Of the improvements identified by this group of teachers, emphasis was placed on providing children with opportunities to interact with other age groups, providing older children in multi-age settings with an environment for uninterrupted play, and safe spaces for infants and toddlers within multi-age settings.

Opportunities to interact with other age groups

Offering children in same-age centres opportunities to interact with other age groups was seen as a way of improving practice in same-age settings by five of the teachers. This was seen as increasing flexibility and providing children with multi-age experiences; an advantage akin to multi-age settings.

Maata: “To have the flexibility to actually be able to mix the rooms, like even if it’s once a week or something like lunchtime, letting them go and play in the same playground like have that flexibility”.

Ina: “We (multi-age centres) do that all day”.

Uninterrupted play

Four of the teachers believed that the provision of space for older children to play uninterrupted in multi-age settings was seen as a way of improving practice in multi-age settings. This would provide a safe place for older children to play without the fear of being interrupted.

Katie: “I think having a time and a space where the older children can go”.

Chloe: “I know we said before about the babies having their space but having a space for the older children where they can go and they know that that’s there space where they’re not going to get their towers demolished”.

Safe spaces for infants and toddlers

The provision of safe spaces for infants and toddlers was also seen as a way of improving practice within multi-age settings. Four of the teachers believed that by encouraging older children to move slowly through these areas they could minimise the potential risk towards infants and toddlers in multi-age settings.
Katie: “For our centre it’s having inside as a quiet area, not running around outside and not using loud voices inside and that creates a calming area inside for the babies and small children to retreat to if they want to”.

Multi-age focus group two: Māori medium bilingual setting

This section reflects the data collected from a Māori medium bilingual early childhood centre that participated within the second multi-age focus group. Altogether, five teachers and the centre Kuki Rangatira participated in this focus group. The centre Kuki Rangatira also worked with the children in between meal times. The participating teachers within this focus group had a sound knowledge of Māori me ōna tikanga and the majority of teachers within this focus group were confident speakers of te reo Māori. The teachers that participated within this focus group frequently referred to and addressed multi-age settings as tuakana / teina settings. In this section, I have adopted this wording to accurately reflect the terminology of the teachers participating.

I. Preferences

Familiarity

When asked whether or not a preference existed between same-age and tuakana / teina settings it became evident that the teachers’ preferences were determined largely by their familiarity to the setting, their cultural upbringings and individual beliefs surrounding child development. Furthermore, tuakana / teina settings provided a means where four out of six of the teachers could continue to care for their own children in an environment that reflected their own cultural values and ways of being.

Roimata: “The reason I got into ECE was because of my two kids. I wanted to spend more time with them but I needed to go back to work so I thought this would be a good opportunity”.

Pania: “I’m married, I’ve got three children, and I’ve been in this centre for eight years... I basically did the same too – to be next to my children. I come from an Island family, what they say is that you should stay home and look after your
family and you shouldn’t leave them for other people to look after; they’re your responsibility. But yeah, I’ve been in a lot of main streams; this is my first bilingual centre I’ve worked in. It’s good; it’s good to come back to your language, back to your roots. I don’t like the separation either; it’s good when they’re all together”.

For Mere, tuakana / teina settings offered a familiar environment. Mere’s traditional upbringing on a Māori reservation, led her to seek out a similar environment in the workplace. Mere believed she found this familiarity within the tuakana / teina setting and the values emphasised within this environment aligned with those of her cultural upbringing.

Mere: “The only reason why I believe in the tuakana / teina concept of learning was that I was born on a reservation; isolated right in the middle of Auckland. So we had Nanas and babies and so we were part of the whakawhanaungatanga concept of learning. When I was looking for mahi I went out and I hoped that I could get the same concept – what I was used to and so that’s what happened. This for me is the real, a dream come true and so I suppose that’s saying a lot for the future of where I want to go”.

II. Motives

This group of teachers identified two key motives behind same-age and multi-age grouping arrangements. Same-age groupings were commonly associated with the maximisation of profit whilst multi-age groupings were commonly associated with the philosophical beliefs of centre owners and managers.

Profit

There was a strong consensus amongst teachers within this focus group as they identified one key motive underlying same-age grouping arrangements. Four out of six teachers believed that same-age settings were money oriented and were concerned primarily with the maximisation of profit.

Moana: “...money. Multinational companies, I worked for ABC and got absolutely rolled over by them so I came here; because they are profit driven, they’re shareholders”.
Philosophical beliefs

Alternatively, tuakana / teina settings were commonly associated with the philosophical beliefs of owners and management and were seen to promote quality over quantity. Four of the teachers believed this was reflected in the higher teacher to child ratios within multi-age settings.

Moana: “They (Moana’s current centre) staff on quality not quantity. The ratios are one kaiako to four babies, one kaiako to seven over-twos”.

III. Advantages of same-age settings

Age-appropriate curricula

The participating teachers of this focus group identified one key advantage to same-age grouping arrangements. Four of the six teachers believed that same-age settings provided an environment where teachers could focus their efforts completely on one particular age group and provide age appropriate activities.

Roimata: “In a same-age setting you’ve pretty much got one level of teaching and that’s where you’ll be. You know this is what they should be learning”.

Mere: “It is easier, because you are just teaching at a certain level. You are preparing the children to go to school. If you’re over two’s then you’re preparing the children literally to go to school at four and five and that makes it easier. It is sort of aiming for a certain way of teaching that’s going to be of benefit to the children, I found that at kindergarten”.
IV. Disadvantages of same-age settings

School readiness

Furthermore, three of the teachers questioned the separation of children within same-age grouping arrangements and suggested that this failed to prepare young children for the realities of school.

Amy: “I won’t look at employment in a centre that has closed age groups; like you’ve got the one-year-old room and a closed door to separate them. I think they’re too early to be classed”.

Moana: “Why do we segregate our kids? Why do we have a room for this age, a room for that age? Why do we put the barriers up? Because once they’re up they have to go to primary school and ok, maybe you’ve got all the five-year-olds in one room but then they’ve got to go out in the jungle, in the playground and it is a jungle”.

V. Advantages of tuakana/teina settings

This group of teachers identified several key advantages unique to tuakana / teina grouping arrangements. Tuakana / teina settings were described as a whānau setting that is whānau oriented, which allows siblings to attend together, promotes tuakana/teina and challenges teachers.

Whānau setting

All six of the teachers believed that tuakana / teina settings emulated or acted as an extended family. This was considered important, particularly for children that may have had limited or no exposure to such experiences.

Moana: “For me, whānau is very important and where else are some of these children going to learn what family is really about than in a multi-age? We absolutely embrace the whānau when they come through the door; it is not just about the child or the money from the government, it is also about their whānau. For those children that don’t have brothers and sisters at this point in time,
they’re all their brothers, they’re all their sisters. All the Whāea are their aunties”.

Whānau oriented

Tuakana / teina settings were also considered a way of encompassing all of the whānau. Four of the teachers expressed the belief that tuakana / teina settings recognised that children were culturally embedded; that viewing the child as a separate entity away from their family failed to recognise the holistic being of the child.

Mere: “Can I just add Whāea, that tuakana / teina, it encompasses all the whānau and this is the main thing; you have to encompass all the whānau, it is not like it is just the kid on their own because that’s what you get in kindergarten. I don’t mean to be sadistic in any way, but that’s what you’ve got in kindergartens; it is just the child and that concept of ‘just the child’ isn’t good enough, because that child has a wider, broader, holistic framework”.

Siblings

Tuakana / teina settings also allowed for siblings to attend the centre together. This was considered advantageous by five of the teachers because it reflected the natural home environment and minimised any anxiety children may face when separated from their families.

Moana: “I guess one of the advantages is ‘I’m here with my whānau and I don’t have to tangitangi at the door until my big brother or my big sister comes along’.

Furthermore, three of the teachers believed that siblings had unique relationships. This enhanced the quality of interactions and promoted peer learning. Both the older and the younger sibling were seen as having the potential to be both the teacher and the learner.

Moana: “It allows your older siblings to be with their younger siblings and their younger siblings to be with their older siblings and it must be a bonus for us to have children teaching other children, whether they’re teina or tuakana”.

Amy: “I wasn’t raised in a kaupapa Māori way, I was raised in a relatively small family. There were three of us but you know what? I learnt so much from my big
brother and I learnt so much through looking after my little sister that I know the value of it – I see the value”.

Tuakana / teina

In likeness, five of the teachers believed that children with no biological ties had the opportunity to learn from their interactions with children of different ages. Children new to the centre were able to learn what is expected of them from more knowledgeable peers.

Amy: “I believe there are so much more benefits from having those tamariki together and they just learn from each other so much more and know what is expected of them and there is none of the traumatising, having to leave teachers behind”.

Challenges for teachers

Tuakana / teina settings were also seen as advantageous in that they challenged teachers to be more versatile. Five of the teachers agreed that tuakana / teina settings demanded a greater range of skills from teachers. In particular, teachers were expected to accommodate for a wider range of developmental levels at the same time and acknowledge the differences in children.

Roimata: “…you’ve got to alternate between your activities, whether it will cater for that age group to that age group but yet still be able to cater for both of them... It makes you think as a teacher, it makes you more proactive in what you’re doing, it makes you consider every age group you’ve got in the centre instead of just for the same age group... like ‘I’ve got three-year-olds today, so this is the activity that we’re going to do and that’s it’”.
VI. Disadvantages of tuakana / teina settings

Two key disadvantages of tuakana / teina settings were identified by this group of teachers. Tuakana / teina settings were associated with higher expectations of older siblings and less favourable effects of tuakana / teina.

Higher expectations of older siblings

It was believed that when two or more children of the same biological family attended the same centre together, parents placed greater expectations on the older sibling to care for and protect the younger sibling.

Moana: “We’re raising a whānau generation; we’ve had number one, number two, number three... It can be a disadvantage to little Mary because she is starting to discover that ‘yeah, I’ve got wings and I want to fly and I don’t want these handbrakes’ you know? I guess that’s that thing where Mum and Dad say ‘look after your little sister, don’t let anyone hit your little brother’, so they feel that they’ve got to be there, through thick and thin”.

Tuakana / teina

Tuakana / teina was also seen as a disadvantage in multi-age groupings by three of the teachers. In multi-age settings, tuakana / teina or older / younger interactions had the potential to be negative rather than positive. It was thought that older children might introduce younger, more impressionable children to potentially negative behaviours. Thus, the power of tuakana / teina or older children teaching younger children, was only as good as the role model available.

Amy: “It can be a negative thing, because are role models worth modelling after? Because we’ve got these ‘cool’ big kids that and they have that, you know? Like ‘ahhh, that’s what you do?’ so in that respect, it can be a bad thing. It is manageable, but that is a downside. It is good to have role models but they need to be worth role modelling”.

Moana: “And for these children who are only children, they’re growing up in their house with adults, mum and dad, nanny, papa, uncle, auntie and there are no other tamariki around, so they don’t actually know how to act like a child and then they come in here and they see these kids and they start to push out their
boundaries and they start learning and so that’s a model, they follow that model
whether it is right or not they follow that model”.

VII. New Zealand’s bicultural context

When asked about same-age and multi-age groupings, their relevance within the New Zealand setting and the ways with which they reflect the Treaty of Waitangi the participating teachers identified five key themes. They believed that meeting the obligations of the Treaty was dependant largely on the teachers, that same-age and multi-age settings were culturally bound, that multi-age settings provided rich opportunities for tuakana / teina, and believed that Te Whāriki was often incorrectly interpreted.

Culturally bound

Furthermore, same-age and multi-age settings were considered culturally bound. Moana agreed that the extent to which the Treaty of Waitangi was implemented within early childhood education was dependant on the principles of the centre and the staff. She went on to note that the division of children for homogeneity did not reflect tikanga Māori as it divided rather than brought people together and therefore could not possibly be considered bicultural in practice. This belief was supported by four of the teachers

Moana: “It does depend on the principle of the centre, of the organisation, whether they do mix or whether they stay where they are. I think the government today does want it mixed, because when you talk about biculturalism, biculturalism is not that one there and this one here; it’s us all here, dancing around a table holding hands together”.

Same-age settings however, were commonly associated with people of European descent. Moana, the head teacher, referred to her lengthy practice in same-age settings prior to her role in a tuakana / teina setting. She stated that during her time in a same-age setting, she had not worked with Māori teachers or Māori children.

Moana: “Coming here was a shock to my system really, because having worked in middle-class white centres where you get a room and you’re either the head teacher or the next one down ... when the door opened for me I must say, at first I was reluctant about going through that door but walk through I did.
Moving away from same-age settings was unsettling for Moana who found the familiarity of the setting safer. However, Moana goes on to suggest that as she became comfortable within the centre, she was able to make connections to her own cultural upbringing and believed that *tuakana / teina* settings provided a more natural form of grouping within early childhood education.

*Moana: Tuakana / teina, at first I didn’t like it, because my safety was always going to be a room with a certain number of kids and maybe one or two assistants helping me, depending on how many tamariki you had but coming here and learning to work and once I learnt what a natural way, because we all grew up in tuakana / teina, we helped our parents we helped our grandchildren when we went to the marae and you never ever saw that separation. So I’m all for it, it works. It allows your older siblings to be with their younger siblings and their younger siblings to be with their older siblings”.*

**Tuakana / teina**

Mere also believed that *tuakana / teina* settings reflected a Māori way of teaching and learning; children needed less direction from teachers, instead, learning from their observations of more knowledgeable members of the group. Children’s attempts to imitate or copy *tuakana* were encouraged and this was seen as an important aspect of the children’s learning. This view was supported by all six of the participating teachers.

*Mere: “It’s very cultural, the way that we teach our children. Our younger ones don’t necessarily have to talk, its more about using your eyes, your observation skills and your body language... and I know that from having a mass of children myself, my younger ones picked up from not even talking about it but by watching their older brothers... it’s a cultural way of learning, that they imitated or copied what their older brothers or sisters did and it became a benefit for them. So for me it was about the cultural way that they learn at home that made it from home to the centre. They’ve all gone through the same pattern of watching their older brothers or their tuakana doing it so it was important that that type of learning did happen and it became a part of their different levels of learning”*. 
Te Whāriki

Having a sound knowledge of Te Whāriki was also considered important amongst the teachers, with four believing that this was critical in implementing an authentic bicultural curriculum. Three of the teachers however, believed that a sound knowledge of the Western component of the curriculum was not enough and that in their experience, many early childhood teachers were able to quote the European component of the curriculum but knew very little of the Māori component and how it should be implemented in practice.

Mere: “...one of the decisions about where I got a job was that I had to know the place first and I feel that a lot of the centres that I’ve seen didn’t actually implement Te Whāriki as they were supposed to and can I just be honest, I thought it was a bunch of bull, they said that this was the curriculum but they didn’t know what it was so for me it was go blimey, here they are asking me ‘do I know anything about the curriculum’ and when I tell them the Māori concept they look at me as to say ‘well geez, ok’ so for me if it didn’t have that then I wasn’t going to work there... When you talk about a curriculum that’s bicultural and certainly it’s going to be multi-cultural in a few years’ times... One of the areas that I found with working in kindergarten was that they knew the curriculum off by heart, they knew the curriculum well but what I found was what they knew and what they practised were two different things. We had teachers that came from the North Shore and their understanding of tikanga, from a woman who was just up the road from Mangere East who’s been living with Māori and Pacific Islanders was totally different... Amy, her korero was amazing, yet you have this woman who knew the curriculum off by heart but couldn’t practise it; could write a quote from it and at the end of the day say that that was satisfaction for her, that’s where the difference is... I found it false”.

VIII. Improvements

This group of teachers did not identify any key improvements to practice.
Table II: Key findings derived from the data collected from two multi-age focus groups

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II. Motives

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III. Advantages of same-age settings

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IV. Disadvantages of same-age settings

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V. Advantages of multi-age settings

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VI. Disadvantages of multi-age settings

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VII. New Zealand’s bicultural context

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VIII. Improvements

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<td>• Opportunities to interact with other age groups;</td>
<td>• No key improvements to practice were identified;</td>
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<td>• Uninterrupted play;</td>
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Table III: Key findings derived from the data collected across all settings

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<th>Findings of multi-age setting</th>
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Summary

A first level analysis of the findings across both same-age and multi-age settings shows that many perspectives can be brought to bear on decisions about same-age and multi-age settings. I have selected the following three perspectives as a way of organising the next chapter which discusses the findings and their implications within the early childhood sector. These perspectives are: that of the teacher, organisational perspectives and cultural perspectives.
Chapter Five: Discussion

Overview

Research suggests that classroom organisational structures play a significant role in the teaching and learning of young children (Barr & Dreeban, 1983; Good, Grouws, Mason, Slavings & Cramer, 1990; Gutiérrez & Slavin, 1992; Mason & Stimson, 1996). The practices of either same-age and multi-age grouping arrangements within early childhood education and care have been left largely unquestioned (Logue, 2006; Wardle, 2008) and literature surrounding these grouping arrangements provides little, definitive evidence of the nature of these settings and their implications for children (Kinsey, 2001; Song, Spradlin, & Plucker, 2009). This study is, therefore, timely in gaining a better understanding as to how teachers view and understand same-age and multi-age settings; particularly within the New Zealand context.

This study investigated teacher beliefs about same-age and multi-age early childhood settings in New Zealand and sought to answer four key questions:

1. What reasoning and values lie beneath the practice of grouping young children in same-age and multi-age settings?

2. What are the perceived advantages and disadvantages of same-age and multi-age grouping decisions in early childhood education?

3. In what ways do same-age and multi-age grouping arrangements reflect the values of both Pākehā and Māori and our obligation to the Treaty of Waitangi?

4. What improvements to practice can be made in same-age and multi-age settings?

To answer these questions data was sought that reflected both the experiences and the understandings of teachers who are ultimately involved with the delivery of the program. The importance of this rests on the supposition that the complexities of pedagogical practice can be defined best when research focuses on how this practice is defined and experienced by key stakeholders (Edwards, Blaise & Hammer, 2009). This shift moves away from a ‘process-product’ form of research – where the primary concern is the impact of these practices on
child development and rather, seeks to uncover greater understandings of the complexities associated with teaching and learning in same-age and multi-age settings (Shulman, 1986).

The data collated in this study enabled the research questions to be answered whilst highlighting several other key issues. This chapter presents a discussion of the findings identified in chapter four of this study. An analysis of these findings led to four key perspectives. The first theme titled the ‘Organisational perspective’ discusses what reasoning and values lie beneath the practice of grouping young children in same-age and multi-age settings. The second theme titled the ‘Teachers’ perspective’ identifies the advantages and disadvantages of same-age and multi-age grouping decisions in early childhood education. The third theme titled the ‘Cultural perspective’ looks at the relevance of same-age and multi-age groupings arrangements within New Zealand. Lastly, a fourth, additional theme titled ‘Improvements’ discusses what improvements to practice can be made to better same-age and multi-age grouping arrangements.

The organisational perspective

This perspective seeks to uncover the reasoning and values that lie beneath the practice of grouping young children in same-age and multi-age settings. To achieve this, the participating teachers were asked what underlying motives contributed to owner and management decisions to group children within same-age and multi-age settings. Of the motives identified by this group of teachers, the maximisation of profit, the philosophical beliefs of centre owners and management, and safety arose most frequently.
Motives

Profit

The maximisation of profit was cited as the most prominent motive behind same-age and multi-age groupings across all four focus groups. However, the majority of teachers believed that this was particularly true within same-age grouping arrangements.

Teachers in amongst all four focus groups felt that same-age grouping arrangements provided a means for privately owned companies could enrol large numbers of children with minimal staffing, thereby decreasing the running costs of the centre, whilst maximising profit. Sally provided the following example:

“Let’s be honest, the main, we’re looking at ABC, we’re looking at Lollipops, their main focus is a business run centre. They’re looking at profit. So they’re looking at ‘what’s the maximum number of children that we can have in this space? If we go mixed-age, obviously we can’t have 100+ in one centre. If we have same-age we’re more flexible in having obviously more profit, more money”.

This was considered a disadvantage by the majority of teachers as it was seen to prioritise the maximisation of profit over the interests and wellbeing of the child.

Of the literature obtained and reviewed in this study, no connection was made between same-age and multi-age settings and their profitability within the early childhood sector. Several authors however, allude to this and acknowledge that same-age groupings provide a cost-effective way of educating masses of children (Arthur et al, 2005; Katz, 1995; Logue, 2006; McClellan & Kinsey, 1999; Paradini, 2005). This was considered an advantage within the confines however, of state funded, free early childhood education within America (Katz, 1995) and thus, may not be relevant within the New Zealand context. Consequently, this research has added new knowledge around the organisational structure and motives behind same-age and multi-age settings within New Zealand’s early childhood sector.

Philosophical beliefs

The philosophical beliefs of centre owners and management were also considered a key motive behind multi-age grouping arrangements. It was generally believed amongst the teachers that multi-age settings were more likely to have the interests of the community as a
central focus than same-age settings. Several teachers referred to the philosophies of their own centre as evidence of this, with one teacher stating:

Maata: “The purpose of my centre is a teen parent unit. So the young Mums go to school next door and we look after their children. So we’ve got 20 under-two children and at the moment we’ve got full under-twos and only 10 two-years and up”.

Where this was the case these centres were generally associated with small not-for-profit organisations, were typically multi-age in structure, and prioritised the needs of children and their whānau rather than the maximisation of profit.

The significance of these findings are highlighted by Nyland (2007) who refers to the research of Rush (2006). In 2006, a nationwide study of long day-care centre staff in Australia investigated teacher beliefs surrounding the provision of quality childcare. The findings of this study indicated that in all aspects of quality investigated, community-based, not-for-profit early childhood centres were seen to offer the highest quality care. In contrast, large corporately owned and operated, for-profit centres were seen to offer the lowest quality of care and in several instances, it was “markedly lower than that provided by community-based long day care centres” (Rush, 2006 cited in Nyland, 2007, p.4). These findings were also found in a similar study by Linda Mitchell (2008) in which New Zealand early childhood education and care centres were investigated for quality. These findings are important to consider because in 2001, the private early childhood sector was responsible for owning and operating 23% of all early childhood centres throughout New Zealand (Mitchell, 2002); by 2008 however, this figure had risen to 58% (May, 2008). Furthermore, privately owned and operated centres were responsible for the highest growth of services within New Zealand and between 2007 and 2011 the number of privately owned centres grew by 48% (Ministry of Education, 2013).
The teachers’ perspectives

Susan: “The philosophy of the centre filters down through so many layers before it reaches the child; like the teachers and teachers’ personal philosophies...
We’re part of the hidden curriculum”.

This comment, made by Susan within a same-age focus group, reflects the integral nature of teachers beliefs to this study. It recognises the significance of the role teachers have in delivering early childhood programmes and the curriculum and espouses the notion that the curriculum is not transparent, but rather, it is “informed by the perspectives of adults who, in thinking about childhood, inevitably articulated some of their own understandings of the world” (Duhn, 2006, p.192).

Thus, this perspective seeks to uncover teacher understandings of same-age and multi-age settings and is concerned with how each of these settings is experienced and defined by the teachers working within them. To achieve this, the teachers were asked whether or not a personal preference existed between same-age and multi-age settings. They were then asked to identify the advantages and disadvantages of each setting. This highlighted some interesting, yet expected results whilst bringing to bear new and unexpected findings.

Preferences

Familiarity

During the four focus groups, the teachers were asked to articulate their beliefs surrounding the differences between same-age and multi-age grouping arrangements in early childhood education. Perhaps the most simple and telling comment that arose frequently across all four focus groups, was that the majority of teachers had not given same-age and multi-age grouping arrangements much thought. Often, their decision to work within these environments was dictated by external factors such as their familiarity with the setting and how comfortable they felt within it. Furthermore, there was confusion amongst the teachers about what constituted a same-age or multi-age setting with several teachers believing they worked within the opposite setting.
The significance of this response lies in the fact that the early childhood sector is described as a self-renewing profession (Wardle, 2008) that places great emphasis on reflective practice (O’Connor & Diggins, 2002). Moreover, as “key curriculum decision-makers who employ a range of knowledge and understandings” (Hedges, 2013, p.9) it is appropriate that early childhood teachers’ professional knowledge includes an understanding of “early childhood philosophy, theories of learning and curriculum and pedagogy applicable to young children” (Hedges, 2013, p.9).

The teachers’ limited knowledge and reflection on how children are grouped within early childhood education in New Zealand however, reflects a different reality. The majority of the participating teachers within this study acknowledged that they had not given much thought to the subject and had spent little time within the opposite setting; thus, many believed that their perception of a setting different from their own had the potential to be biased and unjust. This finding may in part, be a reflection of the mixed (Song, Spradlin & Plucker, 2009) and inconsistent research (Kinsey, 2001), literature (Fagan, 2009) and emphasis (Logue, 2006; Wardle, 2008) placed on same-age and multi-age grouping arrangements in early childhood education; particularly within the New Zealand context (Fagan, 2009).

**Personal philosophy**

The remaining group of teachers across all four groups identified that they had spent lengthy amounts of time within both same-age and multi-age settings. Where this was the case, these teachers were able to define and justify their reasons for working within a particular setting. Their decisions reflected their personal philosophies about children, learning and teaching and their beliefs about what this should look like in practice. The most prevalent of reasons acknowledged the nature of same-age and multi-age settings and suggested that each possessed and functioned around different values.

Mere, a teacher within the Māori medium bicultural setting has been in the early childhood industry for approximately 30 years and spent a significant portion of this time working within a kindergarten before moving to a multi-age bilingual centre. Mere believed that the differences within these settings, in fact, reflected distinct cultural ways of being. Thus, Mere sought out a setting that reflected the cultural upbringing which she related to and valued most.
“The only reason why I believe in the tuakana / teina concept of learning was that I was born on a reservation; isolated right in the middle of Auckland. So we had Nanas and babies and so we were part of the whakawhanaungatanga concept of learning. When I was looking for mahi I went out and I hoped that I could get the same concept – what I was used too and so that’s what happened. This for me is the real, a dream come true and so I suppose that’s saying a lot for the future of where I want to go”.

This understanding of same-age and multi-age settings, was particularly common amongst teachers who had spent lengthy amounts of time in both settings and the teachers in the bilingual focus group. A more detailed discussion of the culturally bound nature of same-age and multi-age settings is provided later in this chapter.

Advantages of same-age settings

Age appropriate curricula

A key finding within this study showed that the teachers believed a key advantage of same-age settings lay in the fact that the grouped children were likely to be functioning at similar levels of development. This was considered advantageous across all four focus groups because it was thought to enable teachers to focus on one particular age group at a time and allowed them to provide children with opportunities and experiences that were age appropriate. This finding is consistent with the literature of several authors who, in discussing the nature of same-age grouping arrangements, believe that the division of children for homogeneity implies that a correlation exists between the chronological age of children and their intellectual ability (Aina, 2001; Di Santo, 2000; Evangelou, 1989; Fagan, 2009; Katz, 1993; Lloyd, 1999; Rasmussen, 2005) and assumes that children “have similar developmental needs, interests and learning capacities” (MacNaughton & Williams, 2009, p. 107).

This view was countered however, by the same teachers, who acknowledged that the chronological age of a child was not always an accurate indicator of the child’s ability and that variances between children of the same age were to be expected. They disagreed with the notion that learning is a linear, discontinuous process that occurs in pre-defined stages.
Berk, 2004; Gerard, 2005) and acknowledged, that this view of learning fails to take into account the disparities between children of the same age (Arthur et al., 2005; Berk, 2004; Gerard, 2005). Rather, the similarities between children of the same age were considered useful in aiding the provision of more focused teaching and learning; an opportunity not always readily available within multi-age settings.

Furthermore, it was commonly believed across all settings, that there was the potential for teachers within same-age settings to have set expectations of children dependant on their chronological age. Because the differences between children are less noticeable within same-age settings, the likelihood of teachers comparing children with their same aged peers was seen to increase (Arthur et al., 2005). As a result, same-age groupings are often associated with higher levels of competitiveness, competition and egocentricity (Chase & Doan, 1994; Viadero, 1996).

Safety

Another key advantage of same-age settings was safety. Teachers within the multi-age focus group believed that same-age early childhood centres provided a more secure environment particularly for younger, less mobile children such as infants and toddlers. The separation of age groups was seen to minimise the risk of injury caused by more mobile children within the centre. This view is articulated in the following quote:

Katie: “The babies would be safer, than if it was all mixed... Sometimes it’s hard with two-year-olds and just a little, little baby”.

It was believed however, that multi-age settings could also minimise the risk to infants and toddlers by providing ‘safe places’ that infants and toddlers could move to within the centre. An article by the Ministry of Education (2010a) supports this notion and suggests that there is a need for the implementation of a baby-exclusive area in multi-age settings.
Disadvantages of same-age settings

A lack of community due to larger centre sizes

A key disadvantage of same-age settings identified by the teachers within this study was a lack of community due to centre size. Often, same-age settings were associated with larger, more business like centres and a higher number of child enrolments. The teachers referred to the licensing criteria of same-age and multi-age settings as supporting evidence of this:

*Marie:* “…I don’t know if you’d have any really small same-age centres with such a low, licence... When they’re in a mixed-age centre, you can only have a maximum of 50 per centre. When they’re separated, you can have 150”.

The large centre size was considered impersonal and led several teachers to conclude that same-age settings could not possibly create the same sense of community akin to multi-age settings. Of the literature that I have reviewed, I have found no direct links between same-age settings and their apparent lack of community. It is however alluded to in the vast amount of references that praise multi-age settings for the unique family like feeling that the setting is known for (Aina, 2001; Carter, 2005; McClellan, 1994; Smith et al., 2002; Viadero, 1996).

Moreover, this finding suggests that the teachers within this study value and believe that meaningful relationships, not just amongst children and staff, but also between children of different ages, are a necessary and valid part of the early childhood curriculum; that the emotional wellbeing of the child is influenced by the child’s relationships with teachers and other children. This is consistent with the image of the child outlined in *Te Whāriki*, New Zealand’s early childhood curriculum that views the child as a social, cultural being who learns through “collaboration with adults and peers, through guided participation and observation of others” (Ministry of Education, 1996, p.9).
Frequent transitions

Another key finding indicated that children within same-age groupings experienced greater occurrences of transition as they moved between rooms more frequently than children within multi-age settings. This was considered a disadvantage as children were being forced to leave the familiarity of one setting for the uncertainty of another. The teachers believed that this had the potential to be unsettling for children, negatively affecting their ability to learn. According to (Brooker, 2008):

> The contexts in which children learn in modern societies, are characterised, overwhelmingly by transitions of one kind or another, and everyone who works with children has witnessed the impact that these transitions can have on their learning, essentially through an impact on their wellbeing (p.1).

This quote reflects the delicate nature of transitions on children within early childhood education and acknowledges the impact that transitions can have on their learning and wellbeing. Our role, as early childhood teachers, Brooker (2008) espouses, is to ensure that these transitions occur as smoothly as possible to minimise any disruption to the wellbeing and learning of the child.

Furthermore, the teachers believed that the frequent transitioning from one room to another would impact negatively on the child’s ability to form meaningful relationships with their teachers and peers. This is because children in same-age settings spend less time within the same environment, thus, having fewer opportunities to create meaningful and lasting relationships with their teachers and peers (Carter, 2005; McClellan, 1994).

The separation of siblings

Another key disadvantage of same-age settings was the separation of siblings. The majority of the participating teachers within this study believed that in separating siblings, teachers within same-age settings missed out on opportunities to use the unique relationships that exist between them. This view is shared by several authors who highlight the significance of sibling relationships during early childhood and suggest that positive sibling relationships have been associated with positive learning outcomes and are seen to enhance the emotional, social and cognitive skills of children in early childhood (Howe & Ross, 1990; Milevsky, 2011; Smith, 1993).
Furthermore, the majority of teachers believed that the division of siblings within early childhood settings was unnatural; with one multi-age teacher stating:

Amy: “I won’t look at employment in a centre that is closed age-groups, like you’ve got the one-year old room and a closed door to separate them… I think they’re too early to be classed you know? I wasn’t raised in a ‘kaupapa’ Māori way; I was raised in a relatively small family, we had three, there were three of us but you know what? I learnt so much from my big brother and I learnt so much through looking after my little sister that I know the value of it. I see the value”.

This quote serves to reinforce the value of sibling relationships and the influence that they have on children’s learning. In this finding, Amy was able to refer back to her own experiences as a child, growing and learning alongside her own siblings. Most noteworthy perhaps, was the distinction that she was able to make between the types of learning that she gained through the different interactions that she shared with each of her siblings. Amy espouses that she learnt from her interactions with her older sibling, whilst she learnt to care for her younger sibling.

Several authors concur with the belief that same-age settings create an unnatural grouping arrangement and argue that children aren’t “born into litters” (McClellan, 1994; Viadero, 1996). Rather, same-age and multi-age grouping arrangements are made by adults for adults and imposed upon children (McClellan, 1994; Logue, 2006); ultimately removing their freedom of choice.

**Fewer social experiences with other age groups**

Same-age settings were also seen as providing fewer opportunities for children to interact with other age groups. This was seen as a disadvantage, particularly for children who had limited opportunities to do so outside of the centre. These interactions between children of different age groups were considered beneficial because it was generally agreed that interaction with children of different age groups led to the development and enhancement of unique skills that did not generally arise within same-age settings.

The importance of such a finding suggests that the teachers within this study feel there is an obligation for early childhood centres to provide what Coleman (1987) describes as a societal response to meet the changing needs of children and their families (Katz & McClellan, 1997). During the 1980s New Zealand experienced “a long period of extensive economic, political,
social and demographic change” (Cotterell, von Randow & Wheldon, 2008, p.6). This has influenced and contributed to smaller nuclear families and a delay in readiness to have children. Because the needs of the modern family and community have changed drastically, children now have fewer opportunities to interact with children of different age groups (Callister, 2005). Thus, the responsibility has inevitably fallen on schools and early childhood centres to respond to this shortfall and provide children with multi-age experiences (Katz & McClellan, 1997).

Furthermore, this recognises the vital role a sense of community has in the social and emotional development of the child. According to the literature, “children have always lived with, learned from and played alongside other children of different ages” (Gerard, 2005, p.243). In his observation of children, researcher Lane (1947) watched the interactions of young children. Lane found that the children often gravitated towards children of different ages and that the children’s interactions differed as they worked with children different in age. Lane also noted that when all of the children present were of the same age, higher levels of aggression, rivalry and an inability to compromise were demonstrated. When the children varied in age however, the occurrences where cooperation and consideration were demonstrated grew (Katz & McClellan, 1997; Lane, 1947).

**Less developed / more advanced children are held back**

Same-age settings were also considered barriers to children with special needs as it was commonly believed amongst the teachers that same-age settings had the potential to hold less able children back. Several teachers recalled their own experiences within early childhood centres where they had witnessed or had seen children held back in a classroom with peers younger than themselves because they failed to meet the requirements set by the centre. An example of this is espoused in the following quote:

*Katie: “That’s one of the scary things I’ve heard from parents that want to get their children into same-age preschools, this is around Remuera, is that there are some centres that say that their children ‘have to be’ toilet trained. Which I know legally, you’re not allowed to do but somehow these centres manage to; these private kindergartens and so these parents are really pushing children to toilet train before they’re ready and I think that it’s not ok”.*

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This was seen as a matter of convenience for the teachers within the centre rather than a way of meeting the needs of the children and was considered a disadvantage because it set a standard for children in regards to their age. The teachers within this multi-age focus group believed that in this regard, there was the potential to push children into something that they weren’t ready for. This finding is echoed in the literature of several authors who confirm that same-age grouping arrangements are often adopted because they simplify administration (Arthur et al, 2005; Katz, 1995; Paradini, 2005) and make grouping children convenient (McClellan & Kinsey, 1999).

Moreover, the majority of teachers also believed that same-age settings had the potential to restrict children with more advanced skills. Because same-age settings were generally associated with age-appropriate curricula and resourcing, it was commonly believed that the experiences, opportunities and equipment offered to the children would be restrictive in nature and inadvertently affect the child’s ability to explore more complex tasks because the necessary equipment exceeded the age range within the room.

The study of 12 Australian teachers mentioned earlier also believed that the “exposure to higher levels of learning enabled by the older children benefited the younger learners” (Edwards, Blaise & Hammer, 2009, p.59). Younger learners also benefited from their exploration of more advanced resources found in multi-age settings (Edwards, Blaise & Hammer, 2009). Opportunities where younger children can learn from older, more experienced peers do not exist within same-age settings.

School readiness

There was a general consensus amongst this group of teachers that same-age settings failed to prepare children for school. In particular, same-age settings were seen to provide fewer opportunities in which children could interact with different age groups. The significance of this, as espoused by the teachers, was that children had fewer opportunities to learn the necessary social skills that would help them navigate the “jungle” that is the school playground. Moana provides the following example:

“Why do we segregate our kids? Why do we have a room for this age, a room for that age? Why do we put the barriers up? Because once they’re up they have to go to primary school and ok, maybe you’ve got all the five-year-olds in one room but then they’ve got to go out in the jungle, in the playground and it is a jungle”.

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In this instance, Moana questions the validity of same-age grouping arrangements in early childhood centres and likens the division of children on chronological grounds to putting up a barrier.

This finding suggests that the teachers within this focus group believe early childhood centres play a critical role in preparing children for school and readying them for the realities that they are about to face. This is supported by several authors who state that the transition between an early childhood centre and school is considered a time of rapid change in the lives of children (Margetts, 2000; O’Kane & Hayes, 2006). It is a time of adjustment in which the child learns to adapt to the new environment, new people and new rules (Ladd & Price, 1987; O’Kane & Hayes, 2006) as they “mix with a larger and more diverse group of children” (O’Kane & Hayes, 2006, p.4).

Moreover, grouping arrangements within the early childhood sector have the potential to promote or hinder the acquisition of dispositions necessary for the smooth transition to school. Of particular significance to these teachers, was the child’s ability to effectively function and interact within the school playground where they are forced to play alongside children of diverse and varying ages. They did not believe that same-age settings provided the means where children could effectively learn to play alongside children of different ages and thus, failed to adequately prepare them for school.

In my review of the literature I found no information about the nature of same-age and multi-age groupings and their influence on children as they transition to school. There are however, several authors that suggest multi-age settings are unique in that they provide a means with which children learn to socialise with children of varying ages; adjusting their behaviour to accommodate differences in age and ability (Evangelou, 1989; McClellan, 1991; McClellan, 1999). This research has contributed new knowledge to the growing body of information on same-age and multi-age settings, identifying the importance of questioning the impact grouping arrangements within early childhood settings have on children’s transitions between the centre and school.
Advantages of multi-age settings

Peer scaffolding (*Tuakana / teina*)

The concept of *tuakana / teina* or the ability of older and younger children to learn from each other was considered a key advantage of multi-age settings across all four focus groups. It was generally believed that the interactions between children of different age groups contributed to the overall development of skills that they were generally not confronted with in a same-age setting.

In particular, younger children were seen as keen observers of older, more experienced peers. Through their observations of older children, younger, less experienced children gained the confidence to participate in and attempt more challenging tasks. This was considered important because it minimised the need for adult direction, was initiated by the child and advertently encouraged the child to lead and direct their own learning. This finding is supported by the findings of an Australian based study in which 12 adults shared their understandings of multi-age settings in early childhood education. The researchers found that “…exposure to higher levels of learning enabled by the older children benefited the younger learners” (Edward, Blaise & Hammer, 2009, p.59).

Younger children within multi-age settings were also seen as being less reliant on their teachers. This was because younger children within multi-age settings were seen as having access to a wider range of skills that they could observe and draw from. The observation of more mature, experienced children provided a resource for younger children to learn from. This is consistent with findings in the literature that suggest younger children within multi-age settings are visibly less reliant on their teachers (Carter, 2005; McClellan, 1994) than that of their peers in same-age settings where the only person who possessed greater maturity was the teacher (McClellan, 1994). This is because in “age-mixed play, the more sophisticated behaviour of older children offers role models for younger children, who also typically receive more emotional support from older kids than from those near their own age” (Gray, 2011, p.500).

For older children, multi-age settings provided an environment in which they could engage with the younger children, particularly the infants. The teachers believed that these interactions led to more nurturing, patient behaviours and encouraged older children to recognise and be more tolerant of differences. These interactions were also believed to lead
to positive outcomes for older children, who in interacting with younger, less able children, were learning to identify the differing needs and abilities of those around them and to modify their behaviour accordingly. This is supported in the literature by Gray (2011) who espouses that multi-age play also provides older children with opportunities to learn as they practise ‘nurturance and leadership’ (p.500). Several authors suggest that children, both younger and older, learn to alter their behaviour as they move between interactions with children of different ages (Evangelou, 1989; McClellan, 1991; McClellan, 1994; Gray, 2011).

Multi-age settings were also associated with greater opportunities for older children to lead and take on greater levels of responsibility. It was commonly believed that older children within multi-age settings often assumed roles of responsibility in their interactions with younger, less able children. This was done by assisting teachers with feeding infants and toddlers, helping younger children dress themselves and by role modelling appropriate behaviours. Literature regarding multi-age settings reinforces this finding and suggests that multi-age settings provide older children within the group with more definitive roles of responsibility (McClellan, 1994). This is because multi-age settings are inclusive of a vast array of children with varying capabilities. It is suggested that teachers can choose to utilise the skills of the children that are more knowledgeable and have more experience (Carter, 2005; McClellan & Kinsey, 1999) and can encourage older children within the group to model the appropriate behaviours to the younger, newer members of the group (Carter, 2005; McClellan, 1994; Stone, 1996).

Similar findings are also recorded in the study of Blaise, Edwards and Hammer (2009) who suggest that the learning outcomes described by the teachers challenge traditionally held views of child development. The very notion that children, particularly infants and toddlers, are capable of functioning outside of their “supposed ages and stages of developmental progress” (Blaise, Edwards & Hammer, 2009, p.60) challenges the relevancy of same-age groupings arrangements within early childhood education.
Siblings

A key advantage of multi-age settings was that they made it possible for siblings to attend the same early childhood centre. This was identified as an advantage due to the nature of sibling relationships, in that they were generally positive, nurturing and often enhanced the learning opportunities of both siblings. This is reflected in the following quote:

Marie: “We have a lot of siblings as well, you know, more come through and they, you know the relationships are great, they look after them so well.”

This view is shared by several authors who highlight the significance of sibling relationships during early childhood and suggest that positive sibling relationships have been associated with positive learning outcomes and are seen to have a positive influence on the emotional, social and cognitive skills of children in early childhood (Howe & Ross, 1990; Milevsky, 2011; Smith, 1993).

Furthermore, it was believed that having siblings within the same learning environment was a natural way of including the whole family in the centre; that families that had more than one child in the same early childhood centre often had more of a vested interest in the centre and this translated into more meaningful interactions between whānau and the centre.

Whānau setting

It was also believed by all six of the teachers that an advantage of multi-age settings was that they emulated and created a sense of whānau and community. Because children of all ages were able to attend together, the setting around them was thought to reflect that of a natural family. This was considered particularly important for children who had small families and no siblings and thus had limited opportunities to interact with children of different age groups outside of the centre.

During the focus group, one teacher raised the following question:

Moana: “For me, whānau is very important and where else are some of these children going to learn what family is really about than in a multi-age?”

This question implies, as is stated earlier in this discussion, a growing sense of obligation by the teachers to fill the gaps that changes to society have created. As family dynamics continue to change and sole child families rise in number (Callister, 2000) there is a growing
need for a societal response to these changes (Coleman, 1987; Katz & McClellan, 1997). Often, it is seen as the responsibility of early childhood centres and schools to provide this response (Katz & McClellan, 1997).

Moreover, in the quote above, Moana emphasises the importance of the provision of multi-age experiences for children; identifying the growing need for these interactions in today’s society. She suggests that many children do not experience the sense of community commonly found within a family and that often the only experience children will have exists within the educational environment. This finding serves to highlight the impact a strong sense of community has on the teaching and learning of young children. Several authors also highlight the importance of such experiences and suggest that a strong sense of community contributes to a growing sense of self and self-worth (Carter, 2005) and is essential for the social and emotional development of young children (Coleman, 1987; Katz & McClellan, 1997).

**Challenges for teachers**

Lastly, it was commonly believed that multi-age settings challenged teachers and encouraged their professional growth. This was considered to be true because teachers within multi-age settings worked with several age groups at the same time and were faced daily with the challenge of meeting the unique varying needs of the children within their care. Thus, the very nature of multi-age settings was thought to induce more thoughtful practice and challenged teachers to think of children as individuals and to plan accordingly. This is clearly articulated in the following quote:

*Roimata: “…you’ve got to alternate between your activities, whether it will cater for that age group to that age group but yet still be able to cater for both of them… It makes you think as a teacher, it makes you more proactive in what you’re doing, it makes you consider every age group you’ve got in the centre instead of just for the same age group… like ‘I’ve got three-year-olds today, so this is the activity that we’re going to do and that’s it’”.

The significance of this finding lies in the suggestion that the very nature of multi-age settings is thought to induce greater levels of self-reflection in teacher practice. That the varying needs of children within a multi-age group force teachers to reflect on their practice in order to accommodate the differing skills and needs of all of the children within the
setting. This belief is echoed by several authors who suggest that the challenge to meet the needs of children is greater within multi-age settings than it is within same-age settings and thus, provides a greater challenge for teachers (McClellan, 1994b; Ministry of Education, 2010; Porter, 2005).

Disadvantages of multi-age settings

siblings

In discussing the disadvantages of multi-age settings it became apparent that although the teachers believed that sibling relationships held many benefits for children, they also recognised that these relationships had the potential to be restrictive in nature. Several teachers within this study described negative observations that they had made of siblings within their own settings. Most common amongst these examples was that often, when siblings attended the same setting together, it was common for one sibling to rely on the other for a sense of security. Alice provides the following example:

Alice: “...new ones come in where the older brother wants to go off and play on the bikes and the sister is running along beside the bike because she can’t get on with him. Because she’s following the brother around on the bike and the brothers getting hōhā with her, you know, getting frustrated with her and wanting to go do other things”.

Examples such as this were seen to impede the freedom of the more settled child, restricting their ability to fully engage within the centre environment. Furthermore, several teachers noted that this often led to feelings of frustration and annoyance in the sibling most settled and therefore hindered the child’s overall engagement in the setting.

This was countered however, by two teachers who felt that this situation could be managed by the teachers. That it was in fact, the responsibility of teachers to help settle the child into the centre. This was seen as a strategy that encouraged both children to actively participate within the environment and was seen as a means of fostering a sense of security within the child. Consequently, this would allow teachers to build meaningful relationships with the new child, who given the time, would become less reliant on their sibling and would move off to explore the centre.
As stated earlier in this chapter, a review of the literature found no direct reference to the nature of sibling relationships in multi-age settings and their implications on children. Thus, these findings offer new insights into the nature of sibling relationships within same-age and multi-age settings.

**Older children disrupted**

Another key finding highlighted that it was commonly believed, particularly amongst the teachers within multi-age settings, that the older children were often interrupted in their play by younger children. This was considered a key disadvantage of multi-age settings and was considered particularly frustrating, not just for the teachers but also for the older children by Maata who states:

“I've noticed recently that the three and four-year-olds, the pre-schoolers are missing out on a lot of learning because they get distracted or disrupted by the younger children”.

The ongoing disruption by younger children in the play of older children was considered to have several negative effects. It was commonly believed that these interruptions affected the quality of learning of the older child and that often, they missed out on valuable learning experiences. It was also believed that often, this interruption was disheartening for older children who had spent great amounts of time, particularly in construction, only to have a younger child demolish the building within seconds. As a result, older children were often seen to ‘give up’ on this play and move away. Several teachers recognised that this disruption often deterred older children from extending on their own play and learning.

The teachers reported that often, the types of play disrupted by younger children were thought to be significant learning experiences for older children, in that older children had spent great amounts of time and effort in this play and had demonstrated their ability to focus and persevere for extended periods of time. The teachers admitted to being frustrated by this because they felt that the older children were inevitably “missing out” on enriched learning experiences that only undisturbed play and exploration could offer.

The effects of play on children’s learning have received significant attention in the literature. It is believed that play can have positive effects on all areas of a child’s development (Katz & McClellan, 1997) and is a “varied and rich medium for learning” (Gonzalez-Mena, 2008, p.92). Furthermore, it is commonly believed that children learn significant life skills such as
how to cooperate with others, recognise social cues and make sense of their wider world (Berk, 2004; Gonzalez-Mena, 2008; Katz & McClellan, 1997).

The literature also supported the views of the teachers and suggested that often, one of the biggest hindrances to children’s play is time. Inadequate time, imposed on children by adults and peers, takes away from the meaningfulness of children’s play and prevents children from reaching their full potential (Gonzalez-Mena, 2008).

**Safety**

Furthermore, multi-age settings were seen to increase the risk of harm, particularly to infants and toddlers by more mobile children. This was considered a challenge for teachers within multi-age settings who had to be more vigilant of the interactions between older and younger children, and set up the environment in such a way so as to minimise this risk as much as possible.

This finding was supported in an article that stated “if the age range extends beyond 18-months it is a challenge to provide the range of materials, equipment and experiences needed by children of diverse ages within one space” (Greenman & Stonehouse, 1997 as cited in Ministry of Education, 2010). It was understood within this article, that multi-age settings present a unique challenge. Because children vary significantly in age, it was expected that the skills of children would also vary, thus increasing the risk of harm within multi-age settings.

**Higher expectations of older siblings**

Another key disadvantage identified amongst teachers within this study was that older siblings often had higher expectations imposed on them, particularly by their parents and whānau. Often, parents were overheard reminding older siblings to ‘look after’ or ‘defend’ younger, less able siblings whilst at the centre. Several teachers had observed occasions where older siblings felt bound or obligated to do so and thus, spent the majority of their time within the centre looking after their younger sibling. Moana provides the following example:

“We’re raising a whānau generation; we’ve had number one, number two, number three… It can be a disadvantage to little Mary because she is starting to discover that ‘yeah, I’ve got wings and I want to fly and I don’t want these handbrakes’ you know? I guess that’s that thing where Mum and Dad say “look
after your little sister, don’t let anyone hit your little brother’, so they feel that they’ve got to be there, through thick and thin”.

This was seen as a disadvantage to the older sibling who had less opportunity to interact fully within the centre environment due to their perceived obligation to their younger siblings.

In the literature that I have reviewed in regards to same-age and multi-age settings, I have found no direct links between the effects of such settings on sibling relationships. Although several authors make mention of the ‘family atmosphere’ associated with multi-age settings, they do not refer to the implications these settings have on children within the same family, biological or otherwise. Thus, this study provides a foundation in which sibling relationships within same-age and multi-age settings are explored.

**Tuakana / teina**

The principle of *tuakana / teina*, where older children learn from younger children and vice versa, also had the potential to be a disadvantage. Several teachers believed that the learning occurring between the differing age groups was only as meaningful as the behaviour being modelled. The teachers referred back to observations in their own practice in which younger children had learnt negative behaviours through their observations and interactions with older children. In this way, younger children within multi-age settings were considered particularly vulnerable to the influence of older children who had the potential to lead them astray. This was reflected in the following statement made by Amy:

“It can be a negative thing, because are role models worth modelling after? Because we’ve got these ‘cool’ big kids that and they have that, you know? Like ‘ahhh, that’s what you do?’ so in that respect, it can be a bad thing. It is manageable, but that is a downside. It is good to have role models but they need to be worth role modelling”.

This was also considered a disadvantage for children of families where they are the only child. Moana believed that children, who had fewer opportunities to interact with children in their home environment, relied heavily on the centre environment for the development of social competencies. She believed that these children often adopted the behaviours of others unwittingly and emulated these behaviours in their own play. She acknowledged that the reality of such a setting led children to adopt the behaviours of others be they right or wrong. She provides the following example:
“And for these children who are only children, they’re growing up in their house with adults, mum and dad, nanny, papa, uncle, auntie and there are no other tamariki around, so they don’t actually know how to act like a child and then they come in here and they see these kids and they start to push out their boundaries and they start learning and so that’s a model, they follow that model whether it is right or not they follow that model”.

According to Katz and McClellan (1997) one of the most significant impacts on a child’s social development is their interaction with peers. Through their interactions with peers, children learn social ways of being. They explore different behaviours, test boundaries and learn what behaviours are acceptable and what are not (Katz & McClellan, 1997).

The cultural perspective

The teachers within this study were asked to what extent they believed that same-age and multi-age settings reflected the bicultural nature of New Zealand and their obligation as teachers to the Treaty of Waitangi.

New Zealand’s bicultural context

Culturally bound

It was commonly believed amongst teachers within both multi-age settings, that same-age and multi-age grouping arrangements are culturally bound; that each setting reflects a different cultural way of thinking and being, and emphasises the differing parental aspirations associated with different cultures. In particular, same-age settings were commonly associated with individualistic cultures such as those of Europeans and Asians whilst multi-age settings were commonly associated with more collective cultures such as that of Māori and Pacific Islanders. This belief was founded in relation to the nature of each of these settings and the benefits believed to be in them. In the paragraphs that follow, each setting is dissected with links to the findings identified within this study and relevant literature.

Same-age settings were commonly linked by all four focus groups, with individualistic cultures. This being defined as a group of people that “think of themselves as separate
entities” that are “largely concerned with their own personal needs” (Berk, 2004, p.63) and who “prioritise personal goals and a self-identity based primarily on one’s own attributes and achievements” (Passer & Smith, 2001, p.24). This became apparent in the answers given by teachers within the data collection process. Often, the findings reflected the academic potential of same-age settings. An example of this, the teachers concluded, is that same-age settings allow teachers to focus more in depth on one particular age group thereby focusing on their academic learning.

Furthermore, it was commonly believed that parents, particularly those of European and Asian descent, sought out same-age settings because they believed them to be early childhood centres that promoted “real learning” and offered greater levels of structure, with one teacher providing the following example:

*Katie:* “...there seems like there’s a lot (of same-age centres) around Remuera where there’s a lot of European people. A lot of our, even though we (a multi-age setting) were in Remuera, at our centre a lot of Chinese families really wanted that same-age group. So for them... same-age suited them. Different cultures value different things, so for some cultures, having same-age suits them better and what they think will be better for their child. Definitely it would lean towards an environment where more structure is better”.

This belief was echoed across three of the four focus groups, with one teacher recalling numerous occasions where parents, within same-age settings, had asked her to provide their children with homework sheets to complete at home. This was not necessarily considered a bad thing amongst the teachers, but rather, was seen as reflecting the differing aspirations and cultural values of parents.

In my review of past research I have found no literature pertaining to the cultural nature of same-age early childhood settings. The findings of previous research however, coincide with the belief that same-age settings are commonly associated with individualistic ways of thinking and behaving. This is evidenced in the writings of several authors, who suggest that children within same-age centres often display higher levels of aggression, one-upmanship and competitiveness (Whiting & Whiting, 1975; McClellan & Kinsey, 1999). Children were also more likely to report a greater feeling of social isolation and bouts of loneliness when placed in homogeneous settings (Asherm, Hymel & Renshaw, 1994 as cited in McClellan & Kinsey, 1999).
In contrast, multi-age settings were often associated with more collective cultures such as that of Māori and Pacific Islanders, in that they valued collectivism. Collectivists are defined as a group of people that “define themselves as part of a group and stress group goals over individual goals” (Berk, 2004, p.63) in which “individual goals are subordinated to those of the group and personal identity is defined largely by the ties that bind one to family and other social groups” (Passer & Smith, 2001, p.24). This was also reflected in the data collection process and more often than not, the advantages of multi-age settings were social in nature and were concerned with the interactions between children. In this way, the child was seen to be embedded within the social context and part of a larger family of learners.

This is consistent with Rogoff’s sociocultural theory in which human development is seen as a culturally mediated process (Rogoff, 2003). This process recognises the importance of interactions between children and more advanced members of society in the transmission of culture and knowledge (Berk, 2004; Passer & Smith, 2001) and is considered necessary for children to “acquire the ways of thinking and behaving that make up a community’s culture” (Wertsch & Tulviste, 1992 as cited in Berk, 2004, p. 23). As children engage with those more proficient than themselves, they develop complexity in their thinking and develop an increased ability to self-regulate their own behaviour (Berk, 2004).

Moreover, it was commonly believed, particularly by the Māori bilingual focus group, that multi-age settings reflected a cultural way of thinking and being akin to Māori. Māori principles of whakawhanaungatanga, togetherness and tuakana / teina were emphasised and the teachers described a sense of familiarity within the environment with one teacher stating that it was good to get back to her “cultural roots” after having spent some time working within a same-age setting. This affinity with multi-age settings encouraged them to seek employment within multi-age settings.

As stated earlier, a review of past research turned up no results in regards to the culturally bound nature of same-age and multi-age grouping arrangements. The findings of previous research however, by in large, support the key characteristics of multi-age grouping arrangements that were uncovered during the data collection process. Several authors credit multi-age grouping arrangements for the ‘family like atmosphere’ that they create (Carter, 2005; Chase & Doan, 1994; Evangelou, 198; McClellan & Kinsey, 1999; Stone, 1996; Viadero, 1996) and suggest that children who participate in multi-age settings tend to
demonstrate behaviour that is more prosocial - including greater levels of altruism, nurture, cooperation and caretaking (Rasmussen, 2005; Whiting & Whiting, 1975).

**Whānau oriented**

Multi-age settings were also seen as a means of encompassing the whole whānau in the child’s learning journey. This was thought to be an essential aspect of practice and was considered an acknowledgement of the impact the child’s whānau and wider world have on their holistic development. This belief is articulated in the following comment:

*Mere: “...tuakana / teina, it encompasses all the whānau and this is the main thing; you have to encompass all the whānau, it is not like it is just the kid on their own because that’s what you get in kindergarten. I don’t mean to be sadistic in any way, but that’s what you’ve got in kindergartens; it is just the child and that concept of ‘just the child’ isn’t good enough, because that child has a wider, broader, holistic framework”.*

In essence, this finding acknowledges the child as a social being - deeply embedded in culture. It implies that in order to fully understand the child, the teaching and learning setting must recognise where children come from; “that a child’s learning environment extends far beyond the immediate setting of the home or early childhood programmes outside the home” (Ministry of Education, 1996, p.19). This belief is echoed in the literature which acknowledges that every child is fundamentally “embedded in a larger culture that helps shape” who they are (Passer & Smith, 2001) and that the child functions within this culture, not devoid of it (Fleer, 2002).

The literature also acknowledges that children develop in a complex system of relationships “affected by multiple levels of the surrounding environment” (Berk, 2004, p.24) and that the nature of these relationships ultimately affects the way the child views and interprets the world (Passer & Smith, 2001). It was suggested therefore, that early childhood centres must reflect this notion in all areas of practice, including the way in which they group children and that in practice, must seek to encompass the child’s whānau and wider world.

Furthermore, reference was made to the inability of same-age settings to achieve this. That same-age grouping arrangements, positioned the child as a lone entity, devoid of their family and, reflected an individualistic set of values. Mere, a teacher from the Māori bilingual setting stated that this view of the child, simply “wasn’t good enough” because it failed to
acknowledge that children have a “wider, holistic framework” that they carry with them and that meaningful learning stemmed from the recognition of this.

**Tuakana / teina**

It was also believed, again, particularly by the teachers within the Māori bilingual that *tuakana / teina* or multi-age settings reflected a Māori way of teaching and learning. Several of the teachers believed that due to the nature of multi-age groupings, children needed less direction from teachers, instead learning from their observations of their peers and more knowledgeable members of the group. The children’s attempts to imitate or copy the *tuakana* were encouraged and this was seen as an important aspect of the children’s learning. This view was supported by all six of the participating teachers and is clearly articulated within the following statement:

*Mere:* “It’s very cultural, the way that we teach our children. Our younger ones don’t necessarily have to talk, it is more about using your eyes, your observation skills and your body language... So for me it was about the cultural way that they learn at home that made it from home to the centre. They’ve all gone through the same pattern of watching their older brothers or their tuakana doing it so it was important that that type of learning did happen and it became a part of their different levels of learning”.

Several authors highlight the centrality of *tuakana / teina* in the sustaining Māori culture (Ministry of Education, 2009; Pere, 1994; Tangaere, 1996). According to the literature, the transmission of Māori taonga and tikanga generally occurred from birth; children were exposed too, lived in and learnt from a community of all ages and children, regardless of age, were considered capable of both learning and teaching (Ministry of Education, 2009; Pere, 1994; Tangaere, 1996). The Māori concept of ‘*tuakana / teina*’ is founded on two principles; that is ‘whanaungatanga’ and ‘ako’ - with whanaungatanga portraying the importance of kinship ties between whānau or family and ako meaning both to learn and to teach (Ministry of Education, 2009; Pere, 1994; Tangaere, 1996). This was considered acceptable and was often encouraged within Māori families from a very young age (Tangaere, 1996) and is acknowledged as a core value of multi-age grouping arrangements (Aina, 2001; Carter, 2005).

Furthermore, as multi-age settings within New Zealand accommodate children up to five-years of age, it is not uncommon for siblings and other whānau members to attend
alongside each other, nor is it uncommon for older children to assist younger children thus creating situations for the concept of *tuakana / teina* to present itself (Carter, 2005; Evangelou, 1989; McClellan, 1994; McClellan & Kinsey, 1999; Ministry of Education, 2009; Stone, 1996; Tangaere, 1996; Viadero, 1996).

**Improvements to practice**

The teachers within this study were asked to identify key improvements to practice in same-age and multi-age settings. Of the improvements suggested, three arose most frequently; these were opportunities to interact with other age groups, uninterrupted play, and safe spaces for infants and toddlers.

**Improvements to practice in same-age settings**

**Opportunities to interact with other age groups**

Of the improvements to practice identified by the teachers, the provision of multi-age experiences for children within same-age settings arose most frequently. All of the teachers within this study, regardless of setting, believed that opportunities to interact with children of other age groups enriched the learning of children in some way or another. Offering children in same-age settings opportunities to interact with children of different age groups, even for only a short period of time, was considered beneficial. This shows the strength of teachers’ beliefs in the benefits of multi-age experiences. This is evidenced throughout the findings of each of the focus groups and is articulated in the following quote:

*Maata*: “To have the flexibility to actually be able to mix the rooms, like even if it’s once a week or something like lunchtime, letting them go and play in the same playground like have that flexibility”.
Improvements to practice in multi-age settings

Uninterrupted play

Of the improvements to practice in multi-age settings identified by the teachers, assurances for the uninterrupted play of older children arose most frequently. It was believed, particularly by the teachers within the first multi-age focus group that the play of older children was often interrupted by younger children. This was considered a key disadvantage of multi-age settings and particularly frustrating, not just for the teachers but also for the older children.

Although it was also considered a learning opportunity for older children as they learnt to be tolerant of the children around them, the ongoing disruption by younger children of the play of older children was considered to have several negative effects. The teachers believed that this interruption was often disheartening for older children who had spent great amounts of time, particularly in construction, only to have a younger child demolish the building within seconds. Older children were often seen to ‘give up’ on this play and move away. The teachers admitted to being frustrated by this as often the types of play disrupted were considered meaningful, in that older children had spent great amounts of time and effort in this play and had demonstrated great focus and perseverance.

To ensure uninterrupted play for older children, the teachers suggested the introduction of safe play spaces that are inaccessible to younger children. It was espoused that this would provide a means whereby older children could engage in more meaningful play without the interruption of younger children, thereby providing greater opportunities for older children to extend on their learning. This is reflected in the following quote:

*Katie:* “I think having a time and a space where the older children can go”

*Chloe:* “I know we said before about the babies having their space but having a space for the older children where they can go and they know that that’s there space where they’re not going to get their towers demolished”.
Safe spaces for infants and toddlers

Alternatively, the teachers also recommended the implementation of safe spaces for infants and toddlers; quiet spaces that infants and toddlers could retreat to when they felt the need to. It was not suggested that infants and toddlers be completely separated from the older children, but rather that teachers encourage older children to recognise the space as an area of play that is quiet and slow.

Summary

This study has shed light on teacher understandings of same-age and multi-age settings. In analysing the findings it became apparent that there are several underlying motives governing the ongoing existence of same-age and multi-age grouping arrangements; these include the maximisation of profit, and the philosophical beliefs of owners and management. Furthermore, each of the settings provides children with unique learning opportunities and experiences. Same-age settings were generally associated with organisational benefits for teachers and management whilst multi-age settings were associated with greater social experiences.

In addition, this research revealed the cultural nature of same-age and multi-age settings, suggesting that each grouping arrangement reflects a distinct set of values akin to a cultural way of being. This study does not attempt to suggest that one setting is better than the other, but rather seeks to shed light on the complex and unique nature of each of these settings within New Zealand’s early childhood context.
Chapter Six: Conclusion and recommendations

Overview

The New Zealand early childhood sector is characterised by a range of diverse early childhood education settings. In grouping children, early childhood centres adopt one of two grouping arrangements - some centres choose to arrange children homogeneously in same-age groupings whilst others adopt heterogeneous, multi-age grouping arrangements (Merry, 2007). As a practice, same-age and multi-age grouping arrangements have gone relatively unquestioned (Wardle, 2008). Consequently, this study has uncovered teacher understandings of same-age and multi-age grouping arrangements. The findings of this study affirm the general belief that each of these settings provides children with unique learning experiences and opportunities (Aina, 2001; Arthur et al. 2005; McClellan, 1994) uncovering expected and new findings.

In this concluding chapter, the key findings of the study are summarised, the contributions of this study are explored, the limitations of this study are explained and recommendations for further research are made.

Key findings

The organisational perspective

What reasoning and values lie beneath the practice of grouping young children in same-age and multi-age settings?

The research shows that there are several key motives underlying the ongoing existence of same-age and multi-age grouping arrangements within the early childhood sector. Although the motives were generally seen to be similar across both settings, some were believed to be more characteristic of a particular setting. Most common were the maximisation of profit, the philosophical beliefs of owners and management and child safety.
The maximisation of profit was cited as the most prominent motive behind same-age and multi-age groupings across all four focus groups. However, the majority of teachers believed that this was particularly characteristic of same-age grouping arrangements. It was commonly believed that same-age grouping arrangements provided a means by which privately owned companies could increase their profitability. Because same-age centres were able to enrol larger numbers of children whilst requiring fewer staff, same-age centres were generally seen as a means of decreasing the running costs of the centre whilst maximising profitability. This was considered a disadvantage as it was seen to prioritise profitability over quality early childhood education and care, and the interests and wellbeing of the child.

The philosophical beliefs of centre owners and management were also considered as a key motive behind the ongoing existence of multi-age grouping arrangements. This was because, multi-age grouping arrangements were considered more likely to have the interests of the community as a central focus than same-age settings. Where this was the case these centres were generally associated with small not-for-profit organisations, were typically multi-age in structure and prioritised the needs of children and their whānau rather than profitability. In this way, multi-age settings were generally associated with higher levels of quality and were seen to prioritise children and their whānau, more so than same-age centres.

**The teachers’ perspective**

**What are the perceived advantages and disadvantages of same-age and multi-age grouping decisions in early childhood education?**

The teachers within this study identified several advantages and disadvantages akin to same-age and multi-age grouping arrangements. Most notably, the advantages identified in association with same-age settings, were often related to organisational ease and were seen to be directly beneficial to owners, management and teachers rather than to children. Advantages of same-age settings included the ability of the teacher to target the curriculum to the relevant age group, the maximisation of profit and child safety.

Moreover, the disadvantages associated with same-age grouping arrangements generally reflected the absence of the deep and meaningful relationships between teachers, children and their whānau akin to multi-age settings. Because children spent significantly less time within
same-age settings, it was commonly believed that children had fewer opportunities to develop depth in their relationships with those around them. Consequently, key disadvantages to same-age settings were a lack of community due to centre size, frequent transitions between classrooms, the separation of siblings and whānau, and fewer social experiences with children of other age groups. The teachers within the Māori medium bilingual focus group also believed that the absence of such interactions failed to prepare children for the realities of school, in which children are expected to engage with different age groups on a daily basis.

Same-age settings were also considered disadvantageous because they were seen as having the potential to hold children back. Several teachers referred to experiences within their own practice where children were held back because they did not meet the requirements set by the centre (such as being toilet trained), or because they were operating at a higher developmental level than the rest of their same-aged peers. This was considered restrictive and was thought to have negative effects on the child’s sense of self-worth and identity.

In contrast, multi-age settings were generally social in nature and included greater opportunities for peer scaffolding or tuakana / teina and the inclusion of siblings. Multi-age settings were also described as whānau settings - identified largely for their ability to emulate a large family, were whānau oriented and were seen as a positive challenge for teachers; because teachers had to work with more than one age group, and they had to be more reflective and adjust their practice to accommodate all of the children within their setting.

The disadvantages associated with multi-age settings were also social in nature and reflected the potential impact different age groups had on the play of other children. The participating teachers commonly believed that siblings could hold each other back and that the potential existed for teachers and whānau to expect more from older siblings by expecting them to care, and show responsibility, for their younger siblings. Furthermore, it was believed that tuakana / teina relationships, in which children learn from age groups different from themselves, were only as good as the behaviours being modelled. Several teachers suggested that there was the potential for younger children in particular, to be exposed to and then imitate the negative behaviours of older, ‘cooler’ children within the centre.

Furthermore, it was believed that multi-age settings could pose greater risks to the health and safety of all children. It was commonly believed that younger, less mobile children were at a greater risk of being hurt by older, more capable peers, than their peers in same-age settings. The health and safety of older children within multi-age settings was also questioned and the
teachers referred to several occasions within their own practice in which younger children had disrupted the play of older children, leaving them discouraged and frustrated. This was considered a health and safety matter as it was believed to impact on the older child’s ability to persevere and develop their own learning.

The cultural perspective

In what ways do same-age and multi-age grouping arrangements reflect the values of both Pākehā and Māori and our obligation to the Treaty of Waitangi?

When asked to articulate how same-age and multi-age grouping arrangements reflected the bicultural nature of New Zealand and our obligation as early childhood teachers to the Treaty of Waitangi, there was a general initial reluctance amongst the teachers to answer, (with the exception of the Māori bilingual focus group). Initially, it was generally believed by three out of four focus groups that same-age and multi-age grouping arrangements provided equal opportunities for the implementation of the values of both Māori and Pākehā. As the teachers responded and discussion grew however, it became evident that in actual fact, a significant proportion of the participating teachers believed that same-age and multi-age grouping arrangements are culturally bound; that each setting reflects a distinct cultural way of thinking and being, and emphasises the differing parental aspirations typically associated with different cultures.

Same-age settings were frequently associated with individualistic cultures such as that of Europeans and Asians whilst multi-age settings were commonly associated with more collective cultures such as that of Māori and Pacific Islander’s. This belief was founded in relation to the nature of each of these settings and the perceived benefits the teachers believed they offered. This became apparent in the answers given by teachers during the data collection process. Often, the findings reflected the academic potential of same-age settings. An example of this, the teachers concluded, is that same-age settings allow teachers to focus, more in depth, on one particular age group, thereby focusing on their academic learning. Alternatively, multi-age settings were often associated with greater social outcomes, were seen to incorporate the child and their whānau, and provide greater opportunities for children of all ages to learn from one another.
Improvements to practice

What improvements to practice can be made in same-age and multi-age settings?

The teachers within this study identified three key improvements to practice in same-age and multi-age settings. Of the improvements suggested, opportunities to interact with other age groups, uninterrupted play, and safe spaces for infants and toddlers arose most frequently.

The majority of the teachers within this study believed that same-age settings could be improved by allowing children greater opportunities to interact with peers of different age groups throughout the day. This was seen as a means by which same-age settings could offer children multi-age experiences. In this way, children were given greater opportunities to practice and master the necessary social skills to effectively interact with people of different age groups.

The provision of opportunities in which children (particularly older children), could play without fear of interruption was seen as a way of improving practice within multi-age settings. It was generally believed that the provision of opportunities in which children could engage in uninterrupted play contributed to more meaningful and prolonged learning experiences; that this prolonged engagement, provided children with the necessary time to fully engage in and explore their environment, resources, and understandings, thereby enhancing opportunities for learning.

Safe spaces for infants and toddlers within multi-age environments were also seen as a way of improving practice. It was generally agreed that the provision of space in which infants and toddlers could safely explore with their whole bodies was considered essential for their safety. The teachers recommended the implementation of a quiet, safe space, easily accessible to infants and toddlers. They did not believe however, that it was necessary to exclude older children from the area, but rather, suggested that teachers encourage older children to be respectful of the infants and toddlers, and to recognise the space as one of peace and quiet.
Contributions

A key aim of this study was to identify teacher understandings of same-age and multi-age settings. The purpose of this was to contribute to the growing body of knowledge surrounding same-age and multi-age grouping arrangements in New Zealand’s early childhood sector. Hence, this study presents data that illuminated the nature of each of these settings as they are understood by the teachers.

Furthermore, this study contributed to the limited body of research relating to same-age and multi-age groupings within the New Zealand setting. It questioned the appropriateness of these grouping arrangements and explored their relevance in regards to our commitment as a bicultural nation. This study is distinct in the sense that it offers a unique bicultural perspective that incorporates the te ao Māori view of several Māori early childhood teachers in same-age and multi-age settings.

Limitations

This study was designed to uncover the beliefs of a small group of early childhood teachers within the Auckland region. The small-scale, localised nature of this study means that the findings found are not generalizable across all early childhood settings throughout New Zealand, but rather, are a reflection of the teachers participating within the study. Consequently, teacher understandings and reasoning within this study cannot be seen to reflect the views of all early childhood teachers within New Zealand.

Another limitation encountered in this study was the recruitment of teachers. Because this was a small study, it was imperative that each of the settings was represented fairly within the focus groups. Unfortunately, it was harder to find teachers that worked within same-age settings that were willing to participate than it was to find teachers within multi-age settings. Thus, this is reflected in the relatively small group size of the second same-age focus group.
Recommendations for further research

This study has shed light on the complexities and issues surrounding same-age and multi-age grouping arrangements within New Zealand as they are perceived by early childhood teachers. Future directions for research might endeavour to include the voices of other key stakeholders in early childhood education, such as children, parents and whānau, and other early childhood professionals. This may include experts in the field of same-age and multi-age education, centre owners and management in both privately-owned and not-for-profit community based centres, teachers within the wider New Zealand area including small rural areas, and the Ministry of Education.

Furthermore, an in-depth investigation into the cultural nature of same-age and multi-age settings may provide greater insight into the potential for early childhood centres to provide culturally responsive grouping structures that reflect the cultural aspirations of children, whānau and the local community.

Concluding statement

This study has investigated teacher perceptions of same-age and multi-age grouping arrangements in New Zealand’s early childhood education and care sector. This research has shown that each of these settings offers children unique learning opportunities and experiences. This confirmed the reality that there is a need to question the nature of same-age and multi-age settings and the impact that they have on children, their whānau and the wider community.

The inclusion of both Māori and Pākehā teacher voices within this study has provided an insight into the cultural nature of same-age and multi-age settings and their relevancy within New Zealand’s bicultural setting. This study has provided a basis which further research into the cultural nature of same-age and multi-age groupings can stem.
Glossary of Māori terms

Awhi: To embrace, cherish;

Hākari: Feast;

Hōhā: Bored, monotony, pest;

Hongi: Smell, press noses, relax (as used in Pōwhiri model of engagement);

Iwi: Tribe;

Kaiako: Teacher;

Kaupapa Māori: Māori philosophy, principles, plan, purpose;

Kaimahi: Worker, employee, clerk, staff;

Karakia: Prayer;

Karanga: Call, shout, recruitment of participants (as used in Pōwhiri model of engagement)

Kaumātua: Elders;

Koha: Act of reciprocity;

Kotahitanga: Unity;

Kuki Rangitira: Chef;

Mahi: Work;

Manaaki: Care for others;

Māori: A member of the Indigenous people of Aotearoa/New Zealand; tangata whenua, or people of the land.

Māori me ōna tikanga: Māori language and customs;

Marae: A communal or sacred place that serves religious and social purposes for Māori;

Mōhiotanga: Knowledge, knowing, understanding, comprehension, intelligence, awareness, insight, perception;
Ngā tikanga Māori: Māori cultural practices;

Pākehā: An Aotearoa/New Zealand person of non-Māori descent;

Poroporoaki: Farewell;

Pōwhiri: A Māori welcoming;

Tamariki: Children;

Taonga: Treasure;

Tautoko: To support, prop up, verify, advocate;

Te ao Māori: The Māori world;

Te reo Māori: Māori language or speech;

Te reo me ōna tikanga: Māori language and culture;

Tikanga: Māori customs;

Tuakana / teina: Older sibling/younger sibling; older child/younger child;

Waiata: Debriefing;

Wairua: Spirituality;

Whāea: Mother, aunt, aunty;

Whaikōrero: Discussion;

Whakatauāki: Māori proverb;

Whānau: Extended family, family group, a familiar term of address to a number of people – in the modern context the term is sometimes used to include friends who may not have any kinship ties to other members;

Whakapapa: Genealogical descent of all living things from the gods to the present time;

Whakawhanaungatanga: Kinship, relationship, a process of getting to know each other;

Whanaungatanga: Kinship, relationship, introduction (as used in the Pōwhiri model of engagement).
References


Appendix One:

Information Sheet
Information for participants

Understanding choices in the grouping of children within early childhood education:
An Auckland based study of same-age / multi-age grouping arrangements

To whom it may concern,

My name is Aroha Beach. I am currently enrolled in the Masters of Education in the School of Education at Unitec, New Zealand and seek your help in meeting the requirements of research for a thesis course which forms a substantial part of this degree.

The purpose of this study is to:

1. Examine the reasoning behind choices in grouping young children in same-age and multi-age groupings;
2. To investigate the assumptions and theories of practice underpinning decisions and practice.

As an early childhood teacher you are being invited to take part in a research study. Before you decide whether or not to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully.

You have been invited to participate in a one off focus group because you work within a same-age or multi-age setting. This means that the children within your centre are either separated into different rooms according to their age or are in a setting where children of mixed ages are grouped together. The focus group will last approximately one hour. The group will consist of up to eight people. Participants in the focus group will come from other local early childhood centres that have the same grouping arrangements as your own centre. Through your participation in this study, I would like to investigate your understandings and reasoning in relation to same-age and multi-age settings.
If you are interested in taking part I can be contacted via email at (). Confidentiality will be maintained throughout the study and any identifying information will be censored. This includes your name and any centres with which you are affiliated. Also, please use this email if you have any questions regarding the study and your participation within it. Please note that you may withdraw your participation in the study at any time before March 1\textsuperscript{st}, 2013. If you have any further questions or would like any extra information regarding the study and your participation within it I can be contacted via:

\textbf{Email:} \hfill \textbf{Phone:}

\textbf{Mobile:}

Once the study has been completed a small koha will be gifted to each participant as a sign of appreciation for your support and the time you have volunteered. Dinner and refreshments will be provided at the end of the focus group.

If you have any concerns about this research project you may contact my supervisor Professor Carol Cardno, via phone 0800 UNITEC ext. 7411 or email:

Finally, thank you for taking the time to read this information sheet. I appreciate your support and look forward to hearing from you.

Kind regards,

Aroha Beach.

\textbf{UREC REGISTRATION NUMBER: 2012-1091}

This study has been approved by the Unitec Research Ethics Committee from 22 November, 2012 to 21 November, 2013. If you have any complaints or reservations about the ethical conduct of this research, you may contact the Committee through the UREC Secretary (ph: 09 815-4321 ext 6162). Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.
Appendix Two:

Consent form
CONSENT FORM

Research event: Focus Group

Researcher: Aroha Beach

Programme: Master of Education (Early Childhood Education)


I have been given and have understood an explanation of this research and I have had an opportunity to ask questions and have had them answered. I understand that neither my name nor the name of my organisation will be used in any public report and that any opinions expressed in the course of the study are that of my own and do not reflect those of my employer or my centre. I also understand that I will be provided with a transcript for checking before data analysis is started.

I am aware that I may withdraw myself or any information that has been provided for this project up to the stage when analysis of data is completed on March 1st, 2013.

I agree to take part in this project.

Signed: _______________________________

Name: ______________________________

Date: ______________________________

UREC REGISTRATION NUMBER: 2012-1091

This study has been approved by the Unitec Research Ethics Committee from 22 November, 2012 to 21 November, 2013. If you have any complaints or reservations about the ethical conduct of this research, you may contact the Committee through the UREC Secretary (ph: 09 815-4321 ext 6162). Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.
Appendix Three:

Focus group schedule
Focus Group Schedule

Opening Question

1. Tell me a little bit about yourself and how long have you worked within the early childhood sector?

Introductory Questions

2. Where do you position yourself in the same-age, multi-age settings debate? Do you have a preference for one of these approaches or are your feelings neutral and why? What has influenced this decision for you?

3. When looking for work, what sort of factors influence your decision?

4. When choosing employment opportunities or applying for work how does your preference for multi-age settings impact on this process? Do you seek out multi-age settings and has this presented any challenges for you?

Key Questions

6. What advantages, in your opinion, do same-age groupings offer children that participate in these settings?

7. What disadvantages, in your opinion, do same-age groupings offer children that participate in these settings?

8. What advantages, in your opinion, do multi-age groupings offer children that participate in these settings?

9. What disadvantages, in your opinion, do multi-age groupings offer children that participate in these settings?

10. Given New Zealand’s unique bi-cultural setting and our obligations as teachers to the Treaty of Waitangi, in what ways do same-age groupings reflect the values of both the bi-cultural setting that is New Zealand and our obligations to the Treaty?
11. Subsequently, in what ways do multi-age groupings reflect the values of both the bi-cultural setting and our obligations to the Treaty of Waitangi?

**Ending Questions**

12. Thinking about the pros and cons of these practices, how can we improve or make these practices better?