The work of infant and toddler specialists in university-based early childhood teacher education in Australia and Aotearoa, New Zealand

Submitted by

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Doctor of Philosophy

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Declaration of Authorship and Sources

This thesis contains no material that has been extracted in whole or in part from a thesis that I have submitted towards the award of any other degree or diploma in any other tertiary institution.

No other person's work was used without due acknowledgment in the main text of the thesis.

All research procedures reported in the thesis received the approval of the relevant Ethics/Safety Committees (where required).

This thesis was edited by Bronwyn Dethick, and her editorial intervention was restricted to Standards of the *Australian Standards for Editing Practice*.

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Abstract

This doctoral thesis is a qualitative case study of the work of six university-based infant and toddler teacher educators in Australia and Aotearoa, New Zealand.

Research literature is presented to locate the study within early childhood teacher education as a cultural phenomenon in its institutionalised form. This thesis explores issues related to status, professionalisation, and the education of teachers, who work with infants and toddlers, and reflects the growing awareness of the importance of infant and toddler curriculum in teacher education programs. Conceptually the study is positioned within Cultural-Historical Activity Theory (CHAT). This conceptual framework was chosen in order to explore the motive object of activity of the collective subject of teacher educators within early childhood teacher education. It is also acknowledged, and addressed within the thesis, that issues that are specific to the early childhood field of status and professionalisation are situated within a broader context of how relations operate between workers and employers under capital. However, in this thesis, I have used CHAT primarily as an analytic device. Each of the six participants was interviewed individually; focus conversations were also held in the two countries. Extracts from individual interviews in the other country were used as provocations in each of the focus conversations. Qualitative data analysis followed a process of iterative analysis of codes and categories. Deductive coding using CHAT concepts followed inductive analysis of further categories.

Through exploring the story of the work of infant and toddler teacher educators in Australia and Aotearoa, New Zealand it became apparent that this thesis is a continuing story of struggle, resistance and advocacy in their work (Rockel, 2013).

Findings showed that the participants in the study were involved in a series of enduring contradictions that continually frustrated the expansion of their object of activity as a collective subject, and in turn, their outcome in their activity system. Their object of activity in this activity system was to increase prominence, credibility, and acknowledgment of the needs of infant and toddler curriculum and pedagogy in early childhood teacher education, the aim being to gain their outcome, of high-quality care for infants and toddlers in extra-familial care and education in Australia and Aotearoa, New Zealand.

The findings demonstrated that the long-standing sociohistorical contradictions that the participants experienced through the early childhood field impacted on their work.

There are enduring and sedimented contradictions in the early childhood field related to an ambivalence of the presence of infants and toddlers in non-parental care and education. At the same time, as academics, they were also negotiating struggles against deprofessionalisation in teacher education. These issues eventuated post-merger of teacher education institutions from colleges of education into universities. Expectations for teacher educators changed; research outputs were required to increase without provision of any additional support.

The findings established that the participants struggled to give greater prominence to infant and toddler curriculum and pedagogy in early childhood teacher education in their work in universities in Australia and Aotearoa, New Zealand. This struggle took various forms and is evidenced by the continual silencing experienced by the participants when they engaged in advocating for greater credibility of infant and toddler curriculum and pedagogy in early childhood teacher education.

A contribution of this thesis is that it clarifies the conditions of infant and toddler curriculum and pedagogy content in early childhood teacher education in Australia and Aotearoa, New Zealand. It argues that infant and toddler curriculum and pedagogy knowledge is crucial specialist knowledge essential to early childhood teacher education programs inclusive of children from birth to five years of age, offered in universities.

A second contribution is the evidence presented to support the argument that advocacy is the way in which the participants in the study held their work together. Advocacy was a key concept within the nature of their work as infant and toddler specialists in early childhood teacher education. It is recognised that historically advocacy has been fundamental to the struggle of working against the ambivalence towards infants and toddlers in the early childhood field. Therefore, what this thesis identifies is that little has changed; advocacy continues to be the primary focus of the work of infant and toddler teacher educators as they resist the ongoing ambivalence towards infants and toddlers in the early childhood field.

Conference Presentations

Bussey, K. (2015, September). *University-based infant and toddler teacher educators in Australia and New Zealand*. Presented at Baby Room Conference, Canterbury, UK.

Bussey, K. (2015, September). *University-based infant and toddler teacher educators in Australia and New Zealand*. Presented at EECERA Conference, Barcelona, Spain.

Bussey, K. (2014, September). *University-based infant and toddler teacher educators in Australia and New Zealand*. Presented at ISCAR Conference, Sydney, Australia.

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List of Abbreviations and Commonly used Terms

CHAT Cultural-Historical Activity Theory

Unit

In this thesis, I use the word 'unit' to describe a specific area of study. Typically, in early childhood teacher education a combination of units makes up a course in an early childhood teacher education degree program. As with most university-based teacher education, programs there are a structured amount of units and unit points required for student teachers to achieve before they will be awarded a degree in early childhood education. In Aotearoa, New Zealand, some universities refer to the term 'paper' or 'module'. For the purposes of this thesis, as the term paper often refers to journal articles, and other forms of academic writing I chose to use the term unit

Chapter 1

Introduction

1.1 The Aim and Significance of this Study

This thesis is an examination of the work of six infant and toddler specialists in teacher education in Australia and Aotearoa, New Zealand. The major claim in this thesis is that these infant and toddler, specialist teacher educators engaged in their work both as higher education practice and as a form of advocacy for infants and toddlers in the early childhood field. Throughout this thesis, I highlight the contradictions that arose as a consequence of these simultaneous activities. At the start of this chapter, I explain the rationale for the choice of the focus on infants and toddlers in teacher education in this study, I then turn to how this focus has arisen. This focus sits at the intersection of two domains: early childhood education and higher education. Therefore, in this chapter, I address each of these before drawing them together to show how they establish the context and rationale for this thesis. I also examine the problematic nature of this intersection between the early childhood field and higher education, in order to understand the work of infant and toddler teacher educators.

In teacher education, the number of infant and toddler specialists in universities is limited. This is an international trend (Horm, Hyson, & Winton, 2013). In understanding this trend, it is important to contextualise it within the current policy context in teacher education. Despite the focus on early childhood education and its place within higher education, there remains scant research on the conditions of early childhood teacher education in the broader field of teacher education within higher education (Fenech, Waniganayake, & Fleet, 2009). When narrowing the focus to the specialist area of infant and toddler teacher education, this lack of focus is further increased. This thesis focuses on the work of teacher educators who straddle the border between early childhood teacher education in higher education and the early childhood field. Tuinamuana (2016) explains, "the work of teacher education lives on the shifting, intangible border of academia and the professions" (p. 334). This thesis contributes to knowledge about the practices of teacher education and the work experiences of teacher educators, particularly in early childhood education.

Sleeter (2008), describes teacher education as being "under siege" (p. 1947), and this proved to be the case for the participants in this thesis. I theorise this sense of siege as

a consequence of wider moves to deprofessionalise teachers, which regard teaching and therefore teacher education as, "a short-term job requiring little preparation and much emphasis on subject matter knowledge" (Imig & Imig, 2008, p. 890). In the case of this study, I argue that infant and toddler teacher educators not only struggle against the *deprofessionalisation* of teaching and teacher education but continue to struggle to *professionalise* the early childhood field (Imig & Imig, 2008). I demonstrate in this thesis how these trends create a particularly complex context for the work of infant and toddler specialists in initial teacher education.

Many children attend non-parental early childhood settings internationally. Infants and toddlers are the fastest growing group of enrolments in the early childhood field in Australia and Aotearoa, New Zealand (Australian Bureau of Statistics, 2015; Ministry of Education, 2015; OECD, 2015). Developments in neuroscience (Schore, 2005; Shonkoff & Phillips, 2000; Shore, 1997) have thrown renewed attention on very young children, focusing on how critical the first three years of life are in terms of brain development and attachment relationships (Dalli, White, Rockel, & Duhn, 2011; Fox & Rutter, 2010; National Scientific Council on the Developing Child, 2007). Therefore, it matters that the people that teach infants and toddlers understand the specific needs of infants and toddlers in early childhood settings. To support educators and teachers to understand infants and toddlers in early childhood settings it is essential to ensure that we have strong infant and toddler teacher education. However, at this point, we know next to nothing about the work of infant and toddler, specialist teacher educators. This thesis addresses this gap in knowledge by examining the nature of the work of infant and toddler teacher educators.

The contemporary policy context and practice in the early childhood field in Australia and Aotearoa, New Zealand is one of "rapid and simultaneous" policy reform measures resulting in intense change across the sector (Nuttall & Grieshaber, 2018, p. 16). I argue that lack of focus on infants and toddlers in early childhood teacher education is due to extensive and unresolved debates in Australia about the most suitable qualifications for educators (Lyons, 2012). These debates have been historically recursive (Stonehouse, 1989). As I use cultural-historical activity theory (CHAT) as an analytical tool in this study, I note the importance of history in this study and the temporality of activity systems, which all have a historical context, a contemporary context, and a future. The aim of this study is, therefore, to understand in cultural-historical terms the nature of the work of infant and toddler specialists in

university-based early childhood teacher education in Australia and Aotearoa, New Zealand.

The participants were characterised as a collective subject within a distinctive system of activity in the context of this thesis. By collective subject, I refer to a CHAT term. Collective subjects are a group of people in both formally appointed groups, such as workplaces, or "loose networks of concerned people" (Blackler, 2009, p. 30). The collective subject is seen as an active agent. "It has its own aims, interests, memory and norms" (Lektorsky, 1999, p. 81). It is important to note,

collective subjects can be very different. They can be social institutions or more or less constant social groups... They occupy different positions, have different individual life projects, different plans for fulfilling certain common tasks... A collective subject is not necessarily a center that governs activity. It is a bearer of rules and norms of activity, of its object and means of mediation. (Lektorsky, 1999, p. 82).

The collective subject could be a scientific community of people adhering to a specific research tradition or focus (Lektorsky, 1999), as is the case for this group of six women who work at six different universities in two countries and focus on infant and toddler curriculum and pedagogy.

It is acknowledged that early childhood teacher education is also offered in vocational education and training in both countries. However, given that this thesis engaged in analysis of systems of activity it was beyond the scope of the thesis to look at two systems of activity. A study of the experience of vocational education and training teacher educators warrants a thesis in its own right.

The thesis was limited to participants in Australia and Aotearoa, New Zealand for reasons of feasibility.

1.2 Overview of this Chapter

The next section of this chapter briefly locates this research aim in relation to my personal interests and history. Next, in the main part of the chapter, I argue there are five problematic areas within the work of infant and toddler specialists in university-based teacher education:

- The contemporary policy context in early childhood
- The divide between care and education in early childhood
- Early childhood graduates tendency to not work with infants and toddlers

- The simultaneous struggle for professionalisation for infant and toddler educators in the early childhood field
- Struggle against deprofessionalisation in teaching and teacher education and the challenges of teacher education reform.

Having identified the wider problematic underpinning the research focus, I turn to some key historical issues in the middle section of this chapter. Towards the end of the chapter, I draw these sections together to demonstrate how they contributed to the formation of my research questions. Finally, before providing a brief outline of the thesis as a whole, I define some key terms and list my research questions.

1.3 My Personal Orientation to this Research

There is a story of how I came to this research problem through the literature, but there is also a story of how I came to this problem through my biography. Before I go on to describe what this thesis explores, I must explain who I am. I initially approached my doctoral studies with a background in working as a teacher in infant and toddler care and education settings in Aotearoa, New Zealand. Specifically, I worked in mentoring and engaging infant and toddler teachers influenced by the philosophies of Magda Gerber and Dr Emmi Pikler. Both Pikler and Gerber were Hungarian infant and toddler specialists. These philosophies and approaches come from a constructivist (observation during play) and sociocultural (during care moments and interactions) framework. This work led to the development of my career as an infant and toddler specialist, in Aotearoa, New Zealand and later in Australia, after moving to Melbourne to undertake my PhD. Throughout my career as an infant and toddler specialist, I have been interested in infant and toddler curriculum and pedagogy in early childhood teacher education. I have become a staunch advocate for the inclusion of more infant and toddler curriculum and pedagogy in early childhood teacher education programs. This focus intensified as I continually experienced a lack of depth and understanding of infant and toddler curriculum and pedagogy from pre-service teachers on practicum and amongst Bachelor of Education qualified teachers, I employed when working as a leader in the early childhood field. In moving to work on my doctoral study, I adopted a cultural-historical approach to my work and chose to use cultural-historical activity theory (CHAT) as the conceptual framework for this thesis. My career in Aotearoa, New Zealand, and now in Australia as an infant and toddler specialist, led to my passion for early childhood teacher education. It also motivated my desire to

investigate further and contribute to infant and toddler curriculum and pedagogy, and the work of infant and toddler teacher educators through completion of this study.

1.4 The Early Childhood Field as a Context for this Study

Early childhood teacher education, development has been dominated by a focus on children aged three to five years (Early & Winton, 2001; Horm et al., 2013; Maxwell, Lim, & Early, 2006; Ray, Bowman, & Robbins, 2006; Rockel, 2013), due to a raft of policy developments in the early childhood field over the past 127 years, summarised in the timeline represented by figure 1.1. I designed below.

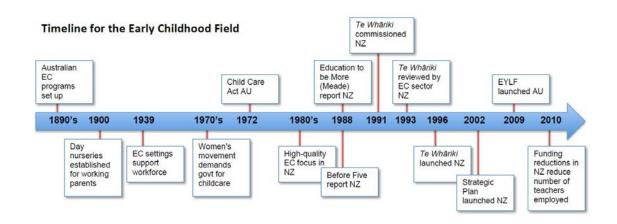


Figure 1.1. Timeline for the history of the Early Childhood field in Australia and Aotearoa, New Zealand

1.4.1 The policy context in the early childhood field in Australia

From the 1890s charitable and religious organisations began to set up early childhood programs for young children in Australia (Nyland & Rockel, 2007). Brennan (1998) noted, "the distinction between 'care' and 'education' services was institutionalised very early in the history of children's services in Australia. Kindergartens and preschools had an early learning focus, whereas day nurseries had a charitable and welfare focus (Elliott, 2006). Day nurseries were intended to cater for the children of women who were 'obliged' to support themselves and their children' (Brennan, 1998, p. 7). In Australia, day nurseries predominantly catering to infants and toddlers were established in the early 1900s to meet the needs of single parents who needed to work. Nurses were employed in Australian day nurseries as there was a focus on physical health and wellbeing (Brennan, 1998). Childcare centres were initially set up by

philanthropists to support underprivileged families, however, by the time of the Second World War childcare centres in Australia were focused on supporting the workforce (Woodrow & Press, 2007). In the 1970s the women's movement led to a demand for the Australian government to support women to engage in the paid workforce (Nyland & Rockel, 2007). The 1972 Child Care Act (Commonwealth of Australia, 1972) was a critical juncture in the development of care and education as it established quality as a key consideration in early childhood policy (Logan, Sumsion, & Press, 2013).

It is complex to outline the historical policy context for the early childhood field in Australia as the eight states and territories have traditionally worked separately. In 2007, the newly elected Federal Labour government attempted to establish a national agenda. To strengthen Australia's economy (Sumsion et al., 2009), the government focused on a 'productivity agenda' in education. A National Quality Framework (NQF) in early childhood education identified as a key policy initiative, with a focus on establishing a national early childhood curriculum. The development of *Belonging*, Being and Becoming: The Early Years Learning Framework for Australia (Commonwealth of Australia, 2009) took place over nine months with only two months of consultation conducted within the early childhood field (Sumsion et al., 2009). The development of this framework was a key policy change as this was the first national learning framework for children aged birth to five years published by the Commonwealth Government of Australia (Grieshaber, 2010). However, recently Sumsion (2017), recently described early childhood education as being a low status portfolio for the Australian federal government. This thesis addresses the challenge of low status in early childhood throughout.

1.4.2 The policy context in the early childhood field in Aotearoa, New Zealand

In Aotearoa, New Zealand, infants and toddlers have had a changeable place in the early childhood field, with government policy "never quite seeming to 'get it right' to guarantee and sustain lasting improvements to the quality of services" (Dalli, 2017, pp. 117-118). High quality early childhood education was a central policy platform of Aotearoa, New Zealand's Labour-led government in the 1980s. A central feature of the context at that time was an increasing politicisation of early childhood educators in Aotearoa, New Zealand, led by the establishment of an industrial union (May,

2007), along with strong advocacy leading to policy changes such as the *Before Five* report (Lange, 1988).

The political context of early childhood in the 1980s was a particularly transformative time for the early childhood field in Aotearoa, New Zealand (Dalli & Meade, 2010). Aotearoa, New Zealand made international early childhood history by shifting early childhood policy in 1986 from the Department of Social Welfare to what was then known as the Department of Education (Dalli & Meade, 2010). A key policy document *Before five: Early childhood care and education in New Zealand report* (Lange, 1988) supported this shift. It focused on the holistic nature of early childhood care and education and was the Labour-led government's response to the *Education to be more* report (Meade, 1988) commonly known as the Meade report. The Meade Report emphasised integration between care and education, improvement to the status of early childhood teachers, quality care and education for young children, and participation, access and diversity in early childhood settings (Smith & May, 2006).

In 1991, in an effort to further the development of curriculum and pedagogy, the National-led Aotearoa, New Zealand government commissioned the development of an early childhood curriculum framework document (Carr & May, 2000). This curriculum document was to be parallel in status to Aotearoa, New Zealand's school curriculum. Te Whāriki: He Whāriki Mātauranga mō ngā Mokopuna o Aotearoa: Early childhood curriculum (Ministry of Education, 1996) was released as a draft for review in the early childhood field in 1993 (Carr, May, & Ministry of Education, 1992). The final document, released in 1996, signalled early childhood care and education in Aotearoa, New Zealand as articulated through a discourse of quality. This commitment to quality connects to the struggle to professionalise the early childhood profession. Te Whāriki specified three different age groups: infants, toddlers, and young children (Ministry of Education, 1996). It acknowledged distinctive needs, characteristics and differences between these three broad age groups (Ministry of Education, 1996). The implementation of *Te Whāriki* (Ministry of Education, 1996) necessitated teacher-led early childhood settings, as the implementation of the early childhood curriculum required teachers who understood the theoretical intricacies of Te Whāriki (Ministry of Education, 1996). This shift was supported by subsequent policy development, such as Pathways to the Future: Ngā Huarahi Arataki (Ministry of Education, 2002) commonly known as the Strategic Plan.

Increased funding from the government accompanied changes made in Aotearoa, New Zealand early childhood to integrate care and education during this period. Several early childhood academics in both Aotearoa, New Zealand and the UK described key policies initiated at this time in the early childhood field as developing Aotearoa, New Zealand's profile as a world leader in early childhood care and education (Dalli, 2006; Meade, 2005; Moss, 2000). This denotes a time when early childhood policy in Aotearoa, New Zealand supported the struggle to professionalise the early childhood workforce through raising levels of qualifications; a point returned to later in the chapter.

Recent measures in early childhood policy reform in the last two decades have included the lifting of qualifications of early childhood educators in an attempt to professionalise the early childhood workforce. This measure has placed a focus on early childhood education in higher education, which has in turn, affected the working lives of teacher educators.

Currently, in Aotearoa, New Zealand, there is a very different situation to many countries around the world regarding early childhood qualifications. Goouch and Powell (2012) explain that the use of the term 'qualified' in the early childhood field in Aotearoa, New Zealand refers to teachers who have graduated through a three-year Bachelor of Teaching (Early Childhood Education) or Graduate Diploma in Early Childhood Teaching program. Smith, Ford, Hubbard, and White (1996) described the introduction of a three-year qualification to the Colleges of Education around Aotearoa, New Zealand that integrated kindergarten and childcare qualifications, as being a milestone in early childhood education. Smith (2015) later described the increase in level of qualifications for teachers in Aotearoa, New Zealand as the most radical of all of the changes generated by the Early Childhood Strategic Plan (Ministry of Education, 2002); a key early childhood education policy initiative provided as an election promise (Ministry of Education, 2002) for early childhood education intended to be rolled out over the next ten years (May, 2007). The working party for the Strategic Plan for early childhood education focused on teacher-led early childhood care and education, with the employment of qualified teachers articulated as being key to ensuring high quality early childhood care and education (May, 2007; Smith & May, 2006). With the introduction of the Strategic Plan (Ministry of Education, 2002) commitment to a 100% qualified workforce was a significant early childhood policy move benefitting infants and toddlers in early childhood settings in Aotearoa, New Zealand. Historically, the early childhood field had employed adults with lower levels of qualifications to work with the youngest children (Dalli, 2017).

However, in recent years' changes in early childhood policy in Aotearoa, New Zealand have reduced funding connected to qualified teachers; changes implemented by a National (conservative) government, which came into power in Aotearoa, New Zealand in late 2008. The conservative government's reversal in 2009, from the 10-year strategic plan aimed at having 100% early childhood education Bachelor qualified teachers in early childhood settings (Smith, 2015), is a current source of contention amongst Aotearoa, New Zealand teachers and academics as discussed in the interviews and focus conversations, by the participants in this study.

1.5 The Divide Between Care and Education

The prioritising of children aged three to five years in the early childhood field has led to the majority of early childhood teacher education focusing on children aged three to five years, and a division between 'care' and 'education' (Brennan, 1998). The early childhood field has long been characterised by this care and education divide (Elliott, 2006).

From the 1890s charitable and religious organisations began to set up early childhood programs for young children in Australia and Aotearoa, New Zealand (Nyland & Rockel, 2007). Kindergartens and preschools focused on early learning, whereas day nurseries operated from a charitable and welfare perspective (Elliott, 2006). Brennan (1998) noted, "the distinction between 'care' and 'education' services was institutionalised very early in the history of early childhood settings in Australia. . Nurses were employed in Australian day nurseries as there was a focus on physical health and wellbeing (Brennan, 1998). In the 1970s the women's movement led to a demand for governments to support women to engage in the paid workforce (Nyland & Rockel, 2007). The 1972 Child Care Act (Commonwealth of Australia, 1972) was a critical juncture in the development of care and education, as it established quality as a key consideration in Australian early childhood policy (Logan et al., 2013).

Despite the historical nature of the care and education divide, it is still maintained today (Sims, 2014b), and manifested through "separate funding arrangements, and differing government portfolio responsibilities" (Cheeseman & Torr, 2009, p. 66) in Australia. Debates in Australia, amongst practitioners, about the most suitable qualifications (including debates around levels of both theoretical and practical

knowledge and experience) for educators in early childhood settings, are still unresolved (Lyons, 2012). This has been an ongoing historical issue, with confusion about the most suitable qualifications for educators in early childhood settings (Stonehouse, 1989).

The divide between care and education also affects Aotearoa, New Zealand. Divisions and differences remain between funding and working conditions for staff working within kindergartens and early childhood care and education settings (May, 2007). However, it is important to note that extensive lobbying undertaken in the 1980s by advocates for childcare, led to administrative responsibility shifting in the government from the Department of Social Welfare to the Department of Education (Dalli, 2010).

The tension between care and education has recently been reflected in the Australian Early Childhood Development Workforce: Productivity Commission Research Report (Productivity Commission, 2015a, 2015b). The Productivity Commission is the Australian Federal Government's principal review and advisory body on microeconomic policy, regulation, and a range of other social and environmental issues. The draft report released to the public (Productivity Commission, 2014) received considerable backlash from early childhood teacher educators (Degotardi & Cheeseman, 2014; Sims, 2014a). This was due to the draft report's view that "the evidence that specific levels of qualifications improve the learning and development outcomes for children under three years of age is absent and evidence of positive impacts of qualifications, by themselves, is inconclusive" (Productivity Commission, 2014, p. 264). While this draft report had considerable impact on the early childhood field through a resurgence of recognition of the importance of having highly qualified educators working with infants and toddlers, I argue that this report also negatively impacted early childhood teacher educators, as it advocates against the need for teachers with degree-level qualifications to work with infants and toddlers, thereby rejecting the need for infant and toddler specialist teacher educators in universitybased early childhood teacher education.

In outlining the history of the early childhood field, I note this is not a historical thesis. I have only briefly described the history of infants and toddlers in the early childhood field and the development of early childhood teacher education in Australia and Aotearoa, New Zealand. In Chapter Three, I return to the theme of history when explaining the adoption of CHAT as an analytical tool in this thesis; in order to

understand current practice, we must have to have a strong sense of its historical origins.

1.6 The Early Childhood Teacher Education and Qualifications Context

The development of early childhood teacher education in both countries has been complex, due to the way in which care and education have historically been divided in the early childhood field, and therefore in the preparation of educators to work with young children.

The place of infants and toddlers in early childhood teacher education has been a complicated issue for over 85 years since the development of qualifications that related to children aged from birth to three years of age. See figure 1.2.

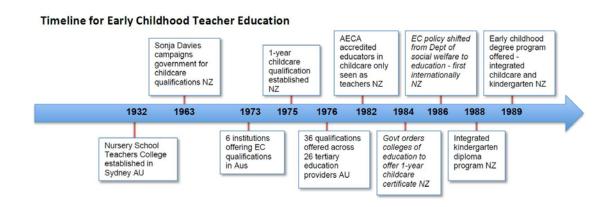


Figure 1.2. Timeline for the history of Early Childhood Teacher Education in Australia and Aotearoa, New Zealand

1.6.1 The development of teacher education for work with infants and toddlers in Australia

I designed Figure 1.2 to show in 1932 a Nursery School Teachers College was established in Sydney, connected to Sydney Day Nurseries, to provide training for people working in nurseries with very young children (Brennan, 1998). Many years later the 1972 Child Care Act (Commonwealth of Australia, 1972) established 'quality' as a key consideration in early childhood policy, leading to several new qualifications which were developed and offered from the mid-1970s (Brennan & O'Donnell, 1986). The most relevant qualification for educators working with infants and toddlers was the Child Care Certificate; a two-year course delivered by vocational education providers initially developed in order to provide a qualification for teachers'

assistants working in childcare centres. The certificate qualification proved to be very popular, and the graduates of the program were highly regarded in the early childhood field in Australia (Press & Wong, 2013). By 1982, the Australian Early Childhood Association (AECA), an organisation with firm historical roots in preschool advocacy, made a decision to provide teacher accreditation automatically for educators who had previously qualified with the Child Care Certificate. However, the AECA announced that graduates of the Child Care Certificate could be considered as teachers only if they worked in childcare centres, and not in preschools or kindergartens (Brennan, 1998). This strategy was introduced because the *Child Care Act 1972* (Commonwealth of Australia, 1972) required teachers to be employed in childcare centres, despite teacher shortages in childcare centres in Australia, due to longer hours and poorer working conditions in comparison to working conditions of teachers in preschools or kindergartens. The Child Care Certificate qualification was seen as being suitable for educators working in childcare centres because its content included a focus on infants and toddlers (Press & Wong, 2013).

1.6.2 The development of teacher education for work with infants and toddlers in Aotearoa, New Zealand

During the same period, Sonja Davies – a strong unionist and later a Member of the Aotearoa, New Zealand Parliament – began campaigning for childcare qualifications in Aotearoa, New Zealand in 1964, at the same time as launching the New Zealand Association of Childcare Centres (NZACCC) (Davies, 1984). The NZACCC formed a collective vision for childcare and focused on creating early childhood qualifications for staff who were already working in early childhood settings. However, twelve years passed before the government established a one-year childcare qualification in 1975 at a vocational training provider (May, 2007). NZACCC had developed a one-year full-time childcare qualification, but lack of government funding meant this qualification was developed by volunteers on a very small amount of money (May, 2001). In 1984 the recently elected Labour government ordered four of the six Colleges of Education then providing initial teacher education in schools to establish a one-year childcare certificate program (Carr, May, & Mitchell, 1991).

As noted earlier, Aotearoa, New Zealand made international early childhood history by shifting early childhood policy in 1986 from the Department of Social Welfare to what was then known as the Department of Education (Dalli & Meade, 2010). Integration of vocational early childhood programs with kindergarten (preschool)

teaching diplomas in 1988 followed the political attempt to integrate care and education. The integration of the two courses provided a three-year diploma, and later degree, offered by Colleges of Education around the country. An integrated three-year diploma brought care and education closer together and enhanced the professionalisation of early childhood in Aotearoa, New Zealand; this new qualification seen as the equivalent of a Diploma of Teaching for primary school teachers. The Labour government in power in Aotearoa, New Zealand at the time committed to increasing the number of qualified teachers in early childhood settings (Dalli & Meade, 2010). This newly integrated qualification provided graduate teachers with a qualification that was acceptable for employment as an early childhood teacher in both childcare and kindergarten.

Historically, early childhood qualifications in both countries divide between teacher education and vocational education. However, in both Australia and Aotearoa, New Zealand early childhood teacher education's dominant focus is on the preparation of educators to work in kindergartens and preschools. The contemporary early childhood qualifications policy context is rife with complexity. Australia provides vocational qualifications alongside university-based early childhood teacher education. The majority of educators who work with infants and toddlers in Australia though are typically qualified with a vocational qualification rather than a teaching degree. Early childhood teacher education began to be included in Colleges of Education from 1988 in Aotearoa, New Zealand (Dalli & Meade, 2010). The eventual shift of teacher education into higher education, through mergers and amalgamations with universities, has led to the inclusion of early childhood teacher education in higher education. Aotearoa, New Zealand's largest early childhood teacher education provider, is not a university but ECNZ [Early Childhood New Zealand], the inheritor of the NZACCC. I now shift to discuss the challenge of reform in teacher education.

1.7 The Challenge of Reform in Teacher Education

Scholars argue the early 21st century is a critical moment in teacher education due to neoliberal burdens (Zeichner, 2010) on education, alongside neoconservative and managerial inclinations (Apple, 2011) that are impacting on teacher education. By use of the term neoliberalism I have adopted Harvey's (2005) definition:

Neoliberalism is in the first instance a theory of political, economic practices that proposes that human well-being can be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework

characterized by strong private property rights, free markets, and free trade. The role of the state is to create and preserve the institutional framework appropriate to such practices.(Harvey, 2005, p. 11)

These neoliberal burdens include directives from universities to focus on outputs, impacts, standards, targets and student satisfaction surveys (Clarke & Phelan, 2015), impacting on teacher education, and the work of teacher educators through compliance enforced by managerialist practices in universities, focusing on productivity and economics (Clarke & Phelan, 2015). This assertion demonstrated through "narrowly-measured performance, 'research-active' definitions, and ERA controlled exercises of measurement and competition against each other" (Tuinamuana, 2016, p. 344).

I return to the theme of reform in Chapter Two but, in summary, the current policy context for teacher education in universities is best understood when examined through the raft of reform measures that higher education has experienced in Australia and Aotearoa, New Zealand over the last 15 years, particularly the introduction of performance-based research funding measures. Australia, introduced the Excellence in Research for Australia (ERA) strategy in 2010 while Aotearoa, New Zealand, introduced the Performance-Based Research Fund (PBRF) in 2003. Since the introduction of ERA and PBRF, there have been higher levels of pressure placed on teacher educators to intensify their research activity (Hill & Haigh, 2012). The introduction of ERA and PBRF, have led to greater separation of teaching and research, with teaching becoming devalued (Curtis & Matthewman, 2005). Together these reforms point to the larger picture of teacher education struggling to maintain its status and academic autonomy within higher education. The participants in this study struggled to advocate for research related to infant and toddler curriculum and pedagogy in universities. It is important to note that at the time of data collection there was only one academic journal internationally that focused primarily on infant toddler curriculum and pedagogy. The First Years Ngā Tau Tuatahi New Zealand Journal of Infant and Toddler Education is a journal edited out of the University of Auckland in Aotearoa, New Zealand.

Prior to these reforms teacher education was introduced into universities from the 1990s with amalgamations occurring between the Colleges of Advanced Education and universities in Australia mandated by government reforms (Aspland, 2006). These amalgamations led to universities conducting all teacher education in Australia, due to the formation of a unified national system of higher education (Aspland, 2006). In Aotearoa, New Zealand a similar process undertaken over a period of 16 years from

1991 resulted in mergers between Colleges of Education and Universities located nearby (May, 2010). Many of the mergers in teacher education in both countries were involuntary and due to government decisions (Harman, 2000). The relatively recent shift of teacher education into universities has contributed to the lack of a secure position in within higher education (McNamara, 1996).

Historically the work of and lives of teacher educators has been one of the least researched aspects of teacher education internationally (Murray, 2014; Troyer, 1986). As Cochran-Smith and Zeichner (2005) found there is a dearth of the literature on the work of teacher educators and the contexts in which they work. Present day higher education policy significantly influences research into teacher education and policy influences working environments in education (Nuttall, Murray, Seddon, & Mitchell, 2006). It is interesting to note that Fenech et al. (2009) point out that to date Australian government inquiries into initial teacher education have not as yet involved the early childhood sector. Murray and Kosnik (2011) question the lack of investigation into teacher educators in general:

That teacher education should be the subject of such sustained attention from policy makers and researchers, without accompanying consideration of teacher educators, as the profession with direct responsibility for designing, teaching, and evaluating the programmes, seems then not a little curious. (p. 243)

In response to the historical lack of research about teacher educators in the last decade the amount of research about teacher educators has increased (Ellis, Blake, McNicholl, & McNally, 2011; Ellis, McNicholl, Blake, & McNally, 2014; Gunn, Berg, Hill, & Haigh, 2015; Hökkä, Eteläpelto, & Rasku-Puttonen, 2012; Murray, 2014; Murray & Kosnik, 2011; Nuttall, Brennan, Zipin, Tuinamuana, & Cameron, 2013; Spencer, 2013; Tuinamuana, 2016). This thesis contributes to research in teacher education by investigating the work of a specific group of teacher educators not investigated previously. This literature is further developed in Chapter Two.

1.8 The Simultaneous Struggle

I argue that the need to understand the specialist area of infant and toddler, teacher education further intensifies when taking into consideration the low status of infants and toddlers in early childhood education and its translation into the higher education system. I recognise that infant and toddler teacher educators straddle both the early childhood field and the field of higher education. I argue that the experience of

straddling and working across two fields is not without its challenges. Murray (2007) likewise notes, [the] "tensions created for professional educators when they attempt to meet the imperatives of both higher education and their original professional fields" (p. 271). In this thesis, I characterise work across these two fields as a 'simultaneous struggle'. I now discuss the struggle inherent in each of these two aspects.

1.8.1 The struggle for professional recognition of the early childhood field

I recognise the lack of focus on infants and toddlers as a key aspect of the struggle for the early childhood field to obtain recognition as a profession. Here I use 'profession' to mean a "learned occupation requiring preparation and long-term commitment" (Imig & Imig, 2008, p. 890). Despite the progress with qualifications described above, the likelihood of early childhood Bachelor-qualified teachers working with infants and toddlers is typically low in Australian early childhood care and education settings. It is more common for early childhood teachers to prefer to work with children between the ages of three to five years (Ireland, 2007; Nolan & Rouse, 2013) resulting in infants and toddlers remaining peripheral to the field's ongoing attempts to professionalise.

Three levels of qualifications are recognised at present in Australian early childhood settings, whereas in Aotearoa, New Zealand the term 'qualified' refers solely to undergraduate degree-level qualified teachers (Goouch & Powell, 2012). The differences between the levels of qualifications in each country are important to acknowledge. If government policy does not mandate the employment of qualified teachers to work with infants and toddlers, then the student teachers that teacher educators engage with are far less likely to work with infants and toddlers (Ireland, 2004, 2006, 2007; Nolan & Rouse, 2013; Rouse, Morrissey, & Rahimi, 2012).

1.8.2 The struggle against deprofessionalisation

At the same time, teacher education internationally is struggling against the challenge of deprofessionalisation of teaching and teacher education. Teacher education is currently engaged in responding to the extensive influence of "neo-liberal, new managerial, and neo-conservative thinking" (Zeichner, 2010, p. 1544), which is, "guiding efforts to dismantle public education and teacher education in the U.S. and elsewhere and promoting the spread of neoliberal corporate capitalism" (Zeichner, 2010, p. 1544). Giroux and McLaren (1986) note that the, "deskilling of teachers appears to go hand-in-hand with the increasing adoption of management type

pedagogies" (pp. 219-220). This attempt to de-skill is a major finding of the thesis, which I focus on in Chapter Seven, where I describe the work of infant and toddler teacher, specialist teacher educators, as marginalised in the struggle for the professionalisation of the early childhood field, while also struggling against deprofessionalisation of teacher education in universities.

1.9 Research Questions

The research questions for this thesis were:

- 1. What does being an infant and toddler teacher educator involve?
- 2. What is the sociohistorical context for their work?
- 3. What is their work directed at?

1.10 Key Terms

Throughout this thesis, several key terms are used repeatedly. I now share the definitions of these terms chosen to be most appropriate.

Internationally the phrase commonly used to describe children under the age of three years is 'infants and toddlers'. In Australia, the *Early Years Learning Framework* [EYLF] (Commonwealth of Australia, 2009) refers to children as "babies, toddlers and three to five year olds, unless otherwise stated" (p. 6). In Aotearoa, New Zealand the early childhood curriculum document *Te Whāriki (Ministry of Education, 2017)* refers to overlapping age groups, such as "infant (birth to 18 months), toddlers (one to three years) and young children (two and a half years to school entry)" (p. 13).

By 'teacher educators' I refer to a group of people who are employed by universities to work with pre-service or initial teacher education students in their preparation to become a teacher. This type of worker within a university in Australia or Aotearoa, New Zealand is known as a Lecturer or Senior Lecturer, Associate Professor, or Professor (Ellis & McNicholl, 2015).

By 'early childhood educator', I refer to an adult who works with children under the age of five in an early childhood setting. The term 'educator' in the early childhood field encompasses the range of qualifications held around Australia.

By 'teacher', I refer to an adult who has a recognised degree-level early childhood teaching qualification.

By 'early childhood setting', I refer to extra-familial care and education as an encompassing, inclusive term. A specific setting may be in childcare, kindergarten, preschool or family day care.

1.11 Overview of the Research Design

I engaged in three different phases of data collection for this study. I first engaged in collecting information about infant and toddler curriculum and pedagogy on from university websites in Australia and Aotearoa, New Zealand. Secondly, I held individual interviews with six infant and toddler, teacher educators (three within each country). I firstly interviewed the Australian participants, in Australia, in June/July 2014, followed by the Aotearoa, New Zealand participants at the end of August 2014.

Two focus conversations followed the interviews; one focus conversation with participants in Aotearoa, New Zealand in early September where I shared some of the initial data from the Australian participants' individual interviews. Some of the data from the individual interviews were de-identified and shared in the opposite country's focus conversation. I returned to Australia and conducted the focus conversation with the Australian participants in mid-December 2014 sharing some data from Aotearoa, New Zealand participants' interviews. I was involved in both focus conversations as a participant. A more detailed outline of the research design and data analysis process is featured in Chapter Four.

1.12 Outline of the Thesis

In this chapter, I have introduced the aim of this thesis, which was to understand the nature of the work of infant and toddler specialists in university-based early childhood teacher education, and explained the significance of the thesis. I then introduced the aim and research questions that guided this thesis. I then set the context for infants and toddlers in the early childhood field and the struggle for professionalisation. I turned to the context for early childhood teacher education, and more broadly, the context for teacher education in Australia and Aotearoa, New Zealand introducing the struggle against deprofessionalisation, I concluded with a section introducing the examination of the work of teacher educators as a relatively recent area of research in teacher education.

In Chapter Two, I outline the substantive literature I have used as a resource to understand the positioning of infants and toddlers in the early childhood field, and in

early childhood teacher education. It is difficult to distinguish the relationship between professional recognition, content, and status within the infant and toddler field and its place in teacher education. I argue this literature illustrates a separation between care and education. I identify a gap in the literature, with very few studies focusing on infant and toddler curriculum and pedagogy in early childhood teacher education. With this gap in mind, I address the importance of specialist infant and toddler content in university-based early childhood teacher education to raise the professional status of infant and toddler curriculum and pedagogy.

In Chapter Three, I discuss the salience of the theory that I used as an analytic framework in the thesis: Cultural-Historical Activity Theory (CHAT). I explain how I employed the concepts of contradiction, rules, division of labour, and object of activity to describe and explain the nature of the work of infant and toddler specialists in university-based early childhood teacher education. Further, I address the concept of contradictions as a key underpinning concept that has shaped the findings of the study, due to historically accumulating tensions in the early childhood teacher education field. I examine the conceptual literature that explains each of the concepts used in CHAT and how these concepts apply to the context of the participants' work.

In Chapter Four, I outline the methodological position I have taken in this thesis within a qualitative research paradigm. I explain how my simultaneous insider/outsider status added complexity to the study as I address my reflexivity in this thesis. Qualitative research identified as the most suitable methodological approach for the thesis due to its ability to engage with complex social phenomenon. Finally, I describe the thesis's multiple modes of data collection design and describe the analytical process, which identified the key findings.

In Chapters Five, Six and Seven I provide claims, supported by empirical evidence, for my conclusions in response to the research questions.

In Chapter Five, I present four contradictions under the theme of 'ambivalence towards infants and toddlers' in the early childhood field. I argue these contradictions are rooted in historically sedimented attitudes towards infants and toddlers in the early childhood field. In the chapter, I present participants' quotes to illustrate the contradictions the participants experienced.

In Chapter Six, I portray the participants' struggle to represent infants and toddlers in early childhood teacher education as a key theme. I describe the participants' frustration between the rules that they value as a collective group about including infant and toddler specialist content in early childhood teacher education and the reality of their work. I argue that the participants attempt to address these contradictions by engaging in adaptation of key artefacts as a form of advocacy. I argue that, in doing so, the participants are attempting to develop a new, expanded, adapted, and high-quality infant and toddler focus into the artefacts they use in their work.

In Chapter Seven, I present and describe the participants' struggle to advocate for understandings about infants and toddlers within the university system. I describe the participants' experience of negotiating historical rules that they had brought from the early childhood field into the university system of activity. I argue that the participants constantly made strategic decisions about their hierarchy of motives in their work, as they are constantly working on multiple objects of activity.

These three findings chapters aim to contribute new understandings about the work of infant and toddler specialists in university-based early childhood teacher education in response to the research questions. The findings illustrate the deep sedimentation, contradictions, and struggle that the participants experienced across three systems of activity: the early childhood field; early childhood teacher education; and the university more broadly. I argue that the participants use advocacy as a 'meta-strategy' to negotiate the contradictions they experience across these three interpenetrating systems of activity.

I conclude the thesis in Chapter Eight by outlining the areas in which this thesis has contributed to both the early childhood field and to the field of teacher education. I argue that, for the participants in this thesis, advocacy is the unifying feature of their work. I argue, therefore that advocacy is a key concept within the nature of work as an infant and toddler specialist in university-based early childhood teacher education.

Chapter 2

Literature Review

2.1 Introduction

In the previous chapter, I shared a brief history of infants and toddlers in the early childhood field in Australia and Aotearoa, New Zealand. I then discussed early childhood teacher education and the historical development of teacher education more generally.

This chapter examines historical and contemporary literature related to infants and toddlers in the early childhood field and early childhood teacher education. Demonstrating that the relationship between the two is still an emerging field of research is the scarcity of literature connecting the fields of early childhood and teacher education—for example, there is only one scholarly journal dedicated solely to early childhood teacher education and one solely focused on infants and toddlers in relation to care and education. Teacher education was chosen to investigate in this thesis as there are fundamental contradictions between the development of understanding about the importance of the first three years of life for young children as well as policy direction and change to support this, alongside the lack of content, status and thus lack of professionalisation in early childhood teacher education and within the field of infant and toddler care and education.

Therefore, in order to examine the complex working lives of teacher educators who focus on specialising in infant and toddler curriculum and pedagogy in early childhood teacher education, this review considers the following areas of the literature. First, I address literature as it relates to infants and toddlers in the early childhood field, which addresses historical and ongoing issues such as the divide between care and education, and issues of status and professionalisation. Second, I consider the literature on the professionalisation of early childhood education, including research on the connection between teacher qualifications and quality of care and education in early childhood settings. I then look at early childhood teacher education literature relating to infant and toddler curriculum and pedagogy, in particular infant and toddler curriculum and pedagogy content in early childhood teacher education. Finally, I review the literature relating to the work of teacher educators in universities. Detailed reviews of the literature relating to theory and methodology are included separately in their respective chapters later in the thesis.

This review of salient literature highlights historical tensions in relation to the status and place of infants and toddlers in the early childhood field; the struggle for professionalisation and how these factors interact with the work of educators and teachers in early childhood settings.

These insights are critical, given the increase in the participation of children under the age of three in early childhood settings internationally over the past decade (Australian Bureau of Statistics, 2015; Education Counts, 2015; OECD, 2015; White & Dalli, 2016). Despite continuing increases in the number of young children in early childhood settings, multiple studies have found that the majority of care and education provided for infants and toddlers internationally does not meet quality guidelines of care for infants and toddlers (Carroll-Lind & Angus, 2011; Education Review Office, 2009; Helburn, 1995; Hyson & Tomlinson, 2014).

Several commissioned international reports (Dalli, White, et al., 2011; Mathers, Eisenstadt, Sylva, Soukakou, & Ereky-Stevens, 2014; Rayna, 2010; Stephen, Dunlop, & Trevarthen, 2003) argue that, quality early childhood, care and education for infants and toddlers is seen as having, "lasting repercussions for society and therefore, should be seen as an important investment for any country" (White & Barraclough, 2016, p. 31). With educator qualifications empirically related to key elements of quality, in early childhood settings (Burchinal, Howes, Cryer, & Clifford, 2002; Dalli, White, et al., 2011; Manlove, Vazquez, & Vernon-Feagans, 2008; Mathers et al., 2014). Therefore, it is timely to consider the literature relating to infants and toddlers and the work of teacher educators who focus on specialising in infant and toddler, curriculum and pedagogy in early childhood teacher education.

2.2 Methodology of the Literature Review

A critical review of relevant literature, with extensive literature searches focusing on literature related to infant and toddler curriculum and pedagogy, infant and toddler content and teacher education informed this thesis. This review was updated regularly between 2013 and 2017 as the thesis progressed.

To inform the research aim and questions for this thesis, I explored the sociohistorical context of infant and toddler curriculum and pedagogy in early childhood teacher education, as well as exploring the understanding what being an infant and toddler, specialist teacher educator involves. I reviewed literature related to the place of infants and toddlers, and their educators and teachers in the early childhood field, not only to

understand the sociohistorical context but to also recognise where the teacher educators' work was directed. The review included empirical literature primarily, together with conceptual literature, policy literature and some commentary literature.

I used the *ProQuest*, *Sage*, *JSTOR*, *Google Scholar*, and *ProQuest dissertations and theses* databases to find research journal articles, chapters, theses, and dissertations that focused on infants and toddlers and teacher education. The paired search terms used for initial database searches were:

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"'Infant and Toddler' 'Pre-Service'"
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As the majority of results from these searches were focused on infant-mother attachment, intervention and training, professional development or professional inservice learning after training, the scope of the search was then broadened to investigate literature about the work of teacher educators and issues of professionalisation and deprofessionalisation. The literature I initially explored about early childhood education supported the aim and research questions for this thesis. However, as the findings began to focus on teacher education more generally, I followed an additional line of inquiry about teacher education. I then investigated a wider range of literature related to the world of teacher educators, to gain a clearer understanding of the working lives of teacher educators in a broader system of (university) activity. I focused on teacher education literature that connected to issues of deprofessionalisation, the working lives of teacher educators, and an understanding of the work activity of teacher educators.

The following paired search terms were used in the above databases during the same time period:

[&]quot;Infant and toddler' 'initial teacher education"

[&]quot;'Infant and toddler' 'teacher qualifications'"

[&]quot;Infant and toddler' 'educator qualifications'"

[&]quot;'Infant and toddler' 'caregiver training'"

[&]quot;'Infant and toddler' 'educator training'"

[&]quot;'Infant and toddler' 'teacher training'"

[&]quot;Teacher educator' 'work'"

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"Teacher educator' 'profession'"
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From this point, the majority of the literature used in this thesis was found using citation (i.e. ancestry) searching. Reading through the reference lists of relevant literature led me to identify a further range of literature that was highly relevant to this thesis.

Journal articles, chapters, and books were evaluated for peer review, as a mechanism for applying quality standards to empirical literature to determine what would be included or excluded for this thesis— I found that commonly the literature was peer reviewed.

Literature was predominantly focused on Australia and Aotearoa, New Zealand, as these two countries are the focus of the study. In searching for relevant literature for this thesis Nordic-based literature was not frequently found in English. Therefore, no Nordic-focused literature was referenced.

The main themes in this thesis address issues repeatedly identified in the literature, including the status of the early childhood field, the struggle for professionalisation in the early childhood field, infant and toddler curriculum and pedagogy in early childhood teacher education, and the work of teacher educators in universities. These issues were initially identified through keywords provided in empirical journal articles, and then through critical review of the main ideas of each piece of literature.

The next section of this chapter addresses the status of the early childhood field as a key theme in the early childhood literature.

2.3 The Status of the Early Childhood Field

Moloney (2010) describes the early childhood field as being a, "low status, poorly paid sector, predominantly characterised by women with limited training" (p. 168), connecting issues of status to the challenge of professionalisation for infant and toddler educators (Dalli, 2008). The low status of the early childhood field is often associated

[&]quot;'Teacher educator' 'deprofessionalisation'"

[&]quot;'Teacher educator' 'deprofessionalisation'"

[&]quot;Teacher educator' 'professional'"

[&]quot;Teacher educator' 'lives'"

with a feminist paradigm and its connections to the unpaid care work that women have historically engaged in in homes (Ailwood, 2007; Goldstein, 1998).

Care is a term not often analysed in education, which has led many people to view early childhood settings as a safe place for children to be while their parents are working, rather than as a setting for a critical stage of early childhood education. These views reduce child care to a 'function' of parental employability and thus labour market participation (Sevenhuijsen & Williams, 2003). Moloney's (2010) study of Irish early childhood educators reinforces this by highlighting the association between low wages and low status. In Moloney's study, educators reflected that, "the government isn't willing to deal with the salary issue. Basically we're not important enough, and parents want cheap childcare" (p. 182). I revisit this issue of low status of early childhood educators in relation to government policy later in this chapter.

A general lack of respect from teachers in the wider education field accompanies the challenge of the perceived low status of the early childhood field within wider society. Kane's (2008) research study undertaken in Aotearoa, New Zealand reported recurring testimonies to this effect from early childhood teachers, senior teachers, and preservice teachers. This study reflected that early childhood teachers are deemed by other teachers in the education sector as being, "lowest on the educational ladder of status and respect" (p. 45). One of the participants interviewed in Kane's (2008) study stated:

I came to gain a firsthand insight into the way Early Childhood Teachers are viewed, even by our colleagues, primary teachers. It is not just mainstream society that sees ECE [early childhood education] as "babysitters' it is high school/primary school teachers and other people in education. I couldn't count the number of times people have gasped, absolutely shocked when I said I have a degree in Early Childhood education. Often people even come out and questioned "you can do a degree in that! (ECQ 13) (Kane, 2008, p. 45).

The lack of awareness from primary teachers of qualified teachers in early childhood education in Aotearoa, New Zealand (Kane, 2008) illustrates a broader problem. Society perceives early childhood teachers as having a more lowly status than other teachers do in the education system.

At this point, I have discussed issues in the status of early childhood generally. However, this thesis focuses on educators and teachers who work with and for infants and toddlers in early childhood settings. I now turn to the situation for infants and toddlers in early childhood settings, addressing issues of status for educators and teachers who work with infants and toddlers.

2.3.1 The status of infants and toddlers within the early childhood field

Infants and toddlers are still primarily seen by society as immature and incomplete human beings, whose physical needs can be met in simple ways (Moss, 2010). When kindergarten and preschool teachers are compared with educators and teachers who work with infants and toddlers, a large gap in workforce characteristics becomes apparent, revealing a divide between 'care' and 'education'.

Educators working with infants and toddlers are often younger and poorly paid with a relatively low-level qualification. Often adults who work with our youngest children are paid the least in education settings (Moss, 2010). This lowly status is also associated with the discourse and terms used to describe the work of educators. Rockel (2009), points out that the most commonly-used descriptor of those who work with infants and toddlers is the term 'caregiver'. When deconstructing the discourse of caregiving, its connotation provides a rather patronising message about giving care (Rockel, 2009). Despite the slowly increasing number of qualified teachers who work with infants and toddlers in the early childhood field internationally, there is often little acknowledgement of the work of infant and toddler teachers in early childhood teacher education (Abbott, 1997).

The concept of a 'teacher' for infants is often ridiculed and associated with low status (Rockel, 2010). Powell and Goouch (2016) note that, the issue of who cares for infants and toddlers has been an "emotive topic that has challenged philanthropists, parents, policymakers, practitioners and researchers for decades" (p. 93). Recchia et al. (2015), highlight the significance of employing degree-qualified teachers to work with infants and toddlers in the US. They argue this is due to the complex nature of infant and toddler curriculum and pedagogy in relation to attachment, relationships, observation, and individualised care moments. This type of work demands a deep understanding of infant and toddler curriculum and pedagogy to achieve optimum outcomes for very young children

Infant and toddler teacher status is not aided by the historically erroneous belief held by society that the younger the child, the easier, and less-sophisticated, it is to care for and educate (Stonehouse, 1989). Furthermore, many educators who are employed to work with infants and toddlers are typically young, with low-levels of qualifications, and thus unprepared to handle the requirements of infants and toddlers (Sims, Hutchins, & Dimovich, 2002).

Goouch and Powell's (2012), 'Baby Room' research study echoes this claim. This study shared the perspectives of (predominantly female) educators who worked with infants in the UK. These educators described themselves as, "being unimportant, invisible", and in one notable example, "the lowest of the low" (p. 82). The experience of educators positioning themselves as being low status in the early childhood field was echoed by Fleet and Farrell (2014) in Australia, who describes a, "tendency for both this workforce and the children in their care to be marginalised or belittled" (p. 82).

In the process of examining the reason behind the lowly positioning of care work, Chesters and Baxter (2011) explain, "One of the reasons that care work is so female dominated is that care work is more consistent with gender stereotypes about appropriate labour for women compared to men" (p. 56). However, Clark and Baylis (2012), provide a different viewpoint. They propose that the "undervaluing of those who work with this age group is a historical remnant of the undervaluing of babies themselves" (p. 231). This view is reinforced by Lally (2005), who proposes that, "differences in care stem from differences in the way that societies define the basic rights of their youngest citizens" (2005, p. 43).

Infant and toddler educators, who work in early childhood settings, are more likely to have minimal levels of education compared to those who work in kindergartens or preschools (Goouch & Powell, 2012, 2013; Moss, 2010; Sims et al., 2002). However, the common practice of lower qualifications for infant and toddler educators is no longer justifiable due to widespread knowledge and recognition of the critical significance of children's experiences in their first three years of life (Dalli, White, et al., 2011; Fox & Rutter, 2010; National Scientific Council on the Developing Child, 2007; Schore, 2005; Shonkoff & Phillips, 2000; Shore, 1997).

The work that adults engage in with young children, and in particular infants and toddlers, is often viewed as being lower status than work with older children in early childhood, primarily because this work involves a lot of physical care moments and routines, such as feeding, and nappy changing (Elfer & Dearnley, 2007). A longstanding and fundamental challenge in the early childhood field is the view of a division between care and education. The experience of the participants in this thesis was consistent with this literature.

2.3.2 The divide between care and education

The divide between care and education in the early childhood field is an historical and ongoing issue (Brennan, 1998; Brennan & O'Donnell, 1986; Elliott, 2006, 2007) sustained internationally in the contemporary early childhood field (Productivity Commission, 2014, 2015a, 2015b; Sims, 2014b). In the context for this thesis, this divide has been maintained more prominently in Australia in recent years due to qualifications-based hierarchies (Gibson, Cumming, & Zollo, 2017) that set lower levels of qualifications requirements for educators in early childhood settings (Productivity Commission, 2015a, 2015b), when compared with Aotearoa, New Zealand (Carroll-Lind & Angus, 2011; May, 2009).

The draft Productivity Commission report released in Australia in 2014 (Productivity Commission, 2014) received considerable backlash from the early childhood community (Degotardi & Cheeseman, 2014; Sims, 2014a) regarding the importance of having highly qualified educators, working with infants and toddlers in early childhood settings, in order to ensure the best learning and development outcomes through high quality infant and toddler programs. The report's view that, "evidence that specific levels of qualifications improve the learning and development outcomes for children under three years of age is absent and evidence of positive impacts of qualifications, by themselves, is inconclusive" (Productivity Commission, 2014, p. 264). This dominant societal view reflected by the Productivity Commission in Australia maintains the widespread view of society towards educators who work in early childhood settings as 'babysitters' (Beck, 2013). In doing so, this dominant view upholds the marginalisation of educators who work with infants and toddlers in the early childhood field in Australia. White et al. (2016) argues that:

The resulting paradox sets the scene for an Australasian policy context that risks trivializing birth-to-3 pedagogy as a specialist field, foregrounding a generic early year's age focus, alongside curricula that call upon sophisticated interpretative and integrated practice models that are 'woven' within the wider age context for ECE. (p. 297)

The current policy context in Australia and Aotearoa, New Zealand of weaving curriculum and pedagogy in a broad birth to five context (Rockel, 2013; Sumsion et al., 2009), continues to trivialise and silence the place of infants and toddlers in the early childhood field, as addressed later in this chapter. This has resulted in a dominance of a focus on education, specifically; children aged three to five years in the early childhood field, rather than addressing the inseparability of care and

education for younger children. Sims (2014b) cautions the early childhood field of lowering the status of care in the attempt to professionalise the early childhood workforce through the focus of education. As Bussey and Hill (2016) note, "although care and education are seen to be integrally related, education often subsumes care" (p. 128).

Dahlberg and Moss (2005) point out that there has been increasing discourse in early childhood about this inseparability of 'care' and 'education'. Moss (2006) explicates the fine distinctions between care and learning through the notion of the pedagogue:

For the pedagogue learning, care and upbringing (a typically pedagogical term) are indivisible activities; these are not distinct fields that must somehow be joined up, but interconnected facets of life that cannot be envisaged separately. (p.32)

Dahlberg and Moss (2005) suggest that, rather than dividing care and education in the early childhood field, a relationship be constructed between the two by exploring the concept of pedagogy in early childhood. For Dahlberg and Moss (2005) pedagogy encompasses both learning and caring in early childhood settings within a broad concern for all aspects of children's lives. Rockel (2009) adopts the notion of pedagogy while advocating for a 'pedagogy of care', for infant and toddler educators and teachers.

Nyland and Rockel's (2007) Australasian perspective on the divide between care and education is that this issue has had most impact on infants and toddlers in early childhood settings. They argue this has occurred due to a weaker development of infant and toddler philosophy, curriculum, and pedagogy (Nyland & Rockel, 2007).

Positive pedagogical innovations for infants and toddlers in the early childhood field have not previously been a part of policy and practice in early childhood settings. Historically, infant and toddler care and education have typically been under the umbrella of social welfare agencies in governments around the world. This political context has been guided by the dominant societal view that educators who work with infants and toddlers are mother-figures who are warm, sensitive, and loving (Fein, 1994; Stonehouse, 1989).

The historical divide between care and education, which has characterised the early childhood field (Elliott, 2006; Stonehouse, 1989), is still maintained today (Clark & Baylis, 2012; Sims, 2014b). In Australia, Cheeseman and Torr (2009) describe the care and education divide in the following terms:

Bifurcation between the provision of what is seen as "education" for three to five year old children, and "care" for infants and toddlers and older children whose mothers are in paid employment, remains strong in many parts of the country, and is manifested in separate funding arrangements and differing government portfolio responsibilities for different services. (p. 66)

In undertaking this thesis, I was interested in understanding the participants' perspectives on whether this 'bifurcation' persists in Australia and Aotearoa, New Zealand.

International recognition of the historical separation between care and education, in the early childhood field, is evidenced through a raft of policy contexts and government portfolio responsibilities. Further it is manifested historically, through the development over time of role definitions in early contemporary early childhood practice, through the use of names such as 'minder', 'worker' and 'teacher' (Cooper & Royal Tangaere, 1994) in Aotearoa, New Zealand and 'educator' and 'teacher' in Australia. Wangmann (1995) recognises the care and education dichotomy in the Australian early childhood field as being an, "historical product of the actual sources of funding for the different service types from which general community perceptions about their purposes have evolved" (p. 48). Investigating the policy context of the status of infants and toddlers in early childhood settings further reveals the historical and contemporary divide between care and education.

2.3.3 Early childhood policy

In Australia, a strong Federal government policy focus on childcare as a means to support families to return to the workforce has meant that early childhood policy decisions have often not focused on young children or educators themselves (Nyland & Rockel, 2007). Cooke and Lawton (2008) reflect the ironic state of affairs within the international policy push for mothers to return to work. This has resulted in a "situation where poor working women are paying other poor working women to look after their children" (Cooke & Lawton, 2008, p. 10). In a recent Australian study investigating the early childhood workforce (Irvine, Thorpe, McDonald, Lunn, & Sumsion, 2016), researchers were surprised to discover that many educators stated they could only continue to work in the early childhood field due to the financial support their partner or family provided for them (Irvine et al., 2016).

Nutbrown and Page (2008), based in the UK, challenge the lack of policy engagement internationally in relation to infants and toddlers in early childhood settings:

Politicians can no longer be accused of behaving as if, in education terms at least, life begins at five years of age. Babies and toddlers are now firmly fixed in the education and care agenda of government in the UK and other countries around the world and issues relating to the quality of provision made for them are central to policy. (2008, p. 8)

However, the lack of engagement from politicians in relation to early childhood remains a feature of the contemporary policy context in Australia and early childhood education continues to be seen as a low value portfolio for the federal government (Sumsion, (2017).

As discussed in the previous chapter, historically childcare was linked to families who needed welfare assistance in Australia and Aotearoa, New Zealand (Brennan, 1998; Elliott, 2006). In comparison, kindergartens and preschools were seen as being an educational learning opportunity for the middle class (Dalli & Meade, 2010). In recent years, policy changes in Australia have resulted in a shift to childcare moving away from a welfare focus to a labour focus in a bid to get more mothers back to work. (Elliott, 2007). As recently revisited in Australia in 2017 with the new *Jobs for Families* Child Care Package, which was based on key recommendations after the launch of the Productivity Commission Inquiry of Childcare and Early Childhood Learning (Productivity Commission, 2015a, 2015b). However, Elliott (2007) acknowledges that "until 'care' and 'education' dimensions are integrated both conceptually, and practically the care and education staffing distinctions" (Elliott, 2007, p. 207) will continue to reinforce this divide and contribute to the ongoing struggle for professionalisation in the early childhood field.

2.4 The Struggle for Professionalisation of the Early Childhood Field

Educators and teachers who work with infants and toddlers in early childhood settings struggle for professional recognition of their roles in the early childhood field. Researchers in the 1990s in Aotearoa, New Zealand, were arguing in that early childhood settings that cater for infants and toddlers have been seen as the 'Cinderella' of the early childhood field (Dalli, 1993). The struggle to professionalise the infant and toddler workforce in the early childhood field has been upheld by mainstream perceptions of status (Rockel, 2009). As educators and teachers that work with preschool children have dominated the focus of government policy in regards to funding and higher levels of qualifications. In the previous chapter, the term 'profession' was described to mean a "learned occupation requiring preparation and

long-term commitment" (Imig & Imig, 2008, p. 890). By professionalisation, I refer to the systemic development of a profession, in the case of this thesis, early childhood teachers (Gibson et al., 2017). Processes in which the early childhood field has engaged in in order to work towards professionalisation have been teacher education qualification requirements, equitable pay and working conditions to other teachers in the early childhood field, and professional learning and development (Gibson et al., 2017). As illustrated by the large-scale professionalisation strategies implemented in the early childhood field in Aotearoa, New Zealand from the mid-1980s (Dalli & Meade, 2010; May, 2007; Smith & May, 2006) as addressed in the previous chapter.

The undervaluing of infant and toddler educators is demonstrated internationally by infant and toddler educators having the lowest qualifications, pay, and the highest turnover rate of all educators in the early childhood field (Allen & Kelly, 2015; Austin, Whitebook, & Amanta, 2015; Chesters & Baxter, 2011). A recent study in Australia found that the lack of professional recognition and status were cited as contributing factors for educators who were leaving the early childhood field (Irvine et al., 2016). Throughout this thesis, it became evident that the discussion recurrently addressed the challenges of status and professionalisation for the infant and toddler workforce as these issues dominated discussions in interviews, focus conversations, and inclusions in the reviewed literature. Internationally, continually underfunded and under resourced infant and toddler care and education often have the least qualified staff members working with the youngest children (Dalli & Rockel, 2012; Goouch & Powell, 2012, 2013; Sims et al., 2002).

Lack of professional recognition reflects but extends beyond enduring perceptions within the community that teaching young children is, "women's work", grounded in supposedly innate caring capacities rather than professional knowledge and expertise. Disappointingly, the pervasive perception that ECEC teachers, especially in long day care, are not, "real", teachers is also evident in many educational spheres. (Sumsion, 2007, p. 314)

The complex issues of professional recognition for early childhood teachers identified by Sumsion (2007) can be traced back to childcare being initially considered as charity for children of the poor. In Australia, day nurseries, which predominantly catered for infants and toddlers, provided support for this view. Day nurseries were established in the early 1900s by philanthropists in order to meet the needs of single parents who needed to work (Brennan, 1998). Differences in qualifications and training for

childcare versus kindergarten were demonstrated through the higher professional status accorded to kindergarten (preschool) teachers (Brennan, 1998).

It is important to note how the preference for qualified teachers working in early childhood plays into the professionalisation of the early childhood workforce. The participants in this research play a critical role in the link between qualifications and professionalisation due to their role as teacher educators in universities, who work with pre-service teachers, who will go on to be professionals in the early childhood field. Rockel (2009) considers that, by embracing an educational model since the mid-1980s, Aotearoa, New Zealand has moved towards greater professionalisation of care in early childhood. This means early childhood professionals who work with infants and toddlers, are better placed to articulate a clear pedagogy of care as 'teachers' rather than 'childcare workers' or 'caregivers' (Rockel, 2009). This is acknowledged by the wider international early childhood community, which commends Aotearoa, New Zealand as, "the first country in the world to integrate responsibility for the whole range of early childhood education and care services within the education system" (Moss, 2000, p. 36). The development of this integration emerged from contentious debates in the early childhood field in the 1980s and 1990s about the level and type of qualifications needed in early childhood settings in Aotearoa, New Zealand (Dalli & Meade, 2010; May, 2007). Research studies (Smith et al., 1996) persuasively explained the importance of high levels of qualifications in order to support highquality experiences for children (May, 2009). The early childhood community in Aotearoa, New Zealand now proud of its focus on education (Carroll-Lind & Angus, 2011). However, Dalli (2017) recently notes there to be a lack of political focus in Aotearoa, New Zealand in addressing the, "erosion of the early childhood professionalisation agenda, when professionalisation is seen as a systemic issue" (Dalli, 2017, p. 119).

Osgood's research (2004; 2010) in the United Kingdom identifies that it is crucial to bring attention to the issue of professionalisation of the early childhood, care and education labour force if the early childhood field is to understand more about the ways in which political reforms are conceptualised and instigated (Osgood 2004; 2010). The issue of professionalisation of the early childhood workforce is a widespread international issue, as indicated through studies in the UK and US (Branscomb & Ethridge, 2010; Early & Winton, 2001; Moss, 2006; Taggart, 2011).

The struggle for infant and toddler teachers to be recognised as legitimate members of the education profession is intimately related to the perceived role of women within society (Cooper & Royal Tangaere, 1994). The care and education of infants and toddlers in early childhood settings is the stereotypical epitome of 'women's work' (Moloney, 2010; Sevenhuijsen & Williams, 2003). This is reflected in Australian government policy, which does not recognise educators and teachers who work with infants and toddlers in early childhood settings, as providers of educational programs (Productivity Commission, 2011). Early childhood settings that provide care and education for infants and toddlers are often seen as custodial and have (and often still have) been associated with health and welfare agencies instead of the educational agencies with which preschool and kindergarten programs are often with (Dalli & Meade, 2010; Elliott, 2006).

The teacher is the centre of an infant or toddler's experience in an early childhood setting; "we do not need hundreds of studies to know that a positive relationship between a child and teacher is essential" (Zigler & Lang, 1991, pp. 65-66). However, most of society has been unsuccessful in recognising the critical significance of the role of the infant and toddler teacher. The burden of being a responsive infant and toddler teacher produces high expectations for teachers (Leavitt, 1994).

The narrow view of the definition of a 'teacher' being an adult who only works with classes of children in school settings provides a challenging situation for early childhood professionals in Australia (Woodrow, 2007). This exclusion illustrates a key aspect of the struggle for professionalisation in early childhood. Additional research studies conducted in Australia further support this notion:

The most recent census figures show that only 7% of staff working in LDC [Long day care] hold University degree early childhood teaching qualifications. We contend that despite the breadth and depth of enterprise related to the nurture and challenging of young children (Fleet, 2002) early childhood teachers are marginalised professionals. (Fenech et al., 2009, p. 202).

Despite more positive policy settings, the marginalisation of early childhood teachers who work with infants and toddlers is also evident in Aotearoa, New Zealand. In her inaugural professorial lecture, Dalli (2012) highlighted that the 2008, "pre-election promise of a teacher: child ratio of 1:4 (vs 1:5) in settings for under-two year olds has not yet been delivered" (p. 4). She articulates that these changes constitute a:

Progressive attack on the specialist nature of infant and toddler teaching." In particular, the erosion of qualification levels, especially for teachers of the very young, reveals another aspect of popular ideology at work: you don't need to be qualified to do the job. Nice ladies who love children will do." Dalli (2012, p. 4)

My own small-scale research project interviewing infant and toddler teachers in Aotearoa, New Zealand (Bussey, 2012) found similar feedback:

[Teacher 4 illustrated] often people see teachers as a babysitting service and her colleague, Teacher 4 also mentioned the notion of babysitting and states how important it is for qualified teachers to be part a stable team for the children: some adults ... they thought especially working with infants and toddlers is a babysitting thing (p. 42, italics in original).

All of the participating infant and toddler teachers in my small-scale research project valued having degree-qualified teachers working with infants and toddlers (Bussey, 2012). Rockel (2010) advocates for the importance of having infant and toddler teachers who view themselves as professionals with particularly high personal and professional standards. This stance is supported by Aotearoa, New Zealand's early childhood curriculum document *Te Whāriki*, which states, "Providing for the care and education of infants requires specialised knowledge and practice" (Ministry of Education, 2017, p. 14), recognising the important role that infant and toddler educators and teachers play in children's lives.

Infant and toddler advocates (Dalli, 2012; Rockel, 2010) continue to argue for professional status for infant and toddler teachers in the early childhood field in Aotearoa, New Zealand. Their extensive body of work (Dalli, 1993, 2002, 2006, 2008, 2017; Dalli & Rockel, 2012; Dalli & White, 2015; Dalli, White, et al., 2011; Nyland & Rockel, 2007; Rockel, 2009, 2010, 2012, 2013) is testament to the ongoing historical and contemporary struggle for professionalisation in early childhood.

The literature amply demonstrates the pervasiveness and impact of the dominant view that highly qualified educators are not necessary for work with infants and toddlers that a, "nice lady will do". (Beck, 2013; Chesters & Baxter, 2011; Fein, 1994; Kane, 2008; Lally, 2005; Moss, 2010; Rockel, 2009; Sevenhuijsen & Williams, 2003). This, alongside the problematic policy context, continues to maintain tensions that undermine the professional role of infant and toddler, educators and teachers. This dominant view lowers morale in the early childhood field and turns away potential high quality recruits from the early childhood workforce (Dalli, 2012). Goldstein (1998) claims the common perception that caring in education is simply gentle smiles

and warm hugs "obscures the complexity and the intellectual challenge of work with young children" and is "detrimental to the field" (p. 244). The high levels of responsibility as an infant and toddler educator, along with the low levels of wages and low status, often lead to low levels of morale and high levels of stress for infant and toddler educators (Sims et al., 2002).

In Australia, the level of funding provided for early childhood settings that employ a kindergarten or preschool teacher is markedly different from the level of qualification expected for educators who work with children under the age of three (Tayler, 2011). I argue that government policy decisions have maintained these lower levels of status and reinforced the struggle to professionalise the early childhood workforce, particularly for educators who work with infants and toddlers (Productivity Commission, 2014, 2015a, 2015b). Lally (1995) emphasises that the issue of caring for infants and toddlers has often been viewed as "care that anyone can do, that until recently was done for no pay as part of daily family life, and that needs no specific training" (p. 59). I now turn to the way in which this viewpoint plays out as less rigorous qualifications expectations for educators who work with infants and toddlers (Tietze & Cryer, 1999).

2.4.1 The undercurrent of professionalisation – the challenge of qualifications

Higher levels of teacher education and qualifications are commonly associated with a higher overall quality of care and education in early childhood settings. Research evidence established that teachers with higher levels of education provide more developmentally appropriate environments and programs, show more behaviours that are positive with infants and toddlers, and are more responsive to children's needs (Arnett, 1989; Pianta et al., 2005; Shonkoff & Phillips, 2000; Smith et al., 1996; Tietze & Cryer, 1999). This evidence directly counters the Productivity Commission's argument (Productivity Commission, 2014, 2015a, 2015b) that there is no link between qualifications and outcomes. The strong relation between the education and qualifications of infant and toddler teachers and the quality of early childhood settings (Kagan & Neuman, 1996) provides an argument for qualified teachers working with infants and toddlers (Ireland, 2004, 2006, 2007; Rouse et al., 2012). Teachers who have a Bachelors (or higher) degree in early childhood and child development have been shown to be more effective in their work with young children than teachers who have minimal or certificate level qualifications (Bowman, Donovan, & Burns, 2000;

Smith et al., 1996; Whitebook, Howes, & Phillips, 1989). The National Childcare Staffing Study (NCCSS) in the US concluded that high levels of qualifications related to infants and toddlers provided teachers with the knowledge required to understand and respond to the different developmental needs of this age group (Kagan & Neuman, 1996).

The argument that higher levels of qualifications are more desirable for educators working with infants and toddlers in early childhood settings, is supported by empirical literature from the United States, Australia, and Aotearoa, New Zealand (Bowman et al., 2000; Ireland, 2006; Kagan & Neuman, 1996; Marshall, Dennehy, Starr, & Robeson, 2005; Shonkoff & Phillips, 2000; Smith et al., 1996; Tietze & Cryer, 1999; Whitebook et al., 1989). Adults with lower qualifications are typically employed in infant and toddler settings, and where the adult/child ratio is high (Ireland, 2006). The conditions that are therefore critical to sustaining high-quality child care for very young children are appropriate teacher education, specialised infant and toddler qualifications, and a positive attitude about work with infants and toddlers (Shonkoff & Phillips, 2000). However the issue of qualifications for work with this age group continues to be problematic, as infant and toddler teachers are less likely to hold degrees related to early childhood than their colleagues who work with preschool aged children (Marshall et al., 2005).

This sits in contrast with a unifying theme across this body of literature; that in order to have high quality infant and toddler care and education, teachers need to be:

Qualified adults who are knowledgeable about contemporary theories of development and learning including an awareness of the impact of their behaviours on brain development and ... with specialist knowledge of infants and toddlers and with access to ongoing professional development from providers who are also specialists in the field. (Dalli, White, et al., 2011, p. 148)

The specialist knowledge recommended for infant and toddler teachers to succeed in their work relates to infant and toddler *curriculum and pedagogy*. Rockel (2013) advocates for the professionalisation of the labour workforce for infants and toddlers through suitable qualifications inclusive of infant and toddler curriculum and pedagogy content. She reiterates that the increase in the participation of children under the age of two years in care and education settings indicates the necessity for leadership within the specialist nature of infant and toddler teacher education (Rockel, 2013).

As mentioned in the previous chapter, the reversal of a commitment to a 100% teacher qualified workforce in Aotearoa, New Zealand was a source of contention amongst the early childhood field and academics (Smith, 2015). The conservative National government's reduction of support for high quality early childhood education in the 2010 budget announcement decreased the amount of funding for early childhood settings that employed only qualified staff. This was a particular blow for teachers who work with infants and toddlers. The Minister of Education at the time stated that there was no research demonstrating that early childhood settings where every teacher is qualified to provide higher quality education and care than early childhood settings with 80% of the teachers qualified (Smith, 2015). This was despite empirical research conducted in Aotearoa, New Zealand early childhood settings in 2011 that compared levels of quality between early childhood settings with staff compositions of 50 to 79% versus 80 to 100% qualified teachers (Meade, Robinson, Smorti, Stuart, & Williamson, 2012). This study found that infants and toddlers in early childhood settings fully staffed by qualified teachers experienced care and education with higher levels of pedagogical knowledge, and more consistent and higher levels of care and education. This study drew attention to the importance of advocating for the necessity of qualified teachers working with infants and toddlers in early childhood settings (Meade et al., 2012).

The argument for qualified teachers to work with infants and toddlers in early childhood settings was also supported by an earlier study (Smith et al., 1996) undertaken across Aotearoa, New Zealand in 1993. This study sampled 100 early childhood settings that provided care and education for children under the age of two years. Smith and colleagues evaluated numerous aspects of quality for infants and toddlers in early childhood care and education settings. Most relevant to this thesis was moderate to strong connections found in Smith et al.'s (1996) study between levels of staff qualifications and measures of quality practice with infants and toddlers (White & Barraclough, 2016). The biggest impact on infants and toddlers was explained by the higher levels of positive interactions with infants and toddlers in this study that were directly associated with staff who held three-year early childhood qualifications (Smith et al., 1996). At the time this study provided, "evidential leverage to argue for qualified professionals in ECE for infants as well as older children" (White & Barraclough, 2016, p. 29).

The argument for highly qualified educators working with infants and toddlers echoes in Australia. Sims' (2014b) study exploring the perspectives of early childhood education professionals in relation to the care-education dichotomy in Australia reinforced the need for highly qualified educators. One respondent noted, "To work in the best interest of children, our highest qualified educators should be with the youngest children—where they can do the most teaching" (Sims, 2014b, p. 9). Brownlee, Berthelsen, and Segaran (2009) support this focus, remarking that effective training and education is especially critical for promoting quality care. Finding a direct relation between higher levels of qualifications and epistemological beliefs.

Before I shift to address the preparation of early childhood teachers through early childhood teacher education, I explain what commonly happens to early childhood teacher graduates in relation to work with infants and toddlers. I am aware that most early childhood teachers in Australia and Aotearoa, New Zealand do not intend to work with infants and toddlers (Gibson et al., 2017). This was one of the first issues discussed amongst the participants in this thesis. In later chapters, I describe how the participants saw this issue as inextricably linked with a lack of infant and toddler curriculum and pedagogy in early childhood teacher education. Here I discuss the literature related to this issue of salient content in early childhood teacher education.

2.5 Infant and Toddler Curriculum and Pedagogy in Early Childhood Teacher Education

From empirical research on the correlation between teacher characteristics and teacher behaviour (Bowman et al., 2000; Pianta et al., 2005; Smith et al., 1996) we know that early childhood teachers who are more nurturing and engaged with infants and toddlers are more likely to have engaged in g formal education. They are also are more likely to have completed qualifications related to infant and toddler curriculum and pedagogy (Howes, Whitebook, & Phillips, 1992). The increasing recognition of the importance of the first years (Schore, 2005; Shonkoff & Phillips, 2000; Shore, 1997) in early childhood, and the increasing complexity of the roles of early childhood teachers, indicate that qualified adults are essential for effective work with young children (Smith et al., 2000). Dalli, Rockel, Duhn, Craw, and Doyle (2011) argue that there is a need for leadership within the early childhood field and a clear articulation of the varied and complex knowledge foundations that inform the relationship-based pedagogy essential for working with infants and toddlers. With increasing numbers of

Infants and toddlers in early childhood settings in Australia and Aotearoa, New Zealand, and the average age at entry decreasing (Australian Bureau of Statistics, 2015; Dalli, White, et al., 2011; Education Counts, 2015; OECD, 2015; White & Dalli, 2016), a growing theme in the literature is the need for early childhood teacher education to include more infant and toddler curriculum and pedagogy content.

Literature from Australia and Aotearoa, New Zealand related to infant and toddler curriculum and pedagogy content in early childhood teacher education argues there is a contemporary struggle to include infant and toddler curriculum and pedagogy content in early childhood teacher education (Garvis & Lemon, 2015; Garvis, Lemon, Pendergast, & Yim, 2013; Garvis & Manning, 2015; Garvis & Pendergast, 2015a; Ireland, 2004, 2006, 2007; Nolan & Rouse, 2013; Rockel, 2013; Rouse et al., 2012). In Australia, infant and toddler curriculum and pedagogy have received meagre consideration in early childhood teacher education (Garvis & Lemon, 2015; Garvis et al., 2013; Garvis & Manning, 2015; Recchia & Shin, 2010). Generally, early childhood teacher education in Australia asserts that content covers a wide-range of ages (Sumsion et al., 2009), from birth to eight, but the focus is least on children in the first three years of life (Garvis et al., 2013; Recchia & Shin, 2010).

Given that, Australia now has a national focus for early childhood education from birth onwards for young children; likewise, pre-service teacher education should also have an agreed understanding of suitable knowledge and professional experience for children from birth onwards. (Garvis et al., 2013, pp. 33-34)

Limited infant and toddler curriculum and pedagogy in early childhood teacher education programs are also evident in Aotearoa, New Zealand. In 2011, the Office of the Commissioner for Children examined the effect of childcare in non-parental care and education on infants and toddlers. From this investigation, they produced an extensive report, *Through their lens: An inquiry into non-parental education and care of infants and toddlers* (Carroll-Lind & Angus, 2011). In this report, they interviewed parents, early childhood teachers, and early childhood teacher educators. Both early childhood teachers, and teacher educators, raised concerns about the lack of infant and toddler curriculum and pedagogy content, in early childhood teacher education programs. Some teacher educators interviewed had observed an increase in teacher education programs shifting to 'generalise' early childhood teacher education programs. The authors explained and summarised this apprehension:

If there is not a stand-alone paper with the words infants and toddlers in the course title, it is easy for the wording that includes infants in the course outline to be overlooked in effect. Many lecturers do not have the expertise or specialist knowledge in this area and therefore fall back on what they know, which is usually with older children. A lack of research with infant-teacher pedagogy is responsible too. (Carroll-Lind & Angus, 2011, p. 141)

The early childhood teachers interviewed for this report reinforced the importance of the development of individual units of study within early childhood teacher education that focus specifically on infant and toddler curriculum and pedagogy (Chazan-Cohen, Vallotton, Harewood, & Buell, 2017; King, Pierro, Li, Porterfield, & Rucker, 2016), all with the aim of increasing quality in infant and toddler care and education (Carroll-Lind & Angus, 2011).

Teachers who do not have specialised knowledge in infant and toddler curriculum and pedagogy are not in an ideal position to provide a program that meets the needs of infants and toddlers (Dalli, White, et al., 2011). Goldstein (2002) points out:

If we want to prepare teachers who will be able to draw upon a moral and intellectual relation view of caring to build a strong foundation for their professional practices and to take advantage of the pedagogical power in their work with students, we must design teacher education programs specifically focused towards those ends. (p. 114)

A consistent theme in this literature is that, in order to provide better care and education that focuses on the full spectrum of infant and toddler developmental and learning needs, teachers must be well educated. This includes being professional and skilled in their practice and having qualifications that are directly relevant to infants and toddlers (Carroll-Lind & Angus, 2011; Chazan-Cohen et al., 2017; King et al., 2016). I recognise *Through their lens: An inquiry into non-parental education and care of infants and toddlers* (Carroll-Lind & Angus, 2011) to be a key artefact contributing to assist the struggle for the professionalisation of the early childhood field, because of the way in which it builds an argument for qualifications amongst infant and toddler educators.

Mahmood's (2013) empirical study interviewed beginning early childhood teachers in Aotearoa, New Zealand about the realities of practice as new teachers. This study found that teachers who worked with infants and toddlers felt that their teacher education qualification had not sufficiently equipped them to work with children under the age of two. This finding is consistent with statements from teachers in several recent studies (Bussey, 2012; Garvis & Manning, 2015; Garvis & Pendergast, 2015a,

2015b). Data in Mahmood's study showed an ongoing lack of infant and toddler curriculum and pedagogy content in early childhood teacher education. However, I argue that Mahmood's suggestion that early childhood teacher education programs offer a consolidating course to prepare teachers to work with infants and toddlers is simplistic and needs further critique. One argument in the literature that counters Mahmood's suggestion is that early childhood teacher education related to infant and toddler curriculum and pedagogy is unable to be, "adequately addressed through standard, content-focused training" (Manning-Morton, 2006, p. 46). In other words, information about this specialised aspect of work in early childhood needs to appear in an environment that focuses on practice with infants and toddlers, as well as theory. Farber (1993) explains that the younger the child, the less able he or she is to express their needs, and therefore it is vital that teachers are prepared to be able to interpret the behaviour and needs of infants and toddlers. A consistent theme in this literature is that this work requires detailed knowledge and skills that necessitates teaching in early childhood teacher education in a specialised way.

In recent years several studies in Australia have called for a reconceptualisation of infant and toddler curriculum and pedagogy to demonstrate the specific needs, developmental, and learning for infants and toddlers (Davis, Torr, & Degotardi, 2015; Degotardi & Pearson, 2009; Harrison & Sumsion, 2014; Sumsion & Harrison, 2014). This reconceptualisation has been called for because the predicted quality of infant and toddler care and education relates to the teacher's level of specialised qualifications related to infant and toddler, care and education in early childhood settings (Chazan-Cohen et al., 2017; King et al., 2016; Smith et al., 1996). However, many infant and toddler teachers have little, if any, formal preparation for their role (Doherty, 2001; Goldstein, 2002; Sims et al., 2002). Furthermore, the lack of infant and toddler curriculum and pedagogy in pre-service qualifications for teachers in infant and toddler settings is often not addressed by extensive in-service professional learning and education (Doherty, 2001).

A recent study in Australia investigating infant and toddler curriculum and pedagogy content in early childhood teacher education confirms paucities in early childhood teacher education programs (Garvis et al., 2013). This study showed insufficiencies in quality, program content, and placement experiences related to infants and toddlers to aid the educational development of early childhood teachers. This points to a contradiction in early childhood teacher education programs that claim they address

teacher education for children aged birth to eight years, if the first three years of children's care and education is missed out (Garvis et al., 2013). This absence is echoed in the US, with Chu's (2016) study finding that the majority of US university-based early childhood teacher education programs focused only on children aged from three to eight years. Chu (2016) describes the amount of infant and toddler curriculum and pedagogy content in US early childhood teacher education programs as, "uneven and limited" (p. 272). Recognition that, infant and toddler teachers undertaking early childhood teacher education degrees in Australia or Aotearoa, New Zealand, receive the same qualifications as their colleagues who work with preschool-age children is important (Austin, Kipnis, Sakai, Whitebook, & Ryan, 2013; Austin, Whitebook, & Amanta, 2015; Austin, Whitebook, Kipnis, et al., 2015; Beck, 2013; Chu, 2016; Garvis et al., 2013). With teacher education degree programs dominated by content related to pre-school aged children, infant and toddler teachers are less prepared to work with this age group, than their preschool teacher colleagues.

Austin et al. (2015), in a review of infant and toddler curriculum and pedagogy content in early childhood teacher education in seven US states, acknowledge that:

Early childhood degree programs did not consistently focus coursework on all ages of children from birth to age 8. In contrast to the preschool years, there is uneven and more limited inclusion of infants and toddlers in the course content, as well as in field-based learning experiences. (pp. 3-4)

Despite the majority of early childhood teacher education programs internationally claiming to provide programs including content related to children aged from birth to eight years, it appears practices of fully addressing the younger end of this age group are generally uncommon. There are very few early childhood teacher education programs that directly include and address infant and toddler curriculum and pedagogy (Austin, Whitebook, & Amanta, 2015; Marshall et al., 2005; Rockel, 2013). This is an international absence, echoed in the US. Less than half of early childhood teacher education programs in the US have a specialised infant and toddler unit or opportunities for practicum with children under the age of three (Horm, Goble, & Branscomb, 2012; Norris, 2010; Recchia & Shin, 2010). Several reports published by the *Center for the Study of Child Care Employment, University of California* found limited infant and toddler curriculum and pedagogy content and practicum placements in higher degree programs (Austin et al., 2013; Austin, Whitebook, & Amanta, 2015; Austin, Whitebook, Kipnis, et al., 2015). Abbott (1997) argues for a variety of different models of teacher qualification opportunities that cover different age groups to aid in

raising the education level of educators and teachers who work with infants and toddlers, alongside increasing the focus on the professionalisation of infant and toddler educators (Abbott, 1997).

Many teacher education providers in Australia and Aotearoa, New Zealand, do not offer any units of study, coursework papers, or study modules specifically focused on infant and toddler curriculum and pedagogy. Angus and Carroll-Lind's (2011) study advocated for more of a focus on infant and toddler curriculum and pedagogy in initial teacher education, and suggested the option of an infant and toddler specialisation offering in postgraduate units. In Australia, there is a shortage of highly qualified early childhood teachers, who work with infants and toddlers. In a submission to the Productivity Commission about the early childhood workforce in Australia, Edith Cowan University (2011), located in the state of Western Australia, provided some suggestions to address this shortage. They suggested that the development of short graduate-level courses could provide infant and toddler teachers with the specific and comprehensive knowledge needed to understand their role. They argued that, through this qualification, teachers could gain a wide-ranging level of awareness and experience in understanding child development, particularly within the first three years of life. Another possibility was to offer a graduate certificate or diploma in infant and toddler care and education at a range of tertiary institutions within Australia and Aotearoa, New Zealand, with these graduate programs being available to both to local and distance students. Further possibilities suggested these programs could create short courses at the graduate level, to complement tertiary level early childhood teacher education that does not currently address this knowledge and related skills (Edith Cowan University, 2011).

While the idea of including further infant and toddler curriculum and pedagogy in teacher education programs is appropriate, given its current dearth in early childhood teacher education programs, I question the feasibility of postgraduate options as a solution. As mentioned earlier in the chapter, many infant and toddler educators and teachers are the lowest paid in early childhood settings (Allen & Kelly, 2015; Austin, Whitebook, & Amanta, 2015; Chesters & Baxter, 2011) and may struggle to be able to afford the cost of study for additional tertiary courses.

In addition (and related) to the issue of course content, there is also a shortage of teacher educators with specialised knowledge of infant and toddler programs. For example, Maxwell et al. (2006) argue there are limited university-based early

childhood teacher educators in the US who have worked with infants and toddlers in early childhood settings. This is an international issue with the majority of early childhood teacher educators having only worked with children three years of age and older, or who have previously obtained qualifications that focused only on children aged three years and older (Maxwell et al., 2006). Horm et al. (2013) note, "faculty who teach infant/toddler courses often lack specialized academic preparation and direct or recent experience working with this age group" (p. 102). They speculate, "perhaps the absence of faculty with these specialized credentials helps explain why many ECTE [early childhood teacher education] programs do not include substantial infant/toddler content?" (Horm et al., 2013, p. 102). Therefore, it appears that the specialised infant and toddler knowledge base is limited in early childhood teacher education programs as well as in the wider field. It is hardly surprising, therefore, that Austin, Whitebook, and Amanta (2015) report that most US early childhood, teacher educators consider themselves ill-prepared to teach infant and toddler curriculum and pedagogy in early childhood teacher education programs (Austin, Whitebook, & Amanta, 2015). In the US context, with the majority of early childhood, teacher educators having either very limited or no experience in working with infants and toddlers (Austin et al., 2013; Austin, Whitebook, Kipnis, et al., 2015). Therefore, infants and toddlers are "most likely to be disadvantaged, with fewer California early childhood, degree programs requiring the inclusion of the youngest children in the course content and field-based experiences compared to preschool age-children" (Austin, Whitebook, Kipnis, et al., 2015, p. 45).

In order to achieve a high-level of professional practice, together with a good level of understanding about infant and toddler, learning and development to provide high-quality care and education needed for infants and toddlers, theoretical knowledge of the importance of relationships, is required (Brownlee, Berthelsen, Irving, Boulton-Lewis, & McCrindle, 2000; Chu, 2016; Degotardi, 2010; Degotardi & Pearson, 2009; Goldstein, 1999; Manlove et al., 2008; Raikes, 1993; Recchia et al., 2015). Graduates from early childhood teacher education programs should be able to rely on their practice is informed by knowledge they gained in their qualifications (Brownlee et al., 2000). Therefore, early childhood teacher education must reflect current research and knowledge about infant and toddler learning and development (Elfer & Dearnley, 2007; Macfarlane, Noble, & Cartmel, 2004).

The type of early childhood teacher education that teachers complete making a difference to the consequent quality of care and education they provide for infants and toddlers in their care (Manlove et al., 2008). Teachers with higher levels of education who work with infants and toddlers may consider a wider range of determinants when they try to understand children's specific behaviour. Engaging in more complex thinking about children's development and behaviour may influence the teacher's behaviour with the children. Thus, teacher education can be considered as a structural variable that serves as an agent for some of the more dynamic process variables within quality infant and toddler care and education (Manlove et al., 2008).

Both Australia and Aotearoa, New Zealand have no established or formal professional guidelines specifically for infant and toddler, teacher accreditation. Other countries have had specialist infant and toddler qualifications for some time, such as California's Program for Infant Toddler Care (PITC), a California Department of Education training program. This qualification identifies infant and toddler specialist competencies that create the basis for the development, education, and assessment of infant and toddler teachers (Powell, 2007). Data in a recent doctoral study (Ord, 2010), focused on the experiences of newly qualified teachers in Aotearoa, New Zealand, conveying stories whereby a number of participants in the study noted the almost total absence of infant and toddler curriculum and pedagogy content in their early childhood teacher education (Ord, personal communication, June 2012).

The struggle for the inclusion of infant and toddler curriculum and pedagogy in early childhood teacher education takes a number of interrelated forms. First, there is the struggle around the recognition of work with infants and toddlers per se (Garvis et al., 2013; Sumsion, 2007). Second, there is a struggle to produce sufficient numbers of graduates who are committed to working in early childhood settings with children aged from birth to three years (Ireland, 2006; Nolan & Rouse, 2013). Allied with this there is the struggle to engage teacher educators who are committed to infants and toddlers (Carroll-Lind & Angus, 2011; Ireland, 2006; Norris, 2010), an issue central to this thesis. Finally, there is the challenge of including and maintaining specialised infant and toddler curriculum and pedagogy content in teacher education (Carroll-Lind & Angus, 2011; Garvis et al., 2013; Manning-Morton, 2006). These historically persistent themes of struggling in early childhood literature relating to the status of infants and toddlers and the status and professionalisation of educators who work with infants and toddlers (Dalli, 1993, 2010; May, 1991, 2007; Rockel, 2009, 2013).

A range of stakeholders raised concerns in early childhood literature supporting continued efforts to advocate for the inclusion of infant and toddler curriculum and pedagogy in early childhood teacher education programs. Graduates, beginning teachers, and academics have questioned the suitability of early childhood teacher education programs to deliver the content needed for teachers to work with children under the age of three years (Bussey, 2012; Carroll-Lind & Angus, 2011; Dalli, White, et al., 2011; Garvis et al., 2013; Goouch & Powell, 2012, 2013; May, 1991; Powell, 2007; Rockel, 2012, 2013).

There is evidence in the literature that the lack of infant and toddler curriculum and pedagogy content within early childhood teacher education is a widespread issue internationally (Branscomb & Ethridge, 2010; Brownlee et al., 2009; Buell, Hallam, Adams, & Wilson, 2000; Burchinal et al., 2002; Campbell & Milbourne, 2005; Garvis et al., 2013; Manning-Morton, 2006; Recchia & Shin, 2010). Goouch and Powell's (2012) study examined practice in infant rooms in the UK and explored the professional development that was provided to educators who worked specifically with infants and toddlers. One of the significant discoveries of this study was confirmation that educators who work with infants and toddlers are likely to have lower qualifications than educators working with three to five year olds (Goouch & Powell, 2012).

A recent study investigating infant and toddler curriculum and pedagogy content in Australian early childhood teacher education found:

Deficiencies in quality, courses and practicum experiences that support knowledge development to support the development of capabilities related to birth to three year old children. If the quality of early childhood programs is to improve across all of Australia, it is important to consider that early childhood education starts from birth, not three years of age. (Garvis et al., 2013, p. 34)

The deficiencies of infant and toddler curriculum and pedagogy in early childhood teacher education programs in Australia were also reported in Rockel's (2013) document analysis of content in early childhood teacher education programs in Aotearoa, New Zealand in 2011. Rockel (2013) found:

...if the course explicitly specifies infants and toddlers in the title, the analysis revealed that this becomes the full focus of the paper in terms of content, topics, research, texts, and assignments. Using generalised terms, such as inquiry, contexts, or professional practice, risks too broad an interpretation and may neglect the specialism of professional knowledge of the first years. (Rockel, 2013, p. 171)

It is clear from recent studies in Australia and Aotearoa, New Zealand (Carroll-Lind & Angus, 2011; Garvis et al., 2013; Rockel, 2013) that, 'generalisation' of infant and toddler curriculum and pedagogy content, through an interwoven focus on children from birth to five years of age, lacks the specific focus needed to build knowledge and learning outcomes, related to infant and toddler curriculum and pedagogy (Rockel, 2013). Nevertheless, it is common internationally for distribution of infant and toddler curriculum and pedagogy content within early childhood teacher education across units of study. In generalising early childhood teacher education content, there are issues involved:

With content spread across the age groups, there is the risk that infant—toddler care and pedagogy may be marginalised through a lack of visibility. This contributes to the continued low status of teachers with infants and toddlers in ECEC services and questionable practice. (Rockel, 2013, p. 165)

Elliott (2006) refers to this common practice of generalisation as the trivialisation of infant and toddler curriculum and pedagogy in early childhood teacher education programs. Garvis and Pendergast (2015a) described Australian pre-service early childhood teacher education teachers as having a limited amount of pedagogical knowledge in relation to infants and toddlers. It is probably inevitable, therefore, that early childhood teachers working with infants and toddlers in Australia are less likely to be acknowledged for their pedagogical practices, and are less respected in society than teachers who work in primary or secondary schools (Fenech et al., 2009).

Like Chu (2016), I argue that the low status of the work of infant and toddler educators and teachers and the dominance of preschool-aged content in early childhood teacher education combine to undermine attempts to professionalise infant and toddler education (Chu, 2016). This is an ongoing struggle. I now turn to a different struggle, the struggle against deprofessionalisation of teaching, and, therefore, teacher education. In order to address this issue, in the next section of this chapter I turn to the work of teacher educators.

2.6 The Work of Teacher Educators in Universities

As noted in the previous chapter, teacher education has not had a secure position within higher education internationally (McNamara, 1996).

The ongoing and escalating struggle for control of teacher education in countries around the world reflects the difficult and contested position of teacher education experienced within a chaotic turn of reform. In countries all around the world,

government has sought to constrain and 'improve' teacher education in the interests of competitive (inter)national struggles for economic power. (Green, Reid, & Brennan, 2016, p. 39)

Britzman (2009) explains the general crisis faced by teacher education within universities by arguing that the "status of education and teaching has declined" (p. 42). I recognise this decline as a key feature of the struggle teacher educators are experiencing against the deprofessionalisation of teaching and teacher education. This has been instilled by governments, a trend which is illustrated by key policy documents in the UK which refer to teacher education as 'teacher training' (Trippestad, Swennen, & Werler, 2017).

Teacher education has been a focus of educational reform for governments around the world (Green et al., 2016). "The many waves of reforming teacher education have left teacher education with a diverse and complex struggle coming from both within the profession and the outside, challenging and restructuring traditional modes of teacher education work, identity and position" (Trippestad et al., 2017, p. 9). Some major changes made in teacher education in the last three decades have occurred due to neoliberal economic policy reforms, rather than educational reform, with a strong focus on market values rather than education itself (Berg, Gunn, Hill, & Haigh, 2016a)

The challenge of teacher education within the academic context is partly due to the inclusion of teacher education as a field in universities well after the establishment of university education. The mergers and amalgamations outlined in the previous chapter describe this process in Australia and Aotearoa, New Zealand. These mergers led to changing expectations towards research for teacher educators and a change from a predominantly teaching focus, to significantly more emphasis on research in education (Harman, 2000). Teacher education in Aotearoa, New Zealand had historically employed skilled and experienced teachers as teacher educators who had previously worked in schools or early childhood settings (Berg, Gunn, Hill, & Haigh, 2016b). This common practice has been described by Davey (2013) as the "practitioner pathway" (p. 47).

Sleeter (2008) advises caution about the different types of criticism that teacher education is has experienced:

While internal criticisms can serve to strengthen teacher education, external assaults that have their origins in global economic and political restructuring

aim not only to deprofessionalize teaching by devaluing professional preparation of teachers, but also to undermine equity and democracy by restructuring education around corporate needs. (p. 1947)

Multiple commentators have argued that teacher education is under attack in the context of neoliberal burdens on education. Sleeter (2008) has argued teacher educators must therefore become more cognisant of how neoliberalism works and how this affects teacher education (Sleeter, 2008).

Neoliberal burdens upheld through managerialist practices focusing on productivity and on education affect teacher educators' work by devaluing teacher education as a profession, and the process of de-regulating teaching deprofessionalises the work of teachers (Weiner, 2007). Teacher education (including early childhood, primary, and secondary) is a low-status discipline within academia (Grossman & McDonald, 2008). Typically many teacher educators working in Universities are required to engage in substantial teaching workloads, as teaching provides a greater amount of income for universities, more so than research funding typically provides (Zipin & Nuttall, 2016).

The amount of backing and support that early childhood, teacher educators receive within the climate of their University can easily influence their ability to achieve their best work (Hyson, Horm, & Winton, 2012). The challenging nature of the work of teacher educators in their roles in universities, has been documented extensively in the empirical literature in recent years (Berg et al., 2016a; Berg et al., 2016b; Ellis et al., 2013; Ellis & McNicholl, 2015; Ellis et al., 2014; Ellis, McNicholl, & Pendry, 2012; Grossman & McDonald, 2008; Gunn et al., 2015; Hyson, Tomlinson, & Morris, 2009; Nuttall, 2012; Nuttall & Brennan, 2016; Nuttall et al., 2013; Robertson & Bond, 2001; Sleeter, 2008; Zipin & Nuttall, 2016). Respondents to a survey of early childhood teacher educators in the US likened their experience of increased workloads to juggling too many balls at the same time (Hyson et al., 2009). Over 20% of respondents in this survey described working in a negative environment. This experience was described as being in, "survival mode—just keeping our heads above water" (Hyson et al., 2009, p. 5).

The introduction of empirical research as a key expectation of teacher educators workloads is the most recent addition to the workload of teacher educators (Harris, 2005; Luke, Luke, & Mayer, 2000; May, 2010), which has led to concerted efforts by teacher educators to increase their research activity (Hill & Haigh, 2012). This is due to the relatively recent shift in teacher education in Australia and Aotearoa, New

Zealand from being taught in Colleges of Education or Colleges of Advanced Education to universities (Luke et al., 2000; May, 2010).

The increased pressure from universities for teacher educators to initiate research studies that could lead to prestigious research grants has heightened the tension between teaching and research, as teaching is typically a very time consuming role (McInnis, 2000). The policy environment in university-based teacher education "encourages and rewards research output where research is an important source of external funding" (Berg et al., 2016b, p. 1125). Cochran-Smith (2003) claims that teacher educators should engage in research activity themselves; however, in some universities there has been a separation of research from teaching and, in more recent times, a push to remove research from many teacher educators' roles (Robertson & Bond, 2001). Understanding the pressures and expectations placed on teacher educators is particularly relevant for this study, which investigates the work of teacher educators within a field that is a new addition to universities.

This shift in expectations accompanied a reduction in academic autonomy within teacher education. This lack of autonomy has intensified since the introduction of performance-based indicators, leading to a greater separation of teaching and research, with teaching becoming strongly devalued (Curtis & Matthewman, 2005). The introduction of performance-based indicators in universities internationally has intensified the competitive climate in teacher education (Lee & Boud, 2003). The challenge of performance-based indicators for the participants in this study is described in Chapter Seven.

International empirical literature that refers to early childhood, teacher educators often comments on early childhood teacher education content in programs (McCarthy, 1990; McMullen, 1997), or encourages teacher educators to inform pre-service teachers of a particular issue (Adair, 2011; Wheatley, 2002). More commonly, this literature recommends that early childhood teacher educators should strengthen the preparation and knowledge that pre-service teachers need to have before they graduate as teachers (Horm, 2003). Granted, this literature provides early childhood, teacher educators with important messages about how to teach pre-service teachers. However, while empirical research that discusses early childhood teacher education sends a clear message about what early childhood teacher educators should be doing (Adair, 2011), at times it labels early childhood teacher educators as ignorant, as illustrated by Wheatley (2002). This type of narrative risks creating a sense that early childhood,

teacher educators are not succeeding in their work. However, this literature does not effectively examine *what* teacher educators are currently doing in their work, revealing the significant gap in the literature this thesis attempts to address.

The lack of research on teacher educators is not only limited to early childhood teacher educators. The dearth of teacher education literature extends to lack of analysis of and insight into the work of secondary (high school) and primary (elementary) teacher educators. As Murray (2014) explains, overall there is limited knowledge about the work and career development of teacher educators. In the case of the research undertaken for this thesis, it is important to keep in mind that early childhood teacher educators have had even less research undertaken about them than their school-focused colleagues. Further research into the working lives of teacher educators is necessary, especially in early childhood education.

Addressing this gap in the literature is a necessity as, no matter what content is taught, the type of delivery of early childhood program and the experiences of early childhood pre-service teachers greatly depends on the teacher educators who teach them. As Horm, Hyson & Winton (2013) explain:

Whatever the overall program and content and delivery systems, what students get out of their experiences in higher education depends to a great extent on the characteristics of those who are teaching, supervising and mentoring them. These characteristics include not only the demographics of faculty training, experience, and ethnicity but also faculty knowledge, beliefs and pedagogical skills. Decisions made by individual instructors... (e.g. how much to emphasise infant and toddler programming) influence teacher education quality and may increase or decrease the likelihood of graduates' implementing practices that can positively affect children and family outcomes. Unfortunately, except for demographic descriptions, information on early childhood faculty members, such as their knowledge, beliefs, and pedagogical skills, is limited. (p. 565)

Understanding the knowledge, beliefs and experience of teacher educators has been a primary motivation in undertaking this thesis.

Of all the literature reviewed, the group of interrelated studies with the most relevance to investigating the work of teacher educators is the international research project titled the *Work of Teacher Education (WoTE)*. The *WoTE* project started in in the United Kingdom in 2010 after obtaining funding from the UK Higher Education Academy, an organisation that focuses on teaching quality. The *WoTE* research asked the same research questions in two countries in the UK — England and Scotland. The UK-based research did not set out to be a comparative study between England and Scotland, as

is the situation in this thesis, where I did not set out to compare the work of infant and toddler teacher educators between Australia and Aotearoa, New Zealand.

In this thesis, I use Cultural-Historical Activity Theory (CHAT) as the theoretical framework to investigate the work of teacher educators, as did the researchers in the *WoTE* project. The *WoTE* study in the UK, (McNicholl & Blake, 2013) and in Australia and Aotearoa, New Zealand also used a form of data collection known as 'work shadowing' in their study of the work of teacher educators, where participants were observed by a member of the research team in order to understand a typical working day (McNicholl & Blake, 2013). I consider this a suitable model for collecting data related to understanding the complex working lives of teacher educators.

The *WoTE* study spread internationally after the UK study launched. A similar study about the work of teacher educators was conducted in Australia in 2011 (Nuttall & Brennan, 2016; Nuttall et al., 2013; Tuinamuana, 2016; Zipin & Nuttall, 2016), Canada in 2014 (Hales & Clarke, 2016), and Aotearoa, New Zealand in 2014 (Berg et al., 2016a; Berg et al., 2016b; Gunn et al., 2015). In Aotearoa, New Zealand, the government-funded *Teaching and Learning Research Initiative (TLRI* financed the project. At the time of data collection for this thesis, Australia and Canada were yet to gain funding for their *WoTE* research projects, which are ongoing at the time of writing.

In this thesis, as in international *WoTE* studies, (Ellis et al., 2011; Ellis et al., 2014; Gunn et al., 2015; Tuinamuana, 2016) I am interested in exploring the how the category of 'teacher educator' is maintained as academic work. In particular, I am interested in investigating a specific category of academic worker in university-based teacher education that has not previously been examined—the infant and toddler specialist teacher educator. I intend, to seek explicit revelations of the working lives of teacher educators (Spencer, 2013)

The WOTE projects around the world investigated the work of teacher educators in an attempt to understand their role as explored through CHAT concepts and analysis of job descriptions. The aim is to understand how universities are advertising for academic positions in teacher education. Data were collected through work shadowing, interviews, work diaries, and a data analysis workshop where participants were engaged in analysis of their work. This thesis has attempted to engage the participants in starting to analyse their own working lives through interviews and focus

conversations to understand fully the work of infant and toddler specialists in university-based early childhood teacher education.

There have been major changes to university structures in recent years. These changes have meant that research and teaching have become a combined aspect of the work of teacher educators, leading to what Ellis, McNicholl and Pendry (2012) categorise as the 'super-teacher'. Ellis et al. (2012) express caution against the unrealistic and unsustainable expectations for teacher educators in their workplaces due to the range of different components that contribute to the role of the teacher educator. In the context of Aotearoa, New Zealand, Berg et al. (2016a) argue that the work of teacher educators is different from the work of academics in other university departments and universities must shift to understand its particular requirements (Berg et al., 2016a).

The *WoTE* studies in all four countries collected job advertisements for university, teacher educator positions. A key category in the role of the teacher educator outlined in university-based job descriptions was described by Ellis et al (2012, p. 691) as the 'super-teacher'. This position defined a suitable candidate for someone who was an "effective classroom practitioner demonstrating strong personal qualities of enthusiasm and resilience" (Ellis et al., 2012, p. 691). This role was similarly categorised in Aotearoa, New Zealand to the role of, "dually qualified", by Gunn, Berg, Hill & Haigh (2015). They describe, "an expert who is an effective (school/ECE) teacher with high enthusiasm and resilience, but who can also engage in quality research production and dissemination activities in their pursuit of research informed tertiary teaching" (Gunn et al., 2015, p. 316).

2.7 Chapter Summary

Infant and toddler specialist teacher educators are not common internationally (Horm et al., 2013; Maxwell et al., 2006) and there is a specific gap in the empirical literature regarding their work, in addition to the limited empirical research about the work of teacher educators (Cochran-Smith & Zeichner, 2005).

This chapter has examined the literature in relation to the status of the early childhood field, the struggle for professionalisation in the early childhood field, infant and toddler curriculum and pedagogy in early childhood teacher education, and the work of teacher educators in universities. A concerted effort was made in this literature review to include literature from Australia and Aotearoa, New Zealand, to illustrate the particular contexts that the study participants' work explored within this thesis.

However, my review of a variety of international sources demonstrates the international nature of the problems identified. Throughout this review of the historical and contemporary literature, it is apparent that issues of status and professionalism continue to be key areas of challenge and struggle in the early childhood field. In reviewing the literature about infant and toddler, curriculum and pedagogy in early childhood teacher education, it became apparent that there are considerable gaps in the literature internationally related to the inclusion of content focused on infant and toddler, curriculum and pedagogy in early childhood teacher education programs.

Qualitative empirical studies that address the status of the infant and toddler field indicate enduring issues connected to the struggle over the status of infants and toddlers within early childhood education. Issues of status, the divide between care and education, and professionalisation interconnect throughout the historical and contemporary literature. The struggle for the inclusion of infant and toddler curriculum and pedagogy in early childhood teacher education reflects deep-seated, sedimented issues leading to the insecure inclusion of teacher education content relative to infant and toddler curriculum and pedagogy.

The limited literature that focuses on the work of teacher educators identifies gaps in understanding the working lives of teacher educators themselves. At the time of undertaking this thesis, I am unaware of any other empirical studies that have explored the nature of work of infant and toddler specialists in university-based early childhood teacher education internationally. In the next chapter, I outline and explain the theoretical approach I used to begin to address this gap.

Chapter 3

Theoretical Framework: Cultural-Historical Activity Theory (CHAT)

3.1 Introduction

In this chapter, I explain how I use cultural-historical activity theory (CHAT) as the analytical framework that underpins this thesis. I begin by describing the origins of the theory before I return to its interpretation specifically in this dissertation. This chapter defends the use of CHAT as the most appropriate framework for responding to my research questions.

The research aim and questions for this thesis have a strong CHAT influence as I am investigating the motive object of activity and socio-historical context of the participants' work. The research aim and questions for this thesis are:

To understand the nature of work as an infant and toddler specialist in university-based early childhood teacher education.

- 1. What does being an infant and toddler teacher educator involve?
- 2. What is the socio-historical context for their work?
- 3. What is the work directed at?

CHAT is not a single theory but a 'family' of related approaches that emphasise different aspects of the social basis for human cognition. CHAT attempts to transcend binaries between cognitive development and psychology, with purely psychological theory being the study of the mind, and purely sociological theory being the study of society. CHAT endeavours to create a social psychology where the social and psychological meet together.

CHAT is currently redefining itself, and is justifying its productive potential to be used and developed in a range of fields of research that address social practice (Sannino, 2011). Historically, limited amounts of people within the academic field, adopt CHAT. This may be due to a lack of clear institutional systems typically connected with research conventions. Consequently, it is harder to define and pinpoint the tradition of CHAT in a definite way (Chaiklin, 2001).

However, the use of CHAT to examine the work of teacher educators (Ellis et al., 2013; Ellis & McNicholl, 2015; Ellis et al., 2014; Ellis et al., 2012; Gunn et al., 2015;

McNicholl & Blake, 2013; Nuttall et al., 2013) is growing. This thesis continues in this tradition. CHAT is particularly apposite for this thesis because it allows me to make sense of the relationship between sociohistorical context and contemporary forms of workplace activity. Bakhurst (2009) comments on the suitability of using CHAT in educational research:

The fact is that the model seems to work particularly well for the sorts of activity systems that activity theorists typically study: health care, work settings, some educational contexts; that is, where you have a reasonably well-defined object, a pretty good sense of desirable outcomes, a self-identifying set of subjects, a good sense of what might count as an instrument or tool, etc. (2009, p. 206)

The use of CHAT in research in education offers new perspectives and insights to activity in education, particularly in researching specific groups in education.

As a CHAT-oriented researcher, I am looking for the co-evolution of my understanding and the teacher educators understanding. As mind develops then society develops; as society develops then mind develops; they co-evolve (Beach, 1999). I am interested in learning what happens at the point where the individual meets the group. As a CHAT-oriented researcher, I understand this process to be located within the historical flow I have described in the previous chapter.

3.2 Origins and Core Principles of CHAT

CHAT is one theory of a family of cultural-historical theories arising from Soviet activity theory in the 1920s. CHAT has a background in German philosophy through Hegel (Davydov, 1999) and closer origins in Russian psychology of the 21st century (Leont'ev, 1978; Vygotsky, 1978). The activist and interventionist historical background of this theory emerged from the historical turbulence that early activity theorists lived and worked through in the Russian revolution. Cultural-historical theories historically connected to the work of Vygotsky and his colleagues (mainly Leont'ev and Luria). Vygotsky (1978), Leont'ev (1974, 1978, 1979, 1981), and Luria (1971; 1979) attempted to explain learning and development as being a mediated process (Daniels, 2001). CHAT is increasingly being viewed as a strong paradigm for research in education (Bakhurst, 2009). At the heart of CHAT is the attempt to transcend the binary between the psychological and the social.

Vygotsky was trying to develop a Marxist psychology. To understand fully Marxist-thought in Cultural-Historical Theory I describe the theory of dialectical materialism.

The principle of the theory of dialectical materialism is that present forms of activity arise out of historical forms of activity.

3.2.1 Dialectical materialism

The concepts of activity, a division of labour and other concepts within the activity system proceed out of a dialectical materialist ontology. These are concepts that serve to explain how dialectical materialist ontology manifests in terms of reality. Vygotsky viewed Marxist thought as an esteemed resource early on in his career, and this work played a central role in Vygotsky's thinking. In order to articulate Vygotsky's work, it is imperative to outline the strong influence that Marxist thought had on his work from very early on in his career (Cole, John-Steiner, Scribner, & Souberman, 1978). In this section, I further explain Marxism in Vygotsky's and his colleague's work.

Vygotsky determined that the roots of, "higher forms of conscious behaviour were to be found in the individual's social relations with the external world" (Luria et al., 1979, p. 43). But, individuals are not only a result of their environment, they are also an active agent in the formation of the environment (Luria et al., 1979). Marx and Engels considered the study of nature and culture from the position that highlights context, change, conflict and emergence (Moore, 1971).

It is vital to articulate the Marxist materialist concept that, "everything is material in nature" (Bullock & Trombley, 2000, p. 508). Vygotsky, along with Marx and Engels believed that consciousness is something that is, "derived, or developed, from social interactions and the historical development of culture within which these interactions take place" (Raven, 2003, p. 21). Vygotsky emphasised not only the importance of the social interactions, but also how culture transformed historically within these interactions. Dialectical materialistic concepts that originated from Hegel, Marx and Engels contributed to key aspects of Vygotsky's work (Raven, 2003). However, when explaining dialectical materialism and its origins, it is essential to point out that Marx's dialectic method was very different to the Hegelian method:

To Hegel, the life process of the human brain, i.e., the process of thinking, which, under the name of, "the idea," he even transforms into an independent subject, is the demiurgos of the real world, and the real world is only the external, phenomenal form of, "the Idea." With me, on the contrary, the ideal is nothing else than the material world reflected by the human mind, and translated into forms of thought (Marx, 1867, p. 36)

Marx thought it crucial to discard the, "simple subject-object dichotomy along with the epistemological framework upon which it is based" (Gregory, 1977, p. 219). This dichotomy was rejected in return for a dialectical philosophy (Gregory, 1977). Marx believed that there is no division between thought and action, as the reason for knowing is to act, and people know legitimacy only if they observe an action (Rytina & Loomis, 1970). In a dialectical materialist conceptual framework activity is the minimal unit for gaining an understanding of phenomena (Roth, 2010).

From a dialectical perspective, activity and psychological phenomena are interdependent, interpenetrating moments of one relation. They are elements of a *common unity*. They are not separate, independent factors that "interact." Rather, each bears the other inside itself and its quality is affected by the other. This dialectical relation is called an internal or qualitative relation because the quality of each moment depends on the quality of the others. As one moment changes, the other does also. (Ratner, 1997, p. 114 [emphasis added])

The concept of common unity is a thread that weaves throughout this thesis when defining this theoretical approach. This is because I understand this group of teacher educators to be engaged in collective activity that is in a constant dialectic relationship between their mental processes and the social contexts in which they engage.

Marxists have strongly articulated that dialectical materialism is not a universal recipe employable to create noteworthy conclusions, a *priori*. If dialectical materialism is understood correctly it is not a dogma, but instead a vigorous and helpful theory as it is a model for thought and action, "a philosophy of struggle and conflict" (Sayers, 1980, p. 22). In this sense, the socio-historical context of the infant and toddler, care and education field, as described in the previous chapter, implies one of conflict and struggle.

Vygotsky's, "understanding of how human subjectivity emerges within and out of shared actions with others can be imputed from his reliance on the notion of collaborative, transformative practice as the root and foundation of human development" (Stetsenko, 2007, p. 755). These social processes of conflict and struggle are an important part of the socio-historical context in the infant and toddler field, and these processes are all engaged in transformation. You do not have to separate conflict and struggle to understand the processes, but these processes are all interconnected and flowing. Dialectics is a process of moving from the abstract to the concrete (Sannino, 2011).

Perhaps the most important meaning of what is Marxist in Vygotskian theory is its emphasis on the centrality of transformative collaborative practices in human development/ (Vianna & Stetsenko, 2006, p. 86)

Dialectical perspectives have recently been brought into understanding teacher education by Ellis, Edwards, and Smagorinsky (2010). They make a case for understanding teacher education as, "dialectical relationships between continuity and change and the reproduction and transformation of social structures and relationships, underpinned by a complex chronology of development" (p. 4).

In this thesis, I paid attention to what happened when the individual and the system encountered one another. A dialectical system of co-evolution goes on between the micro and macro, with the subject as the agent in that dialectical process. This happens through the mediation of cultural artefacts. The process of understanding preparing teachers to work with infants and toddlers necessitates an understanding of the policy environment, higher education environment, and the social mores of the day.

3.2.2 The history of the development of CHAT

Gal'perin (1967), another colleague of Vygotsky's regarded activity through object-related frameworks. In his outlook, the external, object-related position of cognition establishes the quintessence of the mind. In articulating this concept, he rejected the Cartesian dualism in distinguishing cognitive actions and the external/internal dichotomy. This gives an idea of what a non-Cartesian theory of the mind could be like (Stetsenko, 1999). What we are accustomed to in western thought is Cartesian logic, which explores the separation of the mind and body. This prevalent notion of dualism originates from Descartes.

Even though Vygotsky, Leont'ev, Luria and Gal'perin were not united in a single viewpoint within their work, all correspond that the social organisation of activity, and the cultural instruments or artefacts that are employed to accomplish it, inspire and categorise psychological phenomena. Luria identified that:

Cognitive processes (such as perception and memory, abstractions and generalisation, reasoning and problem-solving) are not independent and unchanging "abilities" or "functions" of human consciousness; they are processes occurring in concrete, practical activities and are formed within the limits of this activity. (1971, p. 266)

CHAT develops the central focus of Vygotsky's theory, along with a line of reasoning defining and considering consciousness in terms of the progression of human activity, or through the portrayal and examination of its changes and configuration. Those who engage in CHAT seek out the, "development of consciousness within practical social activity settings" (Daniels, 2001, p. 83). CHAT upholds the idea that emotion,

cognition, and motivation are not able to be comprehended separately from praxis, which from a CHAT perspective is perceived as a system of relations (Roth, 2005).

Psychological processes, and most of all, higher, specifically human, forms of psychological activity, such as voluntary attention, active memory, and abstract thought, must be understood as a social phenomenon in origin, and as processes formed during the course of mastery of general human experiences. These processes are social-historical in their origin, mediated in their structure, and consciously and wilfully directed in their functioning. (Luria, 1971, p. 272)

CHAT highlights situations where people are working together on a common task. In CHAT terms, a 'collective subject' defines a collective group of people, while an 'object of activity' describes their work task. Without an object of activity in CHAT, there is insignificant activity evident. This collective focus is perfectly aligned with this thesis as the six women interviewed, whilst all are working at different universities, and in two countries are all working on a common object of activity and outcome. The object of activity they are working on is specialist infant and toddler units in universities. This outcome is the preparation of teachers to work with infants and toddlers.

CHAT provides a way to look at systems of activity and a way to understand the knowledge process and the construction of skills. CHAT offers an opportunity to study the relationship between the development of the individual and the society in which the person exists. Certain needs propel activity where participants aspire to attain a certain object of activity. One or more artefacts typically mediate activity focused on a particular object of activity. CHAT does not simply account for these differing concepts (artefacts, division of labour, community etcetera) but instead identifies that each concept intricately mediates cognitive activity (Roth, Tobin, Zimmermann, Bryant, & Davis, 2002). Vygotsky's unit of analysis in his work was object-oriented action, by subjects, and mediation by artefacts and signs, such as writing, speaking etc. as noted in figure 3.1.

Leont'ev expanded Vygotsky's original first-generation triangle (used as a conceptual artefact) from human activity, mediated by artefacts by developing the triangle to demonstrate socially mediated activity in adding the concepts of rules, and division of labour. This expansion and formulation of the concept of activity by Leont'ev were directly influenced by the work of Marx and Engels on labour (John-Steiner & Souberman, 1978; Marx & Engels, 1947).

Mediational Means (Artefacts) Machines, writing, speaking, gesture, architecture, music etc. Subject(s) Individual, dyad, group

Figure 3.1 First generation activity theory adapted from Daniels (2001)

CHAT adopts Vygotsky's interest in mediation, but moves the attention from the individual to focusing on collective subjects (Ellis et al., 2010). The view of focusing on collective subjects is relevant for this thesis, as I investigate the work of a group of infant and toddler, teacher educators. I view the participants not as individuals, but as a collective group working on a shared object of activity and outcome. Within this thesis, the participants are seen as a collective subject as they are all collectively engaged within their specialism of infant and toddler teacher education in Universities.

Object/Motive \rightarrow Outcome(s)

In the 1980s Engeström made a significant contribution to CHAT (1987) and is now one of the theory's most prominent contributors through his further development of the concept of CHAT by drawing on the work of Marx, Vygotsky and Leont'ev. He promoted the study of artefacts as central to human-functioning and broadened activity from Vygotsky and Leont'ev's first generation activity models from subject-tool-object, and later rules and division of labour to add a new concept of 'community'. The term "third-generation activity theory" (Engeström, 1996, pp. 132-133) is frequently used to outline the elaboration of the unit of analysis from a single system of activity to two or more systems of activity that are interconnected. For example, in this study two of the systems of activity that are connected are the early childhood field, and early childhood teacher education. The unit of analysis is the system of activity. For Vygotsky, the minimum unit of analysis was mediated activity. For Engeström the unit of analysis expands and he argues that the minimum unit of

analysis for a third generation activity system is the two triangles, which are a conceptual artefact. For the purposes of this study, interacting activity systems that could be represented through triangles would be the early childhood field as a system of activity, and early childhood teacher education as another.

The triangular depiction of CHAT shaped by Engeström is frequently linked to a CHAT perspective, but the key notions of CHAT are historically linked to Vygotsky's Marxist work, to Vygotsky's students, and his Soviet philosophy colleagues (Ellis et al., 2010).

Tools/Artefacts: What resources do they bring to the work? Collective Object: Outcome: ď subject: What motivates the What is their Who are this desired outcome? work? people? Division of Labour: How are they located Rules: Community: within the profession? What governs Who are their their work? stakeholders?

Figure 3.2 Third-generation Activity system diagram adapted from Engeström (2014)

Used as a thought-provoking tool, in preference to a key artefact in this thesis, the Third-generation Activity system illustrated in figure 3.2 stimulated and further developed the researcher's understandings of the CHAT conceptual concepts highlighting key concepts in CHAT, while further explaining the dialectical materialist basis of this conceptual approach addressed earlier in this chapter.

Before I define and explain the concepts that collectively underpin CHAT, it is important to understand the origins of these concepts. I outlined the history and foundations of CHAT through a discussion of dialectical materialism in the previous

section of this chapter. Vygotsky's sociocultural theory of higher mental processes was highly influenced by the Marxist application of dialectical and historical materialism (Cole et al., 1978). Following on from the section on dialectical materialism the researcher defines the use of the four terms: culture, context, consciousness, and mediation. These four concepts come together in theorising the process of activity. The researcher then defines the key concepts in CHAT.

3.2.3 The concept of culture

A Marxist conceptualisation of culture within CHAT can be articulated not as a group of static artefacts, but instead as a living and constant, "flow of practices that stretch throughout history and are enacted by each generation of people" (Vianna & Stetsenko, 2006, p. 89). In this thesis I use Ratner's (1997) definition of culture:

Culture is more about shared concepts than the meaning of things. Culture also exists in the way people raise children, educate the population, produce goods and services, make and enforce social policies. Culture also includes the distribution of rights, privileges, opportunities, obligations and wealth among various groups of people. In addition, culture includes the division of labour that integrates or segregates various activities from each other. (p. 97)

Engeström points out, "that human activity always takes place within a community governed by a certain division of labour and by certain rules" (Engeström, 1987, p. 149). Developing a deeper understanding of the culture the participants engaged with is advantageous for the researcher. As I am an insider to their context, I have been able to understand easily the participants' engagement in the culture. Learning further information about the history of infant and toddler, teacher education in each country has been enlightening for me, as this has aided me to more fully understand the way in which practices connected with infant and toddler education have been developed and maintained in Australia and Aotearoa, New Zealand. The historical dimensions of the activity in which the participants are involved have also been a focus of interest in this thesis alongside the ever-changing conditions of the activity system within which the participants work:

Although the Engeström triangle depicts the structure of activity, it is inherently a dynamic structure, continuously undergoing change in its parts, in its relations, and as a whole. The triangle embodies the historical dimensions in terms of which human activity and all its various dimensions, including knowing and learning, have to be understood. (Roth, 2004, p. 4)

I have kept in mind the dynamic nature of the activity system in this thesis, as Roth advises.

3.2.4 The nature of cultural context

CHAT claims that in order to understand and analyse activity, one must view activity within its own context. When referring to context, instead of the commonly held idea that context surrounds activity and holds it like a bowl, I use an alternative notion of context, which derives from the Latin word, *contexere* (to weave together). For the purposes of this thesis, I found Ray Birdwhistell's definition of context to be most relevant to this thesis:

I like to think of it as a rope. The fibres that make up the rope are discontinuous; when you twist them together, you don't make *them* continuous, you make the *thread* continuous... even though it may look in a thread that each of those particles is going all through it, that isn't the case. That's essentially the descriptive model... obviously I am not talking about the environment. I am not talking about inside and outside. I am talking about the conditions of the system. (McDermott, 1980, pp. 14-15 [italics in original])

In this thesis, I paid attention to the conditions of the activity system in which the participants' work. Through the collective nature of labour activity, consciousness emerges in a human form (Tolman, 1999).

3.2.5 The role of consciousness

A central notion of CHAT is the incorporation of consciousness and activity, as they are dynamically interconnected. Thinking is an internal activity. Not only do activity and consciousness exist side-by-side, but also they are reciprocally complementary to each other. Consciousness can only be understood as being a product of activity, as in a functional sense they are interconnected. Activity directs consciousness, and consciousness directs activity (Leont'ev, 2006). As we undertake an activity, we expand our knowledge, which then affects how we act, which then transforms our knowledge, and so forth (Jonassen, 2000). From the philosophical view of CHAT, human consciousness (including cognition), must be examined and comprehended in the framework of human activity (Jensen, 1999).

3.2.6 The role of meditation

The heritage behind Vygotskian-influenced cultural-historical theory is that mediation is a principle notion in practical activity.

The central thesis of the Russian cultural-historical school is that the structure and development of human psychological processes emerge through culturally mediated, historically developing, practical activity. (Cole, 1996, p. 108)

Vygotsky's claim from a cultural-historical approach is that artefacts mediate advanced cognitive performance together with human action. I further elaborate and define the use of the term artefacts later in this chapter. Even though individual psychological factors create circumstances in which restrictions are made on mediational means, a cultural-historical approach proposes that cultural, historical and institutional elements likewise can also have an important function (Wertsch, 1991).

Vygotsky focused on the mediating role of culture in psychological development professing that, artefacts and signs are two main types of mediation involved in the natural progression of psychological processes. The focus in CHAT on social factors and in the interactions between people and environments clarifies why artefact mediation plays a significant role in CHAT (Kaptelinin, Nardi, & Macaulay, 1999).

The concept of advanced cognitive processes being a function of, and produced through socially meaningful mediated activity is essential within cultural-historical psychology. Vygotsky and his colleagues handled the phenomenon of human activity from diverse research focuses. Vygotsky engaged in investigating the magnitude of symbolic artefacts and social interactions in human cognition, Leont'ev engaged in investigating the establishment of activity as indicated within the concepts of activity, action, and operation, and consequent motive, goal, and conditions. Leont'ev's notion explained activity within socially significant behaviour that concentrates on common goals and situations (Rambusch, 2006). The participants use mediation through cultural artefacts, to communicate the culturally historical norms of the activity system an underlying reason for asking the participants to share three artefacts essential for them in their work as infant and toddler, teacher educators, in their interview.

Mediated artefacts exhibit additional external positioning while, to transform the environment, mediated signs exhibit additional internal positioning, focused towards the self. Both artefacts and signs function as a single dialectical movement, as Vygotsky articulates the importance of psychological artefacts by explaining that human beings are able to "control their behaviour from the outside" (Vygotsky, 1978, p. 40).

In this thesis the use of the term mediation is focused on to describe two different forms of mediation in Vygotsky's writing, as Wertsch (2007) terms, explicit and implicit mediation. Explicit mediation, as Wertsch proposes, involves situations in which someone intentionally introduces a notion or artefact requiring understanding,

into an activity. In the case of this thesis, an example of explicit mediation in this activity system is neuroscience mediated by related artefacts. Alternately, however, knowledge that is natural and related to the language of the activity system comprises implicit mediation. As Wertsch explains:

Implicit mediation typically does not need to be artificially and intentionally introduced into ongoing action. Instead, it is part of an already ongoing communicative stream that is brought into contact with other forms of action. Indeed, one of the properties that characterize implicit mediation is that it involves signs, especially natural language, whose primary function is communication. In contrast to the case for explicit mediation, these signs are not purposefully introduced into human action, and they do not initially emerge for the purpose of organizing it. Instead, they are part of a pre-existing, independent stream of communicative action that becomes integrated with other forms of goal-directed behaviour. (Wertsch, 2007, pp. 180-181)

In the case of this thesis, an example of implicit mediation is the silencing that occurred in relation to infant and toddler curriculum and pedagogy in early childhood teacher education programs, and the continual defence and negotiation of including infant and toddler curriculum and pedagogy in early childhood teacher education.

3.3 Definitions of Key Concepts in CHAT

To facilitate a deeper understanding of CHAT as a conceptual framework, it is important that I explain the key sensitising concepts used in this thesis.

As many of these original texts and ideas originated in Russia, it is important to be mindful of the challenges of translation. English translations identified as flawed featured mistakes typically made by English translators, through summarising of ideas, rather than translating terms word-for-word. These inaccurate translations led to a lack of accurate direct translation between Russian and English, and to some misinterpretations of some key ideas in cultural-historical theory (Van der Veer & Yasnitsky, 2011). This has created some linguistic problems with the translation of the concept of activity (Kaptelinin, 2005). In this thesis, I regularly refer to the term 'activity'. However, the everyday usage of the term 'activity' as being 'busy' does not apply. Instead, it is used in the cultural-historical tradition through the German/Russian concepts of Tätigkeit/deyatel'nost,' which signify happenings which are both productive and collectively motivated (Roth & Lee, 2007). Further elaboration of the definition of 'activity' as used in this thesis follows.

3.3.1 Activity

Activity is both intramental (as thought) and intermental (as shared practical activity). In an activity system, I am looking at how the collective subject operates in a distributed mode from mind to mind. Activity occurs at the individual level in the individual mind because they are organically distinct. Leont'ev explains the difference between internal and external activities by their structure. He considers activity as a way in which something external becomes internal, as a mechanical more than dialectical understanding of this complicated relationship (González Rey, 1999). CHAT is trying to bring together the individual mind and collective consciousness.

Activity is a central notion in Marxist thought, and much of Marx' theoretical vision focuses on activity. Similarly, the intensity behind Vygotsky's and Leont'ev's theoretical approaches emerged from the precedence they lent to activity and how it was developed (Tolman, 2001). However, Marx did not initiate the idea of activity defined in these terms, nor was he the first person to comprehend its significance. For Marx, activity is entrenched in the framework of specific social arrangements and in particular relationships. Activity is a systemic configuration with its own cultural history, and internal developmental changing aspects. In this thesis, following both the current activity of the participants, and engaging in investigating how the activity of this particular group of infant and toddler, teacher educators have developed over a period of time, has been crucial. Activity is a phenomenon, developed historically, as activity progresses over time within cultural groups.

Vygotsky did not conceptualise activity within his theory. His colleagues, specifically Leont'ev, expanded upon the notion of activity. Leont'ev has been responsible for the assimilation of the differing theoretical positions provided by the historical leaders of CHAT, such as Marx, Engels, and Vygotsky into a comprehensible psychological theory of activity (Jonassen, 2000). Leont'ev (1978) proposed the subsequent itemisation of activity. Activity is correspondent to a motive, action is correspondent to a goal, and operation, is reliant on conditions:

The main thing which distinguishes one activity from another, however, is the difference of their objects. It is exactly the object of an activity that gives it a determined direction. According to the terminology, I have proposed, the object of an activity is its true motive. (Leont'ev, 1978, p. 62)

Engeström (1987) further developed these ideas of activity in his work in the late 1980's and had since become one of the most prominent figures in cultural-historical activity theory.

For Engeström activity is a collective, systemic formation that has a complex mediational structure. An activity system produces actions and is realised by means of actions. However, activity is not reducible to actions. Actions are relatively short-lived and have temporally clear-cut beginning and end. (Daniels, 2001, p. 86)

When Engeström uses the term activity, he focuses more on the collective aspects of the activity, and articulates the difference between action and activity. When Roth (2010) uses the term activity he discusses the complex nature of activity within CHAT as it differs from the common use of the term. Activity instead refers not to do a job or action, but instead, it refers to a cognitive process, and as "contributing to the production and transformation of society broadly" (p. 283). The concept of activity is far too complex to be able to give the concept justice within this thesis, but it is important to be aware of the structural (often-hierarchical) element of activity.

Hedegaard's (2008) definition of activity focuses on the perspective of the persons involved in the activity system being studied:

This term foregrounds the person's perspective by focusing on the person's intentions and motives in the practice being studied. Conceptualising what is going on in an institutional practice from a person's perspective, we prefer to use the concept of activity, a concept that is defined in relation to its 'motive goal'. (p. 16)

Having surveyed all of these authors and understanding the synthesis between them, I can see the resemblances, and the differences. Through engaging in a range of definitions of activity, I have determined that for the purposes of this thesis I am adopting Hedegaard's definition of activity. This is because I find Hedegaard's (2008) definition to be clear, that participant-engaged activity is actively engaged in a socially meaningful interaction, which focuses on the motive object of activity. The participants are all engaged in social interactions in their workplaces that focus on the shared motive object of activity.

Within activity, the individual actively, not passively, engages with influences outside of themselves. The individual is considered to be an active participant in determining their own development by actively engaging in a continual interaction with the world (Stetsenko & Arievitch, 1997). Leont'ev contended that action as a grouping arose

because of a change in the way in which society had been organised to carry out labour processes:

The emergence in activity of goal-directed process or actions was historically the consequence of the transition of humans to life in society. The activity of the participants of collective labour is induced by its product, which initially met the needs of each participant directly. However, the emergence of even the simplest technical division of labour led to the isolation of the separate partial results that are achieved by the separate participants in the collective labour activity but do not in and of themselves satisfy their needs. (1979, p. 60)

Leont'ev's work focused on individual activities and collective actions and this distinction were sometimes misunderstood. In order to explain this distinction of individual activities and their connection to collective actions Leont'ev gave the example of a collective hunting example (Leont'ev, 1981):

Leont'ev describes an individual participating in a primeval collective hunt, whose role as a beater is to frighten animals and direct them towards other hunters, hiding in an ambush. This example is used by Leont'ev to illustrate that division of labour clearly induces a difference between what motivates a person (in this case, food) and to what person's actions are directed (in this case making animals run away). The hunting example allows for various interpretations. Of course, it can be interpreted as pointing out that in some cases, human actions appear to make no sense if taken out of the context of a collective activity. However, the intended meaning of this example, according to Leont'ev (1981), is somewhat different. The example illustrates that dissociation between individual's activities and actions, that is, between motives and goals, initially emerges as a result of division of labour in collective activities. Eventually, this dissociation becomes a basic aspect of human activities in general, either individual or collective. (Kaptelinin, 2005, p. 12)

Leont'ev's example of the hunt (1981) offers guidance to how historically individual activity has evolved over time, rather than demonstrating that activity is only created through a shared cooperative group. In this thesis, the collective group of six women who work in universities as infant and toddler, teacher educators demonstrate activity. This group of women constitute the collective subject.

3.3.2 Object

In CHAT the concept of the object of activity is of central importance (Leont'ev, 1978). There is no activity without there being an object of activity. The object of activity of a system illustrates the definition, the motive, and intention (Engeström & Kerosuo, 2007). The object of activity, however, is not just a task. The object is an activity's true motive.

Vygotsky's understanding of object-oriented activity fundamentally changed the way in which objects of activity were conceptualised. The object of an activity system indicates the general direction of the activity, often seen as a common motive, and people engaged in the activity (the collective subject) will act on the object of activity as a means to construct an outcome. As people involved within a collective activity system are liable to bring differing motives to the activity system their comprehension of the object may differ. Leont'ev describes an object of activity as, being sustained by the collective subject, and that the object motivates activity, which then provides activity with a particular focus (Nardi, 1996). Leont'ev (1974) explains that, "behind the object there always stands a need or desire, to which [the activity] always answers" (p. 22). The object of activity is a central element of the activity system, as the outcome of the activity focuses toward the object of activity.

Objects of activity can be material, but they can also be more abstract (as long as the object of activity is communally shared by the participants that are engaged in the activity system) (Nardi, 1996). Kuutti (1996) explains that it is, "possible that the object and motive themselves will undergo changes during the process of activity, the object and motive will reveal themselves only in the process of doing" (p. 27). Objects of activity can change and develop throughout the progress of an activity, as they are dynamic constructions.

Gal'perin viewed Leont'ev's notion of activity as narrow as it was given, "a psychological description with regard to only one aspect—motivation" (1992, p. 42). As a result, the object-related operational content of activity is often directed. Gal'perin view was that cognitive activity is greatly reliant on external, object-related activity (Gal'perin, 1992).

One of the key issues that Gal'perin saw within Leont'ev's view of activity was that object-related activity was often regarded as being a non-psychological process, and that cognitive activity was juxtaposed as a non-objective process (Rambusch, 2006). In this thesis, I was interested in object-related activity and see that this type of activity also engages cognitive activity. Artefacts mediate the relationship between subject and object of activity. The subject interacts with an object of activity not directly, but by using an artefact that occasionally may be a cognitive artefact (such as thinking) (Bedny & Chebykin, 2013).

The concept of object of activity is of specific significance for research about groups and organisations. This perfectly aligns the concept of object of activity to this thesis as I studied a very particular group of people. The object of activity within CHAT concentrates attention on the work of the group or organisation, it often reveals common habits rather than values, and can often bring attention to new possibilities (Engeström & Blackler, 2005). I was particularly interested in analysing data and addressing the notion of object of activity of the collective subject group of infant and toddler teacher educators. In this research the concept of object of activity has also been a helpful analytical tool in order to understand not just what the collective subject are, "doing, but also *why* they are doing it" (Kaptelinin, 2005, p. 5 [emphasis added]).

3.3.3 Outcome

The outcome follows the object of activity. Outcomes have an important role in determining desired objects of activity. When an activity system acts on an object of activity, then there will be an object of activity. The outcome occurs due to a transformation in the object in the system of activity. In the case of this thesis, the participants' outcome is the preparation of teachers to work with infants and toddlers.

3.3.4 Collective Subject

The subject of activity describes the individual participant or the group of participants involved in the activity system. Labour is a process accomplished by more than one person. Instead, labour is achieved through circumstances where people are engaged in joint activity, in circumstances where they are part of a collective group of people and in a social and collectively articulated way (Leont'ev, 2005). In CHAT terms, there is no activity without a subject and no subject without an object of activity. Subject and object of activity are dialectically connected.

A system of activity is understood from the viewpoint of either the individual participant or the group of participants (Jonassen, 2000). Social participation and relationships adjust and develop dynamically as conditions change within activity systems (Engeström & Miettinen, 1999). Collectively engaged in their specialism of infant and toddler, teacher education in Universities the participants are seen as a collective subject.

3.3.5 Rules

Rules involve both explicit and implicit norms, practices, conventions, and common social relations within the activity system (Kuutti, 1996). Rules, both written and implied, exist. Rules govern subjects in what they are can and cannot do in the activity system. In this thesis, the collective subject's universities communicated and upheld many of the rules.

Rules signify the explicit guidelines, policies, laws, and agreements that limit activity, as well as the implicit communal customs, agreements, and relationships between the participants of the community. Viewed as, "phenomena whose basic characteristic is that of generally controlling, constraining, guiding and defining social action, rules exist in both, "written and unwritten forms; in formal and informal statements" (Mills & Murgatroyd, 1991, pp. 3-4). Rules fundamentally shape the actions and activities that are suitable within the activity system community, in order for the artefacts used within the community to mediate the procedure. Activities are communally and contextually constrained (Jonassen, 2000). Rules constrain actions and can justify interactions in activity systems. Subjects obey, construct, develop and reform rules in activity systems (Engeström, 1993).

3.3.6 Artefacts

The term artefacts as defined within CHAT has a range of possible variants—instruments, tools or cultural tools. Within this thesis, the researcher uses artefacts. CHAT emphasises that artefacts come wholly into themselves when being used. For the participants involved in this thesis, it is the knowledge of how to use an artefact that is an important part of concept of the artefact (Kaptelinin et al., 1999). Engeström (1999) promotes the study of artefacts as, "integral and inseparable components of human functioning" and he claims when studying mediation that the focus ought to be towards the relationship with other concepts of the activity system (p. 29).

It is clear to see the influence that Marx and Engels had on Vygotsky, particularly in his dialogue about the use of artefacts in the development of labour activity. However, Vygotsky was more interested in researching psychological artefacts, rather than technical artefacts. Much of his research was interested in drawing out the position of language, and signs of functioning. He handled signs and language in relation to the ways in which they are engaged with and mediate human action (Wertsch, 1991). In this thesis, I was interested in deepening my understandings about both the

psychological and technical artefacts that the participants used, as they both have a strong place in the mediation of the collective subject's work.

Leont'ev explained that, "a tool mediates activity that connects a person not only with the world of objects of activity but also with other people" (1974, p. 19). Artefacts are important within activity systems because they mediate human activities and actions. Artefacts symbolise the history of a particular group, and this constitutes knowledge of the culture of this group, both for individuals who are involved in the system and for the collective subject (Roth, 2005). Artefacts are examples of specific cultural practices, developed outlines of action, and structured ways of organising things within specific communities not viewed simply as things. Artefacts are the epitome of the, 'function and meaning of things' as discovered in cultural practices, they are, "objects-that-can-be-used-for-a-certain-purpose" in the human community' (Stetsenko, 1999, p. 247). Artefacts are either known as being technical or material (books, DVDs, computers, theses), or as psychic or psychological (concepts, cultural models). Artefacts convey particular cultures and history, and they can either assist or constrain activity.

I was interested in exploring the participants' use of artefacts within this study. I specifically asked the participant teacher educators to share three important artefacts that they use in their work. The participant teacher educators were asked to bring these artefacts to the individual interview and to tell me about these artefacts and their uses in their work. I investigated artefacts in this thesis as Bakhurst (2009) explains, artefacts, "represent the activity to which they owe their existence" (p. 183). For some of the participants, it appeared to be challenging narrowing down to the three most important artefacts used in their work. The participants questioned what I meant by important artefacts in their work. Most importantly, I wonder if the participants were more concerned with wondering why I was particularly asking about artefacts that they use in their work, rather than asking about which artefacts would be most appropriate to share with me. An idea that I discuss in the finding chapters later on in the thesis.

I found after a little bit of prompting from myself either via email before the individual interview or in person as part of the interview, I found that the participants easily identified their three key artefacts. I used a strategy to explain this concept to the participant teacher educators when they expressed they were unsure about what I meant by asking them to share three key artefacts in their work. I asked the participants a question. This was, "if you had to teach the infant and toddler unit on a desert island,

then what three things would you take with you to aid you in your teaching?" This question provoked the participants to respond and share the artefacts that are most important to their work.

Engeström articulates the importance of Vygotsky's creation of the concept of mediation and its connection to artefacts:

The insertion of cultural artefacts into human actions was revolutionary in that the basic unit of analysis now overcame the split between the Cartesian individual and the untouchable societal structure. The individual could no longer be understood without his or her cultural means; and the society could no longer be understood without the agency of individuals who use and produce artefacts. This meant that objects ceased to be just raw material for the formation of the subject as they were for Piaget. Objects became cultural entities, and the object-orientedness of action became the key to understanding human psyche. (Engeström, 2014, p. xiv)

An important component of artefacts that reinforces their twofold stimulus that offers a shared foundation of language and culture is that artefacts are concurrently ideal (conceptual) and material. They are ideal in the sense that they encompass the interactions that they had mediated previously, and that they mediate in the present-day. Material artefacts represent the material. Leslie White (1959) highlights the dual nature of artefacts:

An axe has a subjective component; it would be meaningless without a concept and an attitude. On the other hand, a concept or attitude would be meaningless without overt expression, in behaviour or speech (which is a form of behaviour). Every cultural element, every culture trait, therefore, has a subjective and an objective aspect. (p. 236)

Understanding the historical aspect of an activity is found in the concept of the artefact when the artefact is a product of humans' creation and customs (Hedegaard, 2004). In order to discover the current form and use of an artefact, a historical analysis of artefacts as well as of practice within an activity system are important to take into account (Engeström, 1987).

3.3.7 Division of Labour

Division of labour, "refers to the explicit and implicit organisation of a community as related to the transformation process of the object into the outcome" (Kuutti, 1996, p. 28). In a similar fashion to rules, the division of labour can both constrain and justify action in activity systems. I went into this this research being aware that there are often issues and contradictions in systems of activity between rules and divisions of labour.

"Division of labour refers to both the horizontal division of tasks between the members of the community and to the vertical division of power and status" (Engeström, 1993, p. 67). Division of labour is how activity is allocated between participants of the community, specifically the role that each individual participant takes in the activity, the influence that each participant exerts, and the different duties for which each participant is held accountable. The activity system can only achieve the shared object of activity if the activities of the individual participants have structured and synchronised the communications needed in order for all participants to develop their actions that will accomplish their shared object of activity (Bellamy, 1996).

A community exists when there are participants who connect with each other through a shared object of activity. The nature of their internal relationships within their relationships as participants who interact, as those who connect due to the activity they are working on being so multifaceted that it needs to involve more than one participant (Taylor, 2009). Within this thesis, the division of labour was a key discussion point for the participant teacher educators. This was a key discussion point predominantly because the teacher educators were discussing their work, their roles within their universities, and the time involved in their work. They discussed other people who are involved in creating and controlling their work, as well as supporting them in their work.

3.3.8 Community

If we took the activity of humans out of a group of relationships, human activity would cease to exist, and would not be organised. All human activity, while wide-ranging, is also a system within the system of social relationships. Jonassen (2000) explains:

Very little, if any meaningful activity is accomplished individually. People may perform individually in different contexts, but their ability to perform is predicated on groups of people. That is, individuals are concurrently members of different communities. (p. 101)

In Engeström's third-generation activity diagram which illustrates his theory of activity systems, the concept of community is depicted as being closely connected to the concepts rules and division of labour (Taylor, 2009). The community addressed within this thesis was typically colleagues in their own university and other universities, as well as other organisations that had a direct impact on the work of the participant infant and toddler, teacher educators. This community is seen as a nexus of people and organisations, who are interested in this activity system comprising

numerous stakeholders. These stakeholders are individuals and groups of people, who share a similar object of activity to the collective subject in this activity system (Engeström, 1993).

In this thesis, the community also included external agencies outside of the university. These included the *Ministry of Education* (MoE) and *Education Review Office* (ERO), in Aotearoa, New Zealand. In Australia: *Australian Children's Education & Care Quality Authority* (ACECQA), *New South Wales Institute of Teachers* (NSWIT), *Board of Studies Teaching and Educational Standards NSW Australia* (BOSTES) as well as many other organisations both nationally and internationally.

3.4 Contradictions

Whilst contradictions are not a concept shown in the triangle diagram associated with CHAT (Figure 3.2), they are an important concept within CHAT and particularly within this thesis due to the characteristic of contradictions in pushing forward or transforming the self-development of participants in activity systems. Contradictions are not important within themselves, but in the way that they drive change and development (Engeström, 2014). Engeström explores his Marxist influence through the concept of labour-power and its associated contradictions in his work:

Contradictions are not the same as problems or conflicts. Contradictions are historically accumulating structural tensions within and between activity systems. The primary contradiction of activities in capitalism is that between the use value and exchange value of commodities. This primary contradiction pervades all elements of our activity systems. (Engeström, 2001, p. 137)

Because of the way that contradictions can be resolved (however, not all contradictions can be resolved), some of the contradictions raised within this thesis using CHAT were really challenging to the participant teacher educators and myself. Many of the contradictions that the participants experienced were distressing and challenging. Because of the potential for transformation, contradictions are like a potential energy. Engeström (2001) explains the way in which contradictions can lead to innovative and transformative changes in activity systems:

As the contradictions of an activity system are aggravated, some individual participants begin to question and deviate from its established norms. In some cases, this escalates into collaborative envisioning and a deliberate collective change effort. An expansive transformation is accomplished when the object and motive of the activity are reconceptualised to embrace a radically wider horizon of possibilities than in the previous mode of the activity. (p. 137)

Contradictions or aspects of contradictions are mutually sustaining. Contradictions were a key focus I took into the thesis particularly because of the aspect of contradictions acting as the, "motor of self-development in activity systems" (Engeström, 2014, p. xxix). I was interested in investigating the contradictions that the participants experienced in their work and was interested to learn if these contradictions would push the participants forward in making a change with respect to the contradictions in their working lives. "Contradictions are important constituent moments of any reality, either from the point of view of a Marxian dialectic or from the epistemology of complexity" (González Rey, 1999, p. 271).

For Marx "contradictions do not mean that knowledge is imperfect; rather they are necessary indications of the dynamic nature of knowledge itself" (Gregory, 1977, p. 221). The dynamic nature of the work of the participants was a notion I took into the thesis. Engeström perceives contradictions within activity systems as the chief motivating force that drives movement, development and change within Developmental Work Research (DWR). Engeström's (2014) interventionistic research work through DWR focuses analysis on contradictions that emerge within the activity and between the activity and proximate activities. He sees that these contradictions represent the foundation for learning and change. He observes contradictions in the ways in which artefacts, objects of activity, and subjects are understood as concepts, and he goes on to advise participants involved in the research projects he undertakes by examining contradictions between artefacts that are presently used, and the object of activity generated (Engeström, 2014).

The basic internal contradiction of human activity is its dual existence as the total societal production and as one specific production among many...Within the structure of any specific productive activity, the contradiction is renewed as the clash between individual actions and the total activity system. (Engeström, 1987, p. 98)

Contradictions occur and function within an activity system; they can exist in a range of places; within a system, between rules and division of labour for example, between one activity system and another activity system. Contradictions within activity systems are not seen as an adverse situation within activity systems, but instead, they are seen as a possibility for changes to be made (Roth, 2005).

Contradictions are both conscious and unconscious phenomena, and it is essential to consider how people engaged in a system of activity manage these contradictions (González Rey, 1999). Contradictions between characteristically interrelated marked

moments construct a dynamic amongst them by which each can transform the other (Ratner, 1997). In order to understand shifts that occur within activity systems, it is important to understand the four different types of contradictions that may occur within activity systems (Engeström, 1987).

Engeström (1987) categorises four types of contradictions in activity systems. These are hierarchical:

- 1. Primary contradictions, a contradiction arises within an element.
- 2. Secondary contradiction, when an element in the activity system conflicts with another element, e.g. Rules contradicts the division of labour.
- 3. Tertiary contradiction, when contradictions arise between the object of the activity and the object of a more culturally advanced form of the activity.
- 4. Quaternary contradiction when there are contradictions between activity systems and neighbouring activity systems.

Contradictions addressed both in the data collection and data analysis process are presented in the findings chapters following the methodology chapter.

3.5 The Alignment Between my Research Focus and the Nature of CHAT

CHAT was not used in this thesis as an interventionist or participatory method to work towards change, as commonly used in Engeström's Developmental Work Research (DWR) method (Engeström, 1996). The purpose of this thesis was not to change the system of activity, but to expand the understandings of how this particular group of infant and toddler teacher educators work. In order to understand their work and the system of activity engaged in, it was essential to recognise the history of the system of activity that currently occurs and to understand the character of their activity.

This thesis did not set out to create opportunities for participants to engage in action and change within the activity system by working on their object of activity. Instead, it was confined to a, "framework that has considerable potential for researchers who are interested in how conditions for learning are created and what is learnt" (Edwards, 2005, p. 55). For the purposes of this thesis, the tool used for descriptive analysis was the concept of an activity system.

In order to understand an activity system as it is today, researchers need to historically analyse the system, in order to show how this system has changed and developed over time to arrive where it is currently (Roth, 2005). In this thesis, I outlined the sociohistorical development of infant and toddler teacher education in universities.

3.6 Critiques of CHAT

CHAT has been criticised as a conceptual framework due to the lack of focus on aspects of power in activity systems (Avis, 2009; Langemeyer, 2006; Langemeyer & Roth, 2006). Lektorsky (1999) comments that CHAT, "has long been an object of serious criticism and has even been denied by several schools of philosophy and psychology as CHAT involves a certain technicist activism that has no humanistic origins" (Lektorsky, 1999, p. 43). As noted earlier in the chapter, concerns have been raised occurred due to complications that have arisen when translating texts from the original Russian to other languages such as English (Kaptelinin, 2005; Roth, 2013; Van der Veer & Yasnitsky, 2011). These struggles have consequently led to a loss of meaning and in some cases, some of the aspects of activity theory have been underused (Roth, 2013).

CHAT has also been criticised by Russian philosophers and psychologists because it is, "alleged to be an expression of totalitarian ideology" as they understand CHAT to demonstrate that humans are represented, "not as creative beings but as simple executors of plans, orders, and standards imposed from the outside" (Davydov, 1999, p. 65)

Despite the critiques of CHAT, I understand the use of CHAT in research in education to offer new perspectives and insights to activity in education, particularly in researching specific groups in education (Bakhurst, 2009; Ellis et al., 2010).

3.7 Chapter Summary

This chapter defines CHAT as a conceptual framework. I introduced CHAT as a suitable conceptual framework in this thesis in order to discuss this particular group of infant and toddler teacher educators due to the focus on the motive object of activity and socio-historical context of the participants' work. As a result of the focus of analysis on the collective circumstances of a group of people, rather than individual circumstances, the researcher selected CHAT as the conceptual framework for this

thesis. CHAT "is increasingly viewed as a potentially fertile paradigm for research in education" (Bakhurst, 2009, p. 197).

In the current chapter, I provided a description of the origins and core principles of CHAT, describing the key theorists involved in the development of cultural-historical theory. I then moved to describe each key concept in activity theory, discussing the notion of dialectical materialism, defining some key terms. An explanation of the key concepts of the activity system followed, many of which I took into the data analysis, for discussion and explanation in the next chapter. I concluded this chapter by aligning my research focus with the conceptual framework of CHAT, and explaining why despite criticisms of CHAT as a conceptual framework, CHAT was a suitable theoretical basis for this thesis. This chapter described how the thesis was conceptualised and how the research aim and questions were developed.

In the following chapter, I define and justify the methodology of this thesis, clarifying both theoretical and practical matters, particularly in relation to the data collection and analysis processes undertaken in this thesis.

Chapter 4

Methodology

4.1 Introduction

At this point of the thesis, I have introduced and critiqued the literature that relates to the infant and toddler field, the motivations, contradictions, and struggle in the work of University-based infant and toddler, teacher educators. A chapter explaining the theory underpinning this thesis followed the literature review

This chapter presents the methodological principles and practices adopted for this thesis. As such, I turn to a different story of struggle, contradiction, and tension; my own. Throughout this thesis, I struggled with complex situations in conditions of extreme intimacy. I am both an insider and outsider to this thesis. In the first chapter I discussed my role as an infant and toddler specialist, this role means that I am an intimate insider (Taylor, 2011) to this thesis. As an insider, I am part of the collective subject, a concept discussed in the previous chapter. I am also simultaneously an outsider as I am a PhD candidate. I am not yet fully an academic in the way the participants in this thesis are; I aspire to be in the role they already inhabit.

Further addressed in the section of this chapter that discusses my reflexivity as a researcher is the complexity of simultaneously being an insider and outsider in this study. I return to the aim and research questions and make connections to the ontology, epistemology and axiology of this thesis. I describe the nature of the qualitative study, clarify the study design, including a description of the participants, explain the ethical considerations and practice, and position myself as the researcher. I describe the research methods and data analysis and then illustrate how I have maintained contact with the participants since the data collection. I now move to explain the nature of the qualitative study by returning to the research aim and questions.

4.2 The Nature of this Qualitative Study

I revisit the research aim and questions for this thesis to illustrate how Marxist-influenced concepts within cultural-historical activity theory have shaped this thesis, to understand the nature of work as an infant and toddler specialist in university-based early childhood teacher education.

1. What does being an infant and toddler teacher educator involve?

- 2. What is the sociohistorical context for their work?
- 3. What is the work directed at?

Question 1 explores the role of the work of the collective subject, in asking this question I built up an understanding of the information behind the key CHAT concepts in the activity system engaged in by the participants. Question 2 explores the context in which the participants work, and how this context constructed historically, is currently maintained in their working lives, a key underpinning of CHAT. Question 3 explores the object of their activity, a key concept in CHAT.

The ontology of this thesis is materialist, contextualised, social, dynamic and transformative (Stetsenko, 2008). I understand knowledge is not seen as something constant and stagnant, but as dialectical materialist in nature, something constructed collectively as a group, which is how the participants have been identified as a collective subject (Engeström, 2001). The epistemology of this thesis sees theory of knowledge creation as a process, not an entity that held in culture. Marx believed that thought and action could not be divided as the reason for knowing is to act, and people know legitimacy only if they observe an action (Rytina & Loomis, 1970). The axiology of this thesis values the perspective of the participants involved in this thesis. This means that for the purposes of this thesis the focus is on the knowledge of participants as a collective group. Knowledge not seen by and of itself, but seen as a process through the participants' participation in their commonplace practice (Gal'perin, 1992; Stetsenko, 1999, 2008).

4.2.1 The history and principles of qualitative research

I understand qualitative research to focus on the socially constructed nature of the contexts that are studied. I explored a range of representations of the world of the infant and toddler, teacher educators by collecting information from Australian and Aotearoa, New Zealand Universities about units, engaging in interviews, focus conversations, and taking photographs of the artefacts that the participants shared in interviews. The data collected alongside field notes and memos about the interactions that I engaged in as a researcher with the participants (Denzin & Lincoln, 2011). The intimate connection between the researcher and the phenomena they explore in qualitative research is particularly significant within this thesis (Denzin & Lincoln, 2011).

Qualitative research recognises the influence of a researcher's own personal beliefs and values on the research process, such as their choice of topic through to their life experience, and political views. Previously I discussed my personal beliefs and interest in the topic in the introduction chapter. This research proffered aims followed by questions that need exploration rather than testing and thus is better suited to qualitative research (Creswell, 2007). Several forms of qualitative data: collection of information about units related to infant and toddler curriculum and pedagogy; interviews; focus conversations; and photographs in the thesis provided an in-depth understanding of the work of infant and toddler teacher educators (Creswell, 2013).

4.2.2 The strength and limitations of qualitative research

This section presents the epistemic approach underpinning the methodology. The phenomenon for investigation is the work of infant and toddler, specialist teacher educators in Australia and Aotearoa, New Zealand. I chose to separate the countries with regard to data collection and analysis as while Australia and Aotearoa, New Zealand have significant similar historical development, they still had different historicity, mediational artefacts, accreditation and regulations.

The focus of the research is to understand a complex contemporary social phenomenon within a real-life context. I was particularly interested in the phenomenon of the collective work. The beginning of collection started with information and screenshots of unit outlines from websites in April 2014. This data collection concluded with the final focus conversation with the Australian participants in December 2014.

One limitation particularly relevant to this research is that the data collected cannot necessarily be generalised for the wider population. This is a very specific group of women whose work is particularly unique. A single person collected the data, which may be seen as a limitation but is an aspect of doctoral research that is not uncommon.

4.2.3 The unit of analysis in this study

As I am using CHAT, this thesis uses a particular unit of analysis. In cultural-historical research, "activity", is the basic unit of analysis (Engeström, 2001). The unit of analysis in this thesis was the activity system of the work of the infant and toddler teacher educators in Australia and Aotearoa, New Zealand.

4.3 The Study Design

I collected information from university websites to look for infant and toddler curriculum and pedagogy in teacher education programs. I took screenshots of information about infant and toddler units, collected from Universities that offer a Bachelor of Education degree in Early Childhood Education in Australia and Aotearoa, New Zealand. Individual interviewing of the six infant and toddler, teacher educators (three within each country) followed. I first interviewed the Australian participants. These interviews, conducted in Australia took place in June and July 2014 followed by interviews in Aotearoa, New Zealand at the end of August 2014.

Two focus conversations, one in each country, were organised next, one focus conversation with participants in Aotearoa, New Zealand in early September and one with the Australian participants in mid-December 2014. I had to think creatively in sharing data between the countries. I decided through a process of data reduction which provocations to choose for the focus conversations, identifying contradictions and shared quotes expressed by individuals in their interviews, then using these. The process of sharing quotes in focus conversations is described in-depth later in this chapter.

I based much of the data collection on talking with participants, attained through individual interviews with each of the participants, and from focus conversations with each participant country group. The two focus conversations conducted with myself as the facilitator/participant had three participant teacher educators in each. By engaging in these processes of data collection, I was able to, "reach [an] area of reality that would otherwise remain inaccessible, such as people's subjective experiences and attitudes" (Peräkylä & Ruusuvuori, 2011, p. 529).

4.3.1 The recruitment process

As I am an intimate insider to this research topic, it was relatively easy for me to identify who would be the most appropriate teacher educators to contact to be involved in the thesis. I chose to select particular participants as the infant and toddler, teacher education field is so small that I knew of all of the likely candidates in advance. The participants are all, "key informants", within the phenomenon of infant and toddler teacher education (Holstein & Gubrium, 1995).

I already have an identity within the infant and toddler community within Australia and Aotearoa, New Zealand. I am an infant and toddler, specialist consultant who researches in the field of infant and toddler care and education and infant and toddler teacher education. This prior connection to the field provided an opportunity for me as the researcher to gain insight about the participants within the system of activity that I am researching. This is a very different story than if I were a stranger to this community. Being an intimate insider to this research had some benefits, particularly due to the connections that I had previously made with some participants.

The problem of how participants relate and communicate with me as an interviewer is based on who I am in their life, did they previously know me before this research, and to what extent? The social categories to which we belong, such as age, gender, class, and race – is a practical concern as well as an epistemological or theoretical one. (Miller & Glassner, 2004, pp. 127-128)

As I am an intimate insider to this collective group and was known by a couple of the participants before undertaking the thesis. I have more of an understanding of the phenomenon I am studying than many others in the early childhood field. Various academics argue that, "researchers should be members of the groups that they study, in order to have the subjective knowledge necessary to truly understand their life experiences" (Miller & Glassner, 2004, p. 131). Connection with the infant and toddler field as a researcher and connection between the participants was a carefully considered aspect of this study and design.

In order to conduct focus conversations researchers typically bring together participants from similar backgrounds and experiences to engage in, "a group interview about major issues that affect them" (Patton, 2002, p. 236). In the selection of the participants, I chose to approach a small, homogenous sample of a specific subgroup of infant and toddler specialism within early childhood teacher education, to study in depth. This specific choice provided the type of group with specific interests in common, prospectively more able to yield rich data than another randomly chosen group of early childhood, teacher educators.

I obtained the email addresses of the participants through their university web pages and sent an email invitation to six participants. This email included attachments of an information letter (Appendix A) as well as consent form (Appendix B) for participants to complete. I explained in this email that I was inviting them to partake in the research for my thesis. I provided the participants with information related to the thesis such as the University that I was conducting my PhD from, who my supervisor was, and my

contact details. I explained that the participants were eligible to take part in the thesis as they identified as a University-Based Teacher Educator with a specific specialisation in infants and toddlers within early childhood teacher education in Australia or Aotearoa, New Zealand.

One of the first people contacted withdrew; she did not currently meet the criteria of the research as for a number of years she had been working in a research-only role, not in teacher education. She wished me luck, and I continued to search for a third participant in this country. Through searching university websites, I found a suitable person to contact and emailed them with the same information provided to the previous participants. Luckily, she accepted the invitation and consented to being involved in the research.

After contacting seven early childhood teacher educators, six participants agreed to be part of the thesis, three participants from each country. I am aware that there are a limited number of university-based infant and toddler specialists, in early childhood teacher educators internationally as well as in Australia and Aotearoa, New Zealand. This affected my decision to use six participants in this thesis.

Selected pseudonyms for the participants aided in protecting their identity. The six names chosen were Dayna, Nina, Susan, Dahlia, Wendy and Ruby.

4.3.2 The participants

The participants are all at advanced stages of their career in teacher education. Their titles at their university range from senior lecturer, assistant professor to professor. The participants had been involved in teacher education from between thirteen years to over thirty years. The majority of the participants had completed a PhD, typically achieved by studying part-time while working full-time in early childhood teacher education. All of the participants had engaged in both research and teaching within teacher education in Universities. The participants were all women, the gender propensity common in early childhood, care and education and early childhood teacher education. The early childhood field, in general is particularly synonymous with a female staff workforce (Mahmood, 2013).

Most of the participants had worked in the early childhood field before entering the workforce of teacher education. Some of the participants had specifically worked as teachers with infants and toddlers, and some of the participants had worked with older children. The participants have had a range of roles within the university, particularly

within management. These roles ranged from coordinating units, with many units related to infants and toddlers, to visiting pre-service teachers on practicum, to being an associate dean of research, to supervising higher degree research (HDR) students. These roles continue all the way through to being head of school in education, mentoring other colleagues to engage in research, and coordinating postgraduate students in early childhood. These participants are deeply embedded in the system of activity in their universities evidenced by having had a broad range of roles that across the university.

Some of the participants had worked in a few universities, and others had worked in just one. Several of the participants had experienced mergers from Colleges of Education or Teacher Training Colleges to amalgamations with Universities. Many participants had also experienced the shift from being a specific early childhood department with a strong community of early childhood colleagues, to being subsumed into Schools of Education within the university. With the participants' depth and range of experience, I was aware that the participants have a strong understanding of what it means to work in teacher education in universities.

In this thesis, I deliberately chose to be selective when sharing information about the participants, as I wanted to protect the participants' anonymity. There are few infant and toddler, specialist teacher educators, internationally and I wanted to reduce the likelihood of quotes and other identifying aspects of the research being associated with them, an ethical decision made in order to protect them in their work.

4.3.3 The participants as a collective subject

As mentioned in the previous chapter CHAT highlights situations where people are working together on a common task or activity. Within this thesis, the participants are all working on a common task — the development of pre-service teachers to work with very young children. This task sits alongside the further development of research and practice about infants and toddlers and the teachers and educators who work with them in early childhood settings.

This concept of highlighting and focusing on people who are working on common tasks within CHAT is known as the subject or collective subject. CHAT offers an opportunity for researchers to study the relationship between the development of the individual and the society in which the person exists. Within this thesis, I am particularly interested in focusing on the participants as a collective subject, rather than

individual participants. I see the connections and development of the participants as a shared group in working on their motive object within their system of activity.

4.4 Ethical Considerations

I now explain the ethical considerations and practices I undertook in order to engage in research with human participants in two countries.

4.4.1 Ethical practice

I went through the process of ethics review though Australian Catholic University to conduct research with human participants. This ethics review was granted by the human research ethics committee on the 28th of May 2014 (ethics register number 2014 127N; see Appendix C).

4.4.1.1 Informed consent

The participants provided informed consent at the outset of the thesis. This not only followed established protocols but also gave me the opportunity to build a sense of confidence between myself, as the researcher, and each of the participants. Declaration of the data collection methods to participants through the communication of methods and procedures in the initial letter of invitation prior to the commencement of data collection achieved transparency. Methods were communicated in order to improve the participants' understanding of the research and to "enhance their ability to make judgments regarding the credibility and transferability of the findings and conclusions" (Plack, 2006, p. 39). As the participants will be the key stakeholders in this research transferability relates to understanding and validity of the findings.

4.4.1.2 Avoidance of coercion

I carefully explained the thesis' purpose and processes to each participant through email and information letter (Appendix A), and later again in the individual interview. Each participant returned a signed consent form (Appendix B). I explained what the thesis would involve for them as a participant and each of the participants made a decision about whether or not they wanted to take part in the thesis (Guillemin & Gillam, 2004).

4.4.1.3 Confidentiality

The participants were informed that the data would be identifiable to the researcher and supervisor. However, I made it clear to the participants that only de-identified and aggregated data would be published. Confidentiality was maintained throughout the process of the thesis by the use of pseudonyms in order to protect participant identities. The six pseudonyms used were shared earlier in this chapter. In order to respect confidentiality, and as a means of protecting participants' identity, the data deidentified. No names were associated with de-identified quotes shared from interviews in focus conversations.

Participants received advice that I did not anticipate any risks or discomfort for participants in participating in this project, beyond the usual risks of normal, everyday life. However, I made it clear that being a small group of participants, there was some potential for inference of the identity of individuals in reports arising from the research. This possibility was minimised by removing all names and identifying comments from the interview and focus group transcripts. Because participants knew the identity of the other participants in the study I asked participants to maintain confidentiality about the identity of other participants outside the research process.

4.4.1.4 Right to withdraw

Participants received advice that their participation in this thesis was voluntary and that they were not under any obligation to participate. After they had agreed to participate in the thesis, they were able to withdraw from the research, at any time up until the stage of data analysis, without adverse consequences.

4.4.1.5 Security of Data

All data managed electronically and stored on a password-protected ACU laptop that was stored in a lockable cupboard on secure ACU premises.

4.4.2 Researcher positioning

As I am and have been continually involved in advocating for infants and toddlers in early childhood, care and education, I am an intimate insider to the community I am studying. Collins (2000) argues that for the sake of making legitimate knowledge claims, researchers, "must be personal advocates for their material, have lived or experienced their material in some fashion" (p. 266). I not only bring my subjectivity to the process of designing the research, but I was simultaneously a researcher and a participant through my involvement in the interview and focus conversations. I am aware that my identity as an infant and toddler specialist:

directly and indirectly influences and is influenced by the research process in multiple ways, through self-reflection I began to better understand this influence while at the same time being mindful to negotiate the balance between my personal and professional commitments as a means to avoid the trap of narcissism. (Wagle & Cantaffa, 2008, p. 137)

Self-reflection on my role as the researcher in this thesis was an on-going process throughout with an extensive amount of investigation and reading of literature about being an insider and outsider and researcher positioning.

The participants and I had never worked in paid work together in universities. Throughout the thesis, I discussed my role as a researcher extensively with my supervisor and co-supervisor both before engaging in interviews and focus conversations, while engaging in interviews and focus conversations and after the process of conducting interviews and focus conversations. When discussing the interviews and focus conversations with my supervisor I shared insight into the level of relationship, connection and openness that the participants showed, and reflected with both of my supervisors on my role in this dynamic.

4.4.2.1 Insider/outsider status

Throughout this research process, I have struggled with the issue of being both an insider and outsider. As an infant and toddler specialist, an identity I discussed in the introduction chapter, I am an intimate insider (Taylor, 2011) to this thesis.

My level of dedication to the field of infant and toddler care and education and teacher education has been clear from the outset of this thesis. I am aware that as a researcher that my subjectivity becomes open for examination. This has necessitated critical mindfulness in my personal description of how my, "self-location (gender, race, class, sexuality, ethnicity, nationality), position, and interests influence all stages of the research process" (Pillow, 2003, p. 178). I position my knowledge of this thesis out of my own comparable experience with the participants (Pillow, 2003). A notion and identity I closely identified with in this thesis was the notion of being an intimate insider to this research:

Intimate insider research can be distinguished from 'insider research' on the basis that the researcher is working, at the deepest level, within their own 'backyard'; that is, a contemporary cultural space with which the researcher has regular and ongoing contact; where the researcher's personal relationships are deeply embedded in the field; where one's quotidian interactions and performances of identity are made visible; where the researcher has been and remains a key social actor within the field and thus becomes engaged in a process of self-interpretation to some degree; and where the researcher is privy

to undocumented historical knowledge of the people and cultural phenomenon being studied. (Taylor, 2011, p. 9)

I was able to understand the socio-historical context of the participants and the field of infant and toddler, teacher education that I studied. I have been involved in advocating for infants and toddlers in early childhood care and education for the past fifteen years, I am an intimate insider to the community that I am studying. As an researcher, as with the participants, I "participate in the interviews and focus conversations from a historically grounded bibliographical as well as disciplinary perspective" (Warren, 2002, p. 97). My depth of knowledge in the infant and toddler care and education domain and the infant and toddler teacher education domain has meant I have a deep understanding of what I am investigating in this research.

However, my role as a full-time PhD candidate means that I am an outsider to this thesis at the same time as being an insider. I am not in the same working role as the participants. Their collective discussions in the focus conversations, about the struggles in their work as infant and toddler, teacher educators demonstrated the difference between myself as a PhD candidate and their depth of experience as teacher educators. At the time of this thesis, I had not previously worked as a full-time teacher educator, and my level of connection to the working lives of the participants was clear to me.

4.4.2.2 Advantages and disadvantages of negotiating being both an insider and outsider

As an intimate insider to this thesis, it was important that I was aware that my perspectives on infant and toddler, teacher education might not be the same as the views held by the participants I engaged. As the participants and I are all engaged in this small subculture within early childhood teacher education, there could have been a tendency to assume that the discourse used by the participants and myself as the researcher means the same thing. However, we may not share the same meanings when it comes to particular jargon used when talking about teacher education and infants and toddlers. It was important that together we clarified some of key terms used, in order to move towards more shared understandings (Davies, 2008).

I struggled with concurrently being both an intimate insider and outsider in this thesis. There were times when I felt I knew the field so well, and other times that I felt that there was little connection between myself and the participants and their working roles. There was a great level of challenge in particular in listening to the participants in the

interviews and focus conversations and recognising that this role is likely to be my future. This acknowledgment of my concerns around my future role is discussed further in the conclusion chapter.

4.4.2.3 How I managed my positioning of myself

In order to further understand my positioning as a participant and researcher before I engaged in both interviews and focus conversations with the participants my supervisor interviewed me. This aided me in clarifying my previous constructs about infant and toddler, teacher education before I started speaking to participants.

I was aware of my own nervousness in interviewing the participants. The following journal entry dated 19th of May 2014 described not only what I am nervous about, but also why as a PhD candidate I was apprehensive to start the interview process:

Interviewing participants who are well known for their academic work and rigour is a bit intimidating. While I am passionate that their voices must be heard, it is also worrying that in some way that they could judge the work that I am doing. In addition, for the participants to judge the questions that I ask them and not think that the way that I am conducting the research is best suited to the project. There is a possibility that the participants could wonder why I am asking that particular question. However, at the same time, the theory that I am using within this thesis is different to the theory that guides their epistemological and ontological positioning. Therefore, the way in which I will undertake my research is different to how they would undertake research themselves.

The process of being an interviewee helped me to be very aware that as the researcher I have a certain level of power in this study through taking hold of intimate stories about the work of participants and analysing them. I was careful to consider issues of power when engaging with the participants in data collection. Power requires sensitive treatment as noted in one of the focus conversations when a participant emotionally shared a story about her work and then looked at me and said, "...and now this will be analysed too." I quickly responded to let her know that she and all of the participants could edit the transcripts if they were uncomfortable with what was being included.

In further considering issues of power I was aware that at the completion of my PhD there could be a definite change in the dynamics of power. There is a strong possibility that one of the participants could interview me for a job after completion of my PhD. This added aspect of power around a possible future engagement with participants was a dimension that I had not considered before the thesis had begun.

4.4.2.4 The relationship between positioning, reflexivity and validity

I explain my process of struggle to advance and maintain my sensitivity as a researcher. I made sure from the outset of this thesis to reflect in detail through writing about my preconceptions about the infant and toddler field and teacher education field. As I continued with the thesis collecting data, analysing, and composing the findings chapters, I continued to reflect on my preconceived notions about infant and toddler, teacher education. I wanted to make sure that I understood and clearly defined the work of the participants as they described their perceptions of it (Merriam, 1998). My aim was for the findings chapters to make sense to readers and that the findings are, "consistent and dependable" (Merriam, 1998, p. 206).

I am a close friend of one of the participants in this thesis. I was quite well acquainted with a couple of the other participants in this research before the thesis commenced. I was well aware of all of the participants' work before engaging the participants in this research. I was conscious that several of the participants, who had not yet met me, were aware of my work as an infant and toddler specialist.

It was important that as the researcher that I sensitively worked against hierarchy in the relationships between the participants and myself. I am aware that I am unable to eliminate this hierarchy, as it will always be there. One way in which I attempted to address this hierarchy with the participants was the importance of sensitivity in our relationships. A strategy I used to address this was to explain my personal identity to the participants that I was not friends with before we engaged in the research (Oakley, 1981). This supported sensitivity in my relationships with the participants that I did not know as well when I interviewed them, as they now knew more about me. However, I was aware that it was important that I retained the awareness that we came from different standpoints. My story as a researcher interconnected with my participants' stories. Therefore, I needed to be aware of the complicated nature of empathic appreciation (Warren, 2002).

A key reflexive strategy used in this thesis was the focus of the development of a reciprocal relationship. This entails a relationship where the researcher 'hears' the participants, and they have equal standing within the research relationship. I attempted to reduce the power disparity between the participants and myself. I viewed the participants as collaborators in the sense that we collectively outlined and established understandings about them and their situations in their universities. Those

understandings constructed through participants checking their interview transcripts for accuracy and through rich discussions of their work in the focus conversations as a collective group after each participant interview built stronger relationships.

In this thesis, as the researcher and interviewer, I showed, "sensitivity to the management of power in the relationship" (Butler, Ford, & Tregaskis, 2007, p. 281). I managed this by actively listening to the participants. I limited my own comments particularly in the interviews in order to provide opportunities for the participants to speak. I made eye contact with participants, used verbal encouragement such as, "yeah" "right", and, "mmm", as well as nodding at particular comments that participants made.

This sensitivity, alongside a willingness to recognise and accede to my own partiality in the research, was central to my engagement and relationships with participants; a level of shared understanding and common experiences recognised as constructive characteristics in research connections. Taylor (2011) determines the strong benefits in undertaking research with friends and close colleagues, and acquaintances encompassing:

deeper levels of understanding afforded by prior knowledge . . . closer and more regular contact with the field . . . quicker establishment of rapport and trust between researcher and participants; and more open and readily accessible lines of communication between researchers and informants due to the researcher's continuing contact with the field. (p. 6)

However, advised by Taylor (2011), I guarded against the exclusive use of friend-participants within this thesis and engaged with a combination of intimately familiar, and unfamiliar participants in order to serve as a, "checking mechanism" (Taylor, 2011, p. 15). Friend-participants are more often likely to share similar thoughts and attitudes to researchers who are friends. Engaging unfamiliar participants in this research aided in checking on shared truths between myself, as a researcher, and familiar participants.

In order to reveal my own subjectivity and research in an unhindered way, I have made it clear within the data where my voice through my understandings, perspectives and emotions ends, and the participants' voices begin (Pillow, 2003).

It is important that I explored my own identity relations within qualitative research, explicitly questioning how this thesis is situated within the context of my own identity. Early on at the very beginning of my doctoral thesis, I wrote detailed anecdotal notes

about my views on the infant and toddler field and my thoughts on infant and toddler, teacher education. In order to understand my own identity, I wrote my way into clarifying my ideas of these two domains in particular. I explored how my identity has shifted throughout the progression of the thesis in relation to the identities of the participants involved in the thesis. I then explored how this all makes a difference to this thesis, in relation to the connections I now have with the participants I engaged with for this thesis (Wagle & Cantaffa, 2008).

4.4.2.5 The relationship between researcher positioning and the CHAT principles

The use of CHAT in research expresses the position of an ethical researcher who is, "not reflective as an individual only, but is part of the cultural and collective praxis" (Popova, 2015, p. 141). I am aware that as an intimate insider to this research I am thoroughly enmeshed in infant and toddler, teacher education. I have engaged in both the infant and toddler field, and in the field of teacher education, but as a casual staff member, and not a full-time teacher educator.

To obtain an adequate understanding of the praxis of interest, one must participate in the cultural-historical activity at hand and, therefore, in the very production of the entities that this activity normally produces. (Roth, 2012, p. 200)

I view myself as a researcher positioned as a member of the collective subject. Due to my positioning as an intimate insider, I am able to easily and collectively, make meaning of the cultural activity in which the participants take part. I do not discard the commonly held Western view of being a unique individual, however, I am aware that CHAT emphasises that my unique identity as an infant and toddler specialist has been developed through my participation in activity dedicated to infants and toddlers (Popova, 2015).

4.5 The Research Methods

I now move to describe the three data collection methods used between April and December 2014. Descriptions align with the order of collection.

4.5.1 Collecting information from University websites

I engaged in investigating websites of Australian and Aotearoa, New Zealand universities for information about infant and toddler curriculum and pedagogy in teacher education programs. Sampled teacher education programs drawn from the total

population of University-based teacher education providers offering an undergraduate degree in early childhood teacher education formed data. The program I had chosen to look at in particular was a Bachelor of Early Childhood Teaching (BEd ECE). This program exhibited more shared similarities between the Bachelor degrees in each country than in other early childhood teacher education programs. The BEd ECE Teaching degree is a university-level degree, which typically takes three or four years of full-time study to complete. However, there are options for pre-service teachers at many universities in Australia to obtain recognition for prior learning in early childhood due to the three levels of qualifications currently available. For example, an educator currently working in an early childhood setting with a Diploma in Children's Services can study at a university in order to upgrade the diploma to a BEd and may receive credits through recognition of prior learning. However, it is notable that the contemporary trend in higher education is for a combination of early childhood with a primary degree, where primary studies are dominant.

At the time of the data collection universities in Aotearoa, New Zealand offered both a BEd ECE, alongside a Graduate Diploma in early childhood. At the time of the data collection universities in Australia also offered a Master of Teaching program alongside the two other programs that universities in Aotearoa, New Zealand offered.

In order to organise the information I first created a list of universities that offered these programs. I searched through all University websites in Australia and Aotearoa, New Zealand and discovered the universities that offered the BEd ECE. In Australia, 29 universities offered a BEd ECE. In Aotearoa, New Zealand, six universities offered a BEd ECE. I created tables in a word document (Appendix D) that recorded seven different categories in columns to investigate in the 35 universities.

The categories were:

- 1. the name of the university
- 2. whether there was a unit specifically about infants and toddlers or not, if yes then the name of the unit was mentioned, if not, then "no" was recorded in the table
- 3. the year of the degree that this was offered if this was mentioned in the unit outline
- 4. the points allocated to this unit
- 5. the code number of the unit

- 6. how many clicks of the mouse it took me from the university web page home to find this information
- 7. whether this was an early childhood education degree, or a combined early childhood and primary degree.

When searching for units that offered specific infant and toddler curriculum and pedagogy, I recorded the number of clicks of the computer mouse it took to find information about units about infants and toddlers. This data recorded in order to understand how difficult it was to find information within early childhood teacher education programs about infant and toddler curriculum and pedagogy. When searching for this information, I started my search from the main web page of the university and searched for the BEd ECE if there was a search box on the web page. Another technique used was searching the term, "early childhood", within the list of undergraduate degrees in a list of programs offered by the university. When finding the list of units offered in the BEd ECE it was relatively easy to find whether there were infant and toddler unit offerings.

As an intimate insider, I knew the common discourse used when discussing infants and toddlers. For example unit names mentioning terms such as, 'birth to three', 'first three years', 'infants and toddlers', 'infancy and development', 'child development baby to toddler', and 'people under three'. In universities that did not mention such terms in the unit names, I scanned through the descriptions of the other units they had in order to check for mentions of infants and toddlers. I took screenshots of specific web pages on the university websites that displayed information about these infant and toddler-focused units (Appendix E).

There were two instances at universities where there were two infant and toddler undergraduate units on offer in a program. This occurred at one university in Australia and at one university in Aotearoa, New Zealand. At one of the universities, the second unit was an optional unit offered as part of the early childhood BEd ECE program. At three of the universities, one in Australia and two in Aotearoa, New Zealand there was a unit at a Post Graduate or Master level that specifically focused on infants and toddlers.

Discussion of the data analysis of information collected from university websites will occur later in the chapter. I now move to explain the other two sources of data —

interviews and focus conversations. These two sources of data comprised the majority of the data collected.

4.5.2 Individual interviews

In organising the interviews, I negotiated the dates and times for the interviews at a time that was suitable for the participants and myself. The participants were aware that I would have to travel to interview them, both across Australia and Aotearoa, New Zealand. I asked all of the participants to choose the most suitable and comfortable location for them to be interviewed. Some participants chose their office at the university, some a meeting room at a university, and two participants chose to an interview in their own home. It was important to me that the participants chose the most suitable interview location so that they had a strong level of comfort in their surroundings.

In this thesis I use Kvale's (1996) definition of a semi-structured interview:

An interview whose purpose is to obtain descriptions of the life world of the interviewee with respect to interpreting the meaning of the described phenomena. An interview is a conversation that has a structure and a purpose. It goes beyond the spontaneous exchange of views as in everyday conversation and becomes a careful questioning and listening approach with the purpose of obtaining thoroughly tested knowledge. The research interview is not a conversation between equal partners because the researcher defines and controls the situation. The topic of the interview is introduced by the researcher, who also critically follows up on the subject's answers to his or hers questions. (pp. 5-6)

Within the interviews, I engaged in open questioning, I listened to the responses from the participants and then followed up on their answers to questions. At times I asked for more clarification, and observed the silences when they occurred (Kvale, 1996). I had the attitude that interviewing is a two-way dialogue, and because of this it is always inevitably active, interactional and constructive (Holstein & Gubrium, 1995). I am aware that the use of interviews has its own historical trajectory. Oakley's (1992) work of interviewing women was pivotal in the 1980s in understanding that interviews are a two-way process.

I used a sound recorder to record the individual interviews. This audio data used alongside handwritten field notes. To conduct the semi-structured individual interviews the researcher created an interview program, which was a list of questions and topics (Appendix F) to prompt the conversation with each participant. I was aware that I wanted the participants to be active in this research.

Both parties to the interview are necessarily and unavoidably active. Each is involved in meaning-making work. Meaning is not merely elicited by apt questioning nor simply transported through respondent replies; it is actively and communicatively assembled in the interview encounter. Respondents are not so much repositories of knowledge—treasuries of information awaiting excavation—as they are constructors of knowledge in collaboration with interviewers. (Holstein & Gubrium, 1995, p. 4) [italics in original]

If needed in the interview I adapted and altered some of the wording used in the questions. I also omitted sections that were later unnecessary if the participants had already discussed that point, and introduced some ideas and questions that were previously not involved in the interview schedule, according to the focus of the participants in the interviews. I encouraged participants to further develop their responses, by introducing new ideas to the conversation (Davies, 2008).

I asked participants via email when organising the interview to share three artefacts that were essential to their work as an infant and toddler teacher educators. Four participants remembered and brought these artefacts with them to the interview—I created photographic records of these. Of the two participants reminded at the time of the interview, one participant easily physically produced the artefacts at the time—I created photographic records of these. The remaining participant did not have the artefacts at the location of the interview but explained the artefacts, most important to her in her work. Even though most of the photographs did not include images of people, I was aware that I did not want to reproduce the photographs in the thesis as these images could identify the participants involved. These photographs provided a way in which I could quickly recall the artefacts provided and the particular aspects of the artefacts that participants referred to at the time. For example, a few of the participants pointed to particular sections in books, and their theses, both presenting written passages and photographic images.

The advantages to engaging in semi-structured interviews were that as the researcher I could prepare some questions in advance. I was also able to provide opportunities for participants to express their own views of their work. Most of the participants and I built up a quick rapport very easily with this conversational style of interviewing. I was able to respond to complex topics that the participants introduced and clarify my understanding of some of the answers they provided. For example, some of the jargon used in the different states and territories in Australia meant that some acronyms in use in organisations were unfamiliar, however, the interview allowed opportunity for immediate clarification.

Some of the disadvantages in using semi-structured interviews were that I had to think very quickly in the interview to whether the new ideas the participant was sharing were relevant to the thesis. If the participant was heading down a long tangent unrelated to the research, then I respectfully directed the conversation back to the interview topic. The conversational style led to the interviews taking longer than I had planned and described in the information letter. This forced a more hurried response to the last question for most of the participants.

The interviews were semi-structured because I wanted the questions asked to stimulate naturally occurring conversation. In order to be able to engage in semi-structured interviewing it required me to be active listener. I applied the skills of an engaged conversationalist. I took the stance that the interview "should be a conversation, a give-and-take between two persons" (Denzin, 2001, p. 66).

A good listener doesn't talk, rather, he or she lets others talk, a skill that involves several elements. First, a good listener does not gossip. Second, a good listener does not interrupt. Third, a good listener shares his or her own experiences, thereby transforming the traditional interviewer-respondent situation into a conversational interaction. What an interviewer only listens, without sharing, this can create distrust in interviewees. Fourth, a good listener learns what to listen for. Fifth, a good listener has to have a reason for being a listener. That means that he or she has to create an identity in the social groups he or she is studying. (Denzin, 2001, p. 66)

Taking advice from Denzin (2001) with respect to the role of the researcher as a good listener, I specifically provided an opportunity for the participants to ask me questions at the end of their interview. Most of the participants asked for more information about the research, particularly about the next stage of the data collection – the focus conversation.

4.5.3 Focus conversations

For the purposes of this thesis, I defined what is typically termed as a focus group (Kamberelis & Dimitriadis, 2011; Krueger & Casey, 2009; McLachlan, 2005) as a focus conversation. This definition was preferred as it more accurately reflects the design of the collective data gathering sessions. The design provided an opportunity for the focus conversation to be more conversational and less formal than traditional focus groups. It also acknowledges that I was simultaneously a participant and a facilitator sharing my experiences alongside the participants. However, I chose to share my own experiences less often that the six participants in the focus conversation

in order to maximise opportunities for the participants' experiences to be brought to the forefront.

Conversation is a basic mode of human interaction. Human beings talk with each other – they interact, pose questions, and answer questions. Through conversations we get to know other people, get to learn about their experiences, feelings, and hopes and the world they live in. (Kvale, 1996, p. 5)

I was keen to use focus conversations in each country, as I felt that the group dynamic could, as van Manen (1990) suggests, bring about deeper narration from the participants as they would be engaged in dialogue with other people who could share similar experiences. There is a horizontal dynamic in the focus conversation that does not exist in a focus group where the researcher is not an insider.

I thought carefully about the venues for the focus conversations. I made sure the location was convenient for all of the participants. In the case of four participants, funding from my university allowed me to pay the airfares for the participants to meet together in the focus conversation. A typical focus conversation can last from 1.5 to 2.5 hours, although, as several of the participants travelled from other cities for the meeting, their commitment was sometimes much greater. As many participants were also colleagues and friends, in practice the focus conversations lasted longer than this. The focus conversations in this thesis were on average 3.5 hours long, and each group had a break halfway through the process.

Focus conversations are a way to garner information, as well as being an environment in which participants can share information about their experiences and opinions (Krueger & Casey, 2009). As they bring the power of participant voice to the forefront, focus conversations can, "become sites for over determining collective identity as strategic political practice—to create a critical mass of visible solidarity that seems a necessary first step towards social and political change" (Kamberelis & Dimitriadis, 2011, p. 552).

Some of the benefits in engaging in focus conversations were that the process of bringing participants together in each country as a strategy to bring participants together as a collective subject in each country. The methodological function of the focus conversation, "basically involves collective engagement designed to promote dialogue and to achieve higher levels of understanding of issues critical to the development of a group's interests and/or the transformation of conditions of its existence." (Kamberelis & Dimitriadis, 2011, p. 546).

Sharing quotes from participants in the other county also provided a greater sense of collective voice and identity. I found that the focus conversations were a useful way in which to obtain detailed information on the collective group's thoughts, feelings and perceptions about particular aspects of their work. I was particularly interested in sharing the quotes from the other countries to bring a heightened level of awareness of their colleague's experiences. The collective nature of focus conversations that emphasise motive objects is associated with CHAT through Leont'ev's (1974) work as, "behind the object there always stands a need or desire, to which [the activity] always answers" (p. 22). Bringing the participants together for a focus conversation helped to support their need for connection with colleagues, with shared interests in their work.

Each focus conversation commenced with an introduction where I explained that we were engaging in a collective discussion. There were five questions in total (Appendix G). The third question introduced sharing the quotes from the participants in the other country. In both focus conversations, we had a break after the third question and then came back together afterwards for a collective discussion of the final two questions.

The key difference between focus conversations and other methods of data collection such as individual interviews and questionnaires is that the data collection takes place in, and is facilitated by, a group situation (Stewart, Shamdasani, & Rook, 2007). Focus conversations are successful when participants experience an environment and atmosphere where they are, "comfortable, respected, and free to give their opinion without being judged" (Krueger & Casey, 2009, p. 4).

By understanding the physical, temporal, social, cultural, psychological, and environmental influences on the dynamics of group behaviour, we are better able to identify the nature and degree of bias in our analysis and interpretation of focus group data (Stewart et al., 2007, p. 19).

As the participants all knew each other to a certain extent, some familiarity facilitated a level of comfort. Nevertheless, I took account of intrapersonal factors and individual differences that could play a key part in influencing changes and developments in the dynamics within focus conversations. This included my knowledge of whether participants, were already personal friends, or had conducted research together. I was aware that each individual involved in a focus conversation has a unique behavioural disposition, which influences the individual to exhibit particular behaviours in group settings. The focus conversations also provided me as the researcher with a different

view of the participants in a group setting after building a relationship through the individual interview process.

Focus groups also allow the researcher to see the complex ways people position themselves in relation to each other as they process questions, issues, and topics in focused ways. These dynamics, themselves, become relevant "units of analyses" for study. (Kamberelis & Dimitriadis, 2011, p. 559)

In facilitating the focus conversations, it was vital that I took the individual characteristics of the participants into account in order to make the most of their participation within a focus conversation. Interactions between group participants can play a huge part within the group dynamics as this can work towards group compatibility and cohesiveness. The interactions of the group influence the use of power, leadership, and interaction (Stewart et al., 2007). All of the participants within this research had an awareness of each other's work, and many knew each other personally before the research began.

I was aware that some participants had more dominant personalities than others did. I wanted to make sure that each participant felt able to have an active voice in the focus conversations. If one participant withdrew into silence for a time, I would ask them if they had any thoughts on the topic to draw them back into the conversation. At other times, I would just glance at them and smile to let them know they were welcome to share their thoughts, and that I was interested in their thoughts. I observed many of the interactions that occurred in the focus conversation and provided an opportunity for all participants to make an active contribution to the collective discussion.

Some researchers (Krueger & Casey, 2009; Stewart et al., 2007) point out that interpersonal factors like group cohesiveness need to be taken into account within focus conversations. "The more cohesive the group, the more power the members have and, therefore, the greater the influence they exert over one another" (Stewart et al., 2007, p. 26). As this group has many similarities in terms of their background within their education and attitudes towards their work as teacher educators, the sense of cohesiveness developed more easily than it may have with focus conversation participants, who had opposing views. This does not mean that all of the participants should have agreed with each other completely, but the collective nature of the focus conversations was a more desirable situation than a focus conversation with participants that have completely opposing views.

It was also important to consider the possible influence of myself as the facilitator upon the focus conversations that I engaged. As I am an intimate insider to the small infant and toddler community within early childhood teacher education it was important that I also engaged with the discussion in the focus conversations. As I was previously more involved with the infant and toddler community in Aotearoa, New Zealand it was easier for me to engage to a deeper level with the Aotearoa, New Zealand focus conversation. My practice as a pre-service teacher, teacher, leader and mentor, shaped and further developed within the context of the early childhood field in Aotearoa, New Zealand. My practice was influenced and shaped by the Aotearoa, New Zealand early childhood curriculum document Te Whāriki (Ministry of Education, 1996). I have more connections and relationships within the infant and toddler and early childhood teacher education Aotearoa, New Zealand context and participants, than with the Australian contexts and participants. Particularly as the participants, traverse different states and territories within Australia and each state and territory in Australia has their own education department, policies and rules. Elaboration of this point occurs later in the thesis when I address the socio-historical contexts for the early childhood care and education field and early childhood teacher education.

Before the two focus conversations took place, I considered the differences between the participants in the two groups. I was aware that participants who are friends or acquaintances who are involved in focus conversations can, "possess tacit knowledge about one another that allows them to communicate without fully articulating assumptions and context" (Stewart et al., 2007, p. 34). I was aware that there was a different level of connection and comfort with and between the participants in Aotearoa, New Zealand than in Australia. To aid myself to understand this difference I wrote a research journal entry called 'The differing experiences for me between the two focus conversations'.

Nonetheless, as the researcher, it was important that I recognised that the kind of information gleaned from these participants is very different to the information gathered from participants who are strangers to one another. With respect to this issue, in particular, I noticed a clear difference between the two focus conversations. In one of the focus conversations, the participants were much more familiar with each other. The participants showed they were able to share information very quickly, and confirmed Carlile's (2004) notion of the syntactic boundary or quick transfer, as they

used shared discourse much more easily than participants in the other focus conversation. In the other focus conversation, the majority of the participant discourse was shared, but there were some situations where the semantic boundary and a translation approach was apparent as they did not have the level of shared knowledge that the other group had (Carlile, 2004). I will return to this point later in the thesis when I consider the socio-historical contexts for practice.

Some of the limitations in engaging in the focus conversations were that it could be challenging the facilitator to keep track of all of the different points made by participants. This was particularly challenging when participants spoke at the same time.

The biggest limitation to this thesis was that as the research is taking place in two countries and in order to keep costs to a minimum, I was unable to bring all of the participants together. I had originally hoped to be able to bring all of the six participants together to engage in a focus conversation.

As the facilitator of the focus conversation, I was aware that there are consequences due to my presence within the group. My presence as a facilitator could possibly "create an atmosphere of artificiality and potentially inhibit the free-flow of discussion" (Stewart et al., 2007, p. 35). What I did to minimise this possibility was to refrain from being a strong voice within the focus conversations by engaging in less commentary.

At times throughout the focus conversations, mostly during the beginning of the Australian focus conversations, I found there was less free-flowing discussion. On reflection, this was due to the group needing time to familiarise themselves to feel free to discuss. As the focus conversation progressed, I was aware that this became less of an issue, and the conversation flowed naturally. This was not an issue in the Aotearoa, New Zealand focus conversation, as the participants were more familiar with one another. The four of us travelled together in one car to get to the venue for the focus conversation. The car was a prime location for, 'warming up the conversation'.

One strategy that I took to alleviate some of the issues raised in this chapter related to focus conversations was to establish rapport with the participants through the individual face-to-face interviews. I achieved this by putting effort into listening to the participants in their individual interviews. This gave them an opportunity to talk about a major part of their lives that no one ever discusses. The individual interview

especially helped to develop a sense of rapport between participants and myself who were previously unknown to me or were only acquaintances.

4.6 Data Analysis: General Principles and Methods

In this section of the thesis, I describe the process of ascertaining the most suitable procedures in order to analyse this research, and I integrate literature related to the data analysis used. The data analysis conducted in different stages and through a range of means required processes to collect and managing data, and then processes for analysing the data as explained in this chapter.

4.6.1 Management of data

The first procedure I engaged with in the process of coding and categorising the data began with listening to the audio files from the sound recorders used in the interviews. I transcribed all of the interview and focus conversation data myself and, as I listened to these audio files, I made notes to myself in my research diary whenever there was something I noticed in the interviews that I found particularly interesting. I created a folder on my password protected ACU laptop titled *Interviews* and named each file by using the participants' initials, *II* as a code for individual interview and the date of the interview. I formatted the transcripts to have a large space on the right-hand-side of the margins and a smaller space for writing on the left-hand-side with each page numbered and each line numbered. I printed hard copies of the transcripts. These hard copies were securely stored, in locked cupboards, in locked offices on ACU premises in Melbourne.

The focus conversations' transcripts were organised and formatted in a similar fashion, with each file name featuring FC as a code for focus conversation and either "Aus" or "NZ" as well as the date of each focus conversation. Transcribing the sound recordings verbatim was challenging at times, particularly in the focus conversations as there were many times when two participants would speak at the same time. I was very thankful that I had had the foresight to organise to use two sound recorders at opposite ends of the table in the focus conversations. Having two sound recorders meant that I was able to hear quiet comments and asides that participants made, and able to determine what each participant said when they spoke simultaneously.

4.6.2 General processes of data cleaning and reduction

I made sure that there were no spelling mistakes and in the transcripts and looked for any other errors that had occurred whilst transcribing. After transcription concluded, I sent the transcripts to each of the participants for accuracy checking. Most of the participants made no changes. Some participants made minor changes, and one participant made substantial changes to the transcripts. I completed the changes as requested and sent the revised transcripts back for each participant's final approval.

The participants confirmed that they were happy with the final transcripts. I printed copies of the transcripts for re-reading. After re-reading the transcripts a couple of times, I started to make notes in the margins of each transcript. These notes were key concepts and short phrases that occurred to me as I read them. I refer to this process from here on as tagging (Baptiste, 2001).

4.6.3 Validity in qualitative research

Validity is, "another word for truth" (Silverman, 2010, p. 275) and can be interpreted as, "how research findings match reality" (Merriam, 1998, p. 201) in qualitative methodologies. In order to address issues of validity in this thesis, I used a range of strategies whilst engaging with data collection and the data analysis process. Firstly, data triangulation facilitated cross-verification over the range of data collection methods. This was used in order to, "collect information from multiple sources but aimed at corroborating the same finding" (Yin, 2014, pp. 120-121). I also engaged in member checking when sending the transcripts of the interviews and focus conversations to the participants. This provided an opportunity for the participants to add further information, edit the transcripts and check for any errors (Cohen, Manion, & Morrison, 2011). The participants made changes to data as they saw fit, and returned the data to me. I made it very clear from the beginning that as a researcher, I critically reflected upon my identity as both an intimate insider and outsider, throughout the research process. I engaged in peer examination and debriefing when meeting with supervisors to ensure agreement on the conclusions drawn from data analysis.

However, I am aware that in dialectical cultural-historical research, there is a different way of viewing validity. Rather than crosschecking different methods of data collection against one another, validity is more connected to the strength of the researcher in explaining the socio-historical context of the practice (Hedegaard, 2008). In cultural-historical research, Hedegaard (2008) claims that reliability illustrates that,

"one has to conceptualise the projects of the researcher as different from the persons being researched and at the same time conceptualise the researcher as a partner in their activities" (p. 44). Hedegaard's (2008) ideas about reliability and validity connect closely to the role of myself as the researcher in this thesis. I have played a very active part in this research as an intimate insider, contributing to the focus conversations, while simultaneously being an outsider.

4.6.3.1 Triangulation as a strategy to increase validity

Triangulation is a multiple method strategy used to understand a phenomenon in an in-depth way (Denzin & Lincoln, 2011). For example in this thesis the use of information from university websites about infant and toddler curriculum and pedagogy, interviews, checking of accuracy and provocation of quotes used in focus conversations, and focus conversations themselves provided data triangulation. I also verbally shared information with participants in the focus conversations about the data that I had collected, about information on the number of universities that in 2014 had a specific infant and toddler-focused unit. This information about infant and toddler curriculum and pedagogy in units that I shared was unsurprising to the participants. I found that sharing information about the units helped to contribute to discussions about infant and toddler curriculum and pedagogy in universities.

4.7 Data Analysis: Specific Methods

I now explain the specific data analysis methods that I undertook to analyse the data. Data were analysed both progressively and summatively.

4.7.1 Iterative initial analysis of interviews to support the focus conversation

The process of engaging in data analysis was not linear, but instead iterative, and this iterative process meant I was absorbed in continually working through the data strands. As mentioned earlier I printed a copy of the interview, and focus conversation transcripts and made notes in the margins. I engaged in tagging the data using codes on the right-hand-side of the margin. I then tagged the transcripts where I identified the sensitising CHAT concepts that I made note of on the left-hand-side of the margin. After reviewing all of this information, I defined and refined some key categories that were present in the three Australian participants' interviews. I read the electronic transcripts and highlighted the different key quotes that I wanted to use in the focus conversation in Aotearoa, New Zealand.

I identified six key categories and associated these with quotes from the participants. To identify these key categories I made further notes on both the interview, and focus conversation transcripts, and reflected on thoughts that I had on the data and started to form more categories. These categories helped to build more understanding of the focus for this thesis, the work of infant and toddler teacher educators.

I prepared the quotes in a word document with headings for each of the categories that I illustrated with quotes. I included this word document as a backup file within my interview folder on my laptop. I transferred the categories and quotes to a *PowerPoint* document, ready to project in the room, during the focus conversations. I was aware that in the Aotearoa, New Zealand focus conversation that I may not get through all of the six categories, so I started with the categories that I thought would be more relevant to the participants and that could possibly lead to more discussion. I was open to using the six categories in the focus conversation. I was aware it was vital to keep an eye on the time as the participants had other commitments.

After I collected the data in Aotearoa, New Zealand from the participants through the interviews, followed by the focus conversation, I returned to Melbourne and started to transcribe the Aotearoa, New Zealand interviews and later the Aotearoa, New Zealand focus conversation. I commenced analysis of the Aotearoa, New Zealand individual interview data in the same way as I had started the preliminary stages of data analysis with the Australian individual interviews. I wanted to attempt to replicate the style of data analysis as much as I could. I was aware that the data and the contexts were different. However, I wanted to provide similar type of conditions than I had for the preliminary data analysis from the Australian individual interviews that then led to identifying and using the quotes in the focus conversation in Aotearoa, New Zealand.

I discussed my desire to keep things as consistent between the two countries with my supervisor. On her guidance, I decided to respond to the data in the focus conversation in the most relevant way for both the participants and in terms of how the research was progressing. I became aware that keeping the same process would not necessarily help the thesis.

One of the ways that I changed the process of the focus conversation for Australian participants was in how I shared the category titles from the Australian interviews before sharing the category titles from Aotearoa, New Zealand. I then shared the quotes that accompanied the category from Aotearoa, New Zealand. This process

meant that I included more slides in the *PowerPoint*. We first looked at the names of the Australian initial categories, and then looked at the Aotearoa, New Zealand initial themes. We returned to look at the names of the Australian initial categories before continuing on to collectively read the Aotearoa, New Zealand quotes that accompanied the categories.

Sharing the names of the categories between the two countries prompted some interesting discussion. The participants and I engaged in reflection on the differences, comparisons and contrasts in the categories between the countries. I noticed this centred particularly on the importance of the political context in Aotearoa, New Zealand. The discussion that ensued was beneficial to the research as it assisted the participants in the focus conversation to reflect again on their own context as infant and toddler, teacher educators. This occurred by re-connecting the Australian participants to what they had communicated in their interviews several months before. This process also helped the Australian group to connect to the differing context for their Aotearoa, New Zealand colleagues. This process provoked some rich discussion between the participants about the differing socio-historic contexts, though they noticed many similarities to their own context.

In the Aotearoa, New Zealand focus conversation, we only managed to have time to engage with three of the categories when I shared the slides with the quotes. In preparation for the focus conversation in Australia, I made the decision to organise slides with three main categories, for use in the focus conversation, alongside some backup slides with the other categories. The category, *Working in Universities*, strongly echoed across the interviews and focus conversations, not just in Aotearoa, New Zealand, but also in Australia. I went into the Australian focus conversation open to using this slide about *Working in Universities* as a backup slide if needed. As the focus conversation in Australia progressed, I quickly made the decision to use this category as a slide for the participants to comment on. This enriched the conversation as the participants collectively deepened their discussion about contemporary issues about the problematic nature of working in Universities.

The categories used in the Aotearoa, New Zealand focus conversation were:

- 1. The infant and toddler field
- 2. Infant and toddler curriculum and pedagogy
- 3. Working in Universities

The categories that were not included in the Aotearoa, New Zealand focus conversation but were available as backup slides were:

- Graduates
- ACECQA and the policy environment Power/Control/Rules

The four categories used in the Australian focus conversation were:

- 1. The political context
- 2. The siloing effect of PBRF and the research focus of universities
- 3. Relationships
- 4. Working in Universities

The category that was not included in the Australian focus conversation but was available as a backup slide was:

Graduates

4.7.2 In-depth analysis of interviews and focus conversations

After all of the data collected through interviews and focus conversations, I engaged in tagging, labelling, defining, and refining (Baptiste, 2001) as mentioned earlier.

4.7.2.1 Approaches to inductive analysis

I made further notes on both the interview and focus conversation transcripts and reflected on the thoughts that I had on the data and started to form more categories. These categories helped to build more understanding of the work of infant and toddler, teacher educators.

I identified ten categories (see table 4.1) and I looked for several examples of evidence from the data collected to support the categories (Creswell, 2013). I then started to reduce these categories and combined them into the six categories that I later share in the following chapters. I named the categories by either summarising ideas that the participants had expressed. Alternatively, I created categories using direct quotes that the participants shared in the interviews, or focus conversations. I made connections about the focus in this study through the categories identified, and how these linked to literature published, about the work of teacher educators, as well as to issues around status, professionalisation, and infant and toddler curriculum and pedagogy, addressed earlier in the literature review.

In order to organise this information, I started to use raw data grids in *Microsoft Excel* spreadsheets. I used one spreadsheet for the interview data, and one for the focus conversation data. As interview and focus conversation data were produced at different stages in the data collection, the separate spreadsheets were practical. I used the name of the participants along the top of the spreadsheet. Along the left hand side of the *Microsoft Excel* spreadsheet, there were the ten categories I had identified. I then went through the transcripts again and inserted the corresponding line/s of categories identified in the analysis, into the spreadsheet (see table 4.1).

Table 4.1

Raw Data Grid of Categories in Individual Interviews

Name	Dahlia	Ruby	Wendy	Dayna	Susan	Nina
I&T field						
I&T curriculum						
and pedagogy						
Wk in Unis						
Political context						
Silos						
Relationships						
Grads						
Policy environ						
Status						
Professionalisation						

I asked the participants in the interviews and focus conversations to share information about their experiences of working in their respective universities. My intention in asking about their experiences was to understand the contexts and communities they worked in. I attempted to build categories of people, in order to describe the people that the participants understood as contributing to their work communities.

I found the participants guarded when talking about colleagues. The made more general comments about their issues, such as a lack of support from colleagues. If they did mention individuals, it was more likely to be in relation to positive support that their colleagues provided for them in their work. On reflection, this was unsurprising, as they wanted to act ethically and protect their colleagues. Through the process of engaging in interviews and focus conversations, I discovered that half of the

participants experienced colleagues removing, or attempting to remove infant and toddler curriculum and pedagogy from early childhood teacher education programs. However, comments about colleagues typically focused on describing groups of colleagues, who threatened infant and toddler curriculum and pedagogy in early childhood teacher education courses, in favour of commenting on individuals.

4.7.2.2 Approaches to deductive analysis

The set of concepts taken into the analysis and deliberately applied to all data were the CHAT concepts of, rules, divisions of labour, community, artefacts, subject, object, outcome, and contradictions. I was able to identify the CHAT concepts, as they are the sensitising concepts that I had closely examined as a process of building an understanding of CHAT for analysis. I had also been involved as a research assistant in a couple of research projects with my supervisor using CHAT concepts. I found this experience of actively using CHAT helped me to easily identify the concepts.

In order to organise this information, I started to use raw data grids in a similar style to how I had used them with the using in *Microsoft Excel* spreadsheets. I used one spreadsheet for the interview data, and one spreadsheet for the focus conversation data. I used the name of the participants along the top of the spreadsheet. Along the left hand side, there were the CHAT concepts. I then went through the transcripts again and wrote the corresponding line/s that the concept showed through in the analysis (see table 4.2).

Table 4.2

Raw Data Grid for CHAT Concepts in the Focus Conversations

Name	Dahlia	Ruby	Wendy	Dayna	Susan	Nina
Rules						
Artefacts						
DoL						
Community						
Subject						
Object						
Outcome						
Contradiction						

4.7.3 Major themes through aggregating codes and categories

I identified ten categories (see table 4.1) as I described earlier and looked for several examples of evidence from the data collected to support the categories (Creswell, 2013). I began to reduce these categories and combined them into the six themes later shared in the following chapters. I named the themes by either, summarising ideas that the participants had expressed or by using direct quotes that participants shared in the interviews or focus conversations. Information from infant and toddler units in universities contributed to discussions, and the data from the information from universities' units contributed to the theme about infant and toddler curriculum and pedagogy shared in future chapters.

4.8 Leaving the Field

My final contact with the participants as a part of the research was at the time of each of the focus conversations. I am well aware that it is likely that I will see some or all of the participants again given that the field of infant and toddler, teacher education is relatively small.

4.8.1 Maintaining contact and rapport with the participants

I conversed with the participants in the "original Latin meaning of *conversation* as wandering together with" (Kvale, 1996, p. 4), not only because the participants were mostly known to me before the thesis began. In addition, because we will most likely continue a relationship after the research has ended. The interviews and focus conversations will become part of a longer-term set of interactions. Some of the points that came up through the focus conversations reflected the collectively shared histories that many of the participants and I have through our past relationships. I was mindful of future continuing relationships (Davies, 2008).

I advised the participants at the end of the focus conversation that I would be in touch with them for them to comment on and make changes if needed to the focus conversations transcripts. Two of the participants made changes to the focus conversation transcripts, as they were not comfortable with some possible identifying aspects of their comments. This was a process that we had already gone through with their individual interviews. I also let the participants know that I would provide them with a copy of the thesis in full at the conclusion of my PhD.

4.9 Chapter Summary

In this chapter has provided a detailed description of the technical features of my study and explained how I designed the thesis. I introduced the six participants, explained the ethical considerations involved in the process of the thesis, and later ethical aspects considered in the dissemination of the research findings. I shared the positioning of myself as a researcher and the complexity of being both an intimate insider and an outsider to this thesis. I clarified the research methods used and the data analysis for this thesis. This chapter described conducting the research.

In the next three chapters, I introduce the main findings of this thesis and explain the six themes that the process of data collection and analysis formed. In the first chapter, I describe the sociohistorical context of work as an infant and toddler, teacher educator. The following three chapters describe what it is like to work as an infant and toddler, teacher educator in a University in Australia, and Aotearoa, New Zealand in 2014.

Chapter 5

Enduring and Sedimented Contradictions: Ambivalence towards Infants and Toddlers in the Early Childhood Field

5.1 Introduction to the Finding Chapters

This chapter introduces the key findings of this thesis argued across the next three chapters. The following three chapters move from the background concepts presented through the substantive and theoretical literature that was introduced to the thesis in Chapters Two and Three, and from the methodological objectives that were defined in Chapter Four. I now move to concrete examples of what was learned as a result of the research questions of this thesis. The work of this thesis is to understand what this particular group of teacher educators are working on in their work as infant and toddler specialists in universities in Australia and Aotearoa, New Zealand. The purpose of the next three chapters is to articulate the story of this thesis and to illustrate how I have addressed the research aim and questions in this thesis. I return to the research aim and questions for this thesis:

To understand the nature of work as an infant and toddler specialist in early university-based childhood teacher education.

The research questions for this thesis were:

- 1. What does being an infant and toddler teacher educator involve?
- 2. What is the sociohistorical context for their work?
- 3. What is their work directed at?

In the next three chapters, I present the perspectives of the participants in response to the research questions and elucidate which key contradictions the participants experienced in their work.

My core argument is that the participants in this thesis are involved in a series of enduring contradictions that constantly frustrate the expansion of their object of activity as a collective subject, and in turn, their outcome in their activity system. Their outcome of activity in this activity system is high-quality care for infants and toddlers in extra-familial care and education in Australia and Aotearoa, New Zealand.

It was challenging to separate the findings into three chapters in this thesis, as the participants' lived experience was not linear; their experiences were simultaneous. To

address the challenge of simultaneous lived experience, I organised the three findings chapters around the relevant three systems of activity: the early childhood field as a system of activity addressed in Chapter Five; Early childhood teacher education as a system of activity addressed in Chapter Six; and the contemporary university as an activity system addressed in Chapter Seven. This chapter illustrates what I understood to be the participants' movement and inter-penetration across these three systems of activity, how they organised their movement across the systems, and what this meant for them and for the wider fields of early childhood education and teacher education.

Using the conceptual framework of CHAT as an analytical tool, I foregrounded contradictions the participants experienced in their work across the three findings chapters. I explained the consequences of these contradictions, in the working lives of the participants and, how the participants responded to these contradictions through, both psychological and practical 'activity', It was interesting to note the way in which the contradictions drove the participants to attempt to change the tensions they experienced (Engeström, 2014). As mentioned in Chapter Three, CHAT was not used in this thesis as it is commonly used, such as in Engeström's Developmental Work Research (DWR) method (Engeström, 1996), as an interventionist or participatory method to work towards change. The purpose of this research was not to change the system of activity, but to expand the understandings of how this particular group of infant and toddler, teacher educators work.

The identifiers connected to quotes throughout this thesis reference the pseudonym, of the person to whom the quote belongs—from an interview (I), or focus conversation (FC), and the date of the interview or focus conversation.

Chapter Five focuses on long-standing sociohistorical contradictions the participants experienced in their work in the early childhood field. In this chapter, I argue that there are enduring, and sedimented contradictions in the early childhood field, related to an ambivalence towards the presence of infants and toddlers in non-parental care and education.

Chapter Six turns to the nature of early childhood teacher education in universities in Australia and Aotearoa, New Zealand and addresses contradictions the participants experienced in relation to infants and toddlers in early childhood teacher education. In this chapter, I argue that the participants struggled to represent infant and toddler curriculum and pedagogy in early childhood teacher education. This was due to

continual silencing experienced when advocating for infants and toddlers, not only in the early childhood field but also in early childhood teacher education in universities.

Chapter Seven addresses the crisis the participants experienced in their hierarchy of motives in regards to accountability pressures from universities versus academic priorities, contradictions that the participants experienced in their inhabitancy of a subculture between the early childhood field and teacher education in universities. The participants struggled with the contradiction experienced while negotiating the collective rules they had maintained from the early childhood field at the same time as negotiating the individualistic rules from higher education. I argue that the participants use advocacy as a meta-strategy to negotiate the contradictions they experience in their work across three interpenetrating systems of activity.

5.2 Introduction to Chapter Five

In this chapter, I argue that historically practices related to the legitimacy of infants' and toddlers' participation in non-parental care and education continue to have implications for the participants' work, to the extent that ambivalence about their inclusion in the early childhood field has become highly sedimented. I am using the CHAT concept of sedimentation, where Engeström (1993) explains that, "an activity system always contains sediments of earlier historical modes" (p. 68). The present chapter describes what the participants communicated about longstanding contradictions that characterise the early childhood field in Australia and Aotearoa, New Zealand, which I argue serve to maintain this sedimentation of attitudes and practices. The overarching contradiction that the participants collectively experienced was the ongoing ambivalence about the place of very young children in extra-familial care and education. This chapter addresses four contradictions in particular:

- 1. An object/artefact contradiction related to espoused commitment versus funding actually provided to the early childhood field.
- An outcome/division of labour contradiction related to the value of having qualified teachers in early childhood education, but not with infants and toddlers.
- 3. A rule/outcome contradiction related to the low status of infants and toddlers versus goals for high-quality care and education for infants and toddlers.
- 4. A quaternary contradiction of outcome/outcome arising from sociohistorical divides between care and education.

I base my argument within what the participants told me about the sociohistorical context of the early childhood field in Australia and Aotearoa, New Zealand as it relates to infants and toddlers. In doing so, I address the second research question in this thesis, which is concerned with the sociohistorical context for the participants' work. In turn, this highlights the way that improving and changing the infant and toddler field is an object of activity for the participants' work, the focus of the third question in this thesis, which asks what the participants' work is directed at.

5.3 An Object/Artefact Contradiction: Commitment versus Funding

Governments around the world espouse a strong commitment to very young children (Dalli & Te One, 2003; Grieshaber, 2000; Rao & Li, 2009). However, during the research, the participants explained that they felt the espoused commitment from governments — key community members — in particular, was not supported. This claim was made due to a continued absence of funding, which supports and finances policy, research, and in turn, textbooks and other literature related to infant and toddler curriculum and pedagogy. In this context, funding takes on the status of an artefact or tool available to the field. This chapter shares the participants' experiences of an object/artefact contradiction. The participants were committed to their object of activity, which was to teach pre-service teachers to become excellent teachers of infants and toddlers. This contradiction was highlighted to the participants and upheld through espoused commitment versus a lack of funding.

At this point in the thesis, it is important to return to the definition of contradictions used in Chapter Three as "historically accumulating structural tensions within and between activity systems" (Engeström, 2001, p. 137). Many of the contradictions experienced by the participants in this thesis relate to historically sedimented practices in the early childhood field. While collective subjects in activity systems can question and challenge contradictions, they experience in their work, in order for change to arise there needs to be, "collaborative envisioning and a deliberate collective change effort" (Engeström, 2001, p. 137), made by the collective subject in an activity system. This process is followed by the collective subject of participants engaging in expansive transformation, accomplished when, "the object and motive of the activity are reconceptualised to embrace a radically wider horizon of possibilities than in the previous mode of the activity" (Engeström, 2001, p. 137). It is also important to return

to another point made in Chapter Three that the purpose of this study was not to change the system of activity but to expand the understandings of how this particular group of infant and toddler, teacher educators works as a collective subject.

Ruby was frustrated by the espoused commitment from the Aotearoa, New Zealand Government in relation to their response to research conducted by the Prime Minister's Scientific Advisor confirming prior international research (Shonkoff & Phillips, 2000), that the first three years in a child's life are, as Ruby said, "of critical importance":

After all Professor Gluckman has recognised, the prime minister's science advisor saying the first three years are those that are going to be of critical importance later for adolescence. He was saying that by three children are beginning to make their own decisions for themselves. This is critical work, so how are teachers supported in understanding the significance of these first three years? So, you've got the prime minister's advisor, on one hand saying that. On the other a lack of funding because it often does get down to funding for programs (Ruby, I, 01.09.14).

Ruby's awareness of the contradictions she and the other participants experienced was apparent with her question, "this is critical work, so how are teachers supported in understanding the significance of these first three years?" Ruby desired further mediation through artefacts of funding, research, and policy from the Aotearoa, New Zealand government in order to support the claim from the Aotearoa, New Zealand prime minister's scientific advisor that, "the first three years are those that are going to be of critical importance". She desired further funding in order to support teachers to learn more about the important role they have in working with infants and toddlers. However, it is important to note that, despite Ruby's understanding of the contradiction she experienced, this does not mean that she was able to resolve this contradiction at the time of data collection.

Dahlia's story too illustrated what she saw as a lack of commitment from the government in Aotearoa, New Zealand. I understand this to illustrate an example of the historically recursive nature of the failure of the early childhood field to embrace the legitimacy of infant and toddler curriculum and pedagogy:

I was just surfing through some of my publications because somebody had asked me for a reference from an early paper from the 90s and I saw that I had forgotten that way back in 1991 [when] we were also talking about the ratios of infants and toddlers needing to be 1:4. Looking carefully at group size and recommending 1:4 as the minimum [ratio] rather than 1:5. That was a preelection promise in 2008 by the National Government, Paula Bennett [education spokesperson for the conservative National party in 2008] made a promise, but none of it has worked. None of it's been put into place, it's

shocking, and it's disappointing, and it's an indictment of the early childhood policy of this government (Dahlia, NZFC, 03.09.14).

Dahlia's awareness of the recursive historical struggle dates from, "way back in 1991 [when] we were also talking about", challenges in the early childhood field in Aotearoa, New Zealand. Dahlia's recalls her experience of advocating for small group size and ratios in 1991 and how this was an ongoing struggle in the field, despite preelection promises from the incoming government in Aotearoa, New Zealand in 2008. I understand Dahlia's example as illustrating the recursive nature of the object/artefact contradiction experienced by the early childhood field. The commitment espoused by the education spokesperson for the National party at the time, which followed through with no artefacts to support this commitment, is a further example of the struggle the early childhood field experienced. Dahlia's frustration about the recursive nature of this historical contradiction was apparent:

We haven't got there; it is such a long time ago. It feels like we keep arguing the same things over and over again and usually policy follows on from changes in public attitudes. If we haven't yet got it, it's because there still hasn't been the shift in attitudes in the public arena. People don't really understand the importance of the very early years (Dahlia, NZFC, 03.09.14).

Dahlia speculated why there was a lack of change and development in the early childhood field, "it's because there still hasn't been the shift in attitudes in the public arena". An argument consistent with early childhood literature (Dalli & Rockel, 2012; Goouch & Powell, 2012; Lally, 2005; Manning-Morton, 2006; Rockel, 2009, 2010; Stonehouse, 1989). Despite the professionalisation agenda which views teaching as a, "learned occupation requiring preparation and long-term commitment" (Imig & Imig, 2008, p. 890). Dahlia's interpretation of what she sees as change needed in public societal attitudes demonstrated the depth of transformation outside of the early childhood field necessary in order to help support change in the early childhood field and to further the professionalisation agenda of teaching.

Dahlia reflected on the development of empirical research artefacts related to infants and toddlers, predominantly in relation to neuroscience:

We cannot deny that there have been changes, but sometimes I wonder whether those changes are more visible to us because we work in the area. There is more literacy about the importance of brain development; they talk about it more in the media. Yet, it doesn't seem to translate in a swell of public advocacy that would convince policy makers, the ministers. Ministers and thus policy makers because I think it is more ministers and then policy makers because I think the minister is dictating down (Dahlia, NZFC, 03.09.14).

Dahlia was frustrated about sedimented societal attitudes towards infants and toddlers; in CHAT terms the rules maintained by the community (Dalli & Rockel, 2012; Goouch & Powell, 2012; Lally, 2005; Lally, 1995; Manning-Morton, 2006; Rockel, 2009; Stonehouse, 1989). Dayna was aware that over the last thirty years there had been positive changes in the early childhood field in relation to infants and toddlers, in Aotearoa, New Zealand. However, she was also aware that public advocacy was needed in order to continue to convince policy makers and government Ministers of the importance of infant and toddler curriculum and pedagogy. I understand Dahlia to identify changes in public attitude as a catalyst in the shaping and development of early childhood policy. Dahlia's view was that, despite what she saw as contemporary shifts in the early childhood field in the expansion of research supporting the development of infant and toddler curriculum and pedagogy, this had not translated to, "a swell of public advocacy that would convince policy makers". Dahlia identified that she felt that increased public understanding and advocacy would be instrumental in making change for infants and toddlers in the early childhood field.

Dahlia felt deeply challenged by the contradiction perpetuated by the National-led government that the public had less of a say with respect to the government and Ministers and that the government, has more power than they had previously. Smith (2015) recognised similar issues in the early childhood field in Aotearoa, New Zealand from the time that the National-led (conservative) government came into power, during the financial recession in 2008. In 2009, early childhood settings previously employing only fully qualified teachers experienced dramatically reduced funding. Funding reductions meant that only up to 80% of funded staff in any given early childhood setting required a BEd qualification. I argue this government decision is associated with to the deprofessionalisation agenda, which regards teaching as, "a short-term job requiring little preparation and much emphasis on subject matter knowledge" (Imig & Imig, 2008, p. 890). Smith (2015) commented that the previously internationally recognised successes (Moss, 2000) of teacher-led early childhood education in Aotearoa, New Zealand, were stagnant and worsening.

Dahlia was particularly concerned at the level of power held by the Minister of Education (at the time of data collection the Minister of Education was Hon. Hekia Parata). Dahlia reflected on the differences she had observed in the 1980s, whereby she understood that the rule was that the Department of Education worked for the public, as the public employed them. Dahlia articulated her concerns about what she

saw as changes in the way in which policy had previously been driven in the Ministry of Education. Dahlia felt that the rules had changed in Aotearoa, New Zealand, in politics, both through how the government works and, how the government works for the early childhood field:

There's been a change from public service people being public servants to being servants of the minister. In the '80s people talked about being public servants, being employed by the public, for the public. It was like we didn't really think that we were simply working to the Minister's agenda but now every time I am in a ministry forum it's like what does the Minister want? It's not like we as public servants, as policy people are going to advise about what is best. We only advise about what is best if the minister asks us to advise. I think while there is more information out there about the importance of the early years it doesn't necessarily mean that everybody has taken it on board. As a consequence, I don't think that there's been an up-swell in public advocacy to the Ministers. The Ministers aren't convinced (Dahlia, NZFC, 03.09.14).

Dahlia continued to identify an, "up-swell in public advocacy to the Ministers", as lacking, but necessary in order to convince Ministers of the importance of infant and toddler curriculum and pedagogy. She felt this advocacy was key, in order to receive mediating artefacts of funding and policy support, in order to make change for infants and toddlers in the early childhood field. I recognise the complexity of the participants as advocates for infants and toddlers in the early childhood field due the knowledge and experience of negotiating multiple stakeholders in order to move the field forward.

Susan also shared her frustration at the lack of availability of funding related to infants and toddlers in early childhood, specifically, to fund neuroscience research in early childhood education, "I've tried for years and years and years and years to get funding to do some brain development stuff and just not been able to get funding" (Susan, AUFC, 17.12.14). I understand Susan's struggle to obtain an artefact of funding in order to research neuroscience in early childhood education to further demonstrate an object/artefact contradiction.

Despite the object/artefact contradiction experienced by Susan and other participants in this research in relation to espoused commitment and support, Dahlia was not dissuaded in her attempts to access future funding. Instead, I understand Dahlia was driven by the object of her activity to promote infant and toddler curriculum and pedagogy in the early childhood field:

We could try for big grants like that though, it's not as if it's impossible, it's just convincing of funding bodies, like Marsden, that it's a worthwhile project.

In a way the public, despite the fact that families are flocking to early childhood centres with their infants and toddlers to assist them to have the life they want. But the funding bodies aren't convinced that this is a worthwhile problem. I don't know, we're not doing something, or they're not hearing? (Dahlia, NZFC, 03.09.14)

I understand Dahlia's pondering, "I don't know, we're not doing something, or they're not hearing", to further demonstrate the sedimentation of this contradiction of espoused commitment and lack of funding to mediate achievement of this commitment. The participants continually desired funding, as a mediating artefact, as they saw this as providing further opportunities for them to contribute to research that benefitted the infant and toddler field. The continued lack of interest by the early childhood field in infant and toddler curriculum and pedagogy reinforced the limited commitment the early childhood field had to infant and toddler curriculum and pedagogy. In CHAT terms, it is important to note that Dahlia identified key community members such as, the Ministry of Education, as related to the activity system outlined in this research and the influence that these community members have on key funding bodies, such as the Marsden Fund.

5.4 Valuing Qualified Teachers, but not with Infants and Toddlers: an Outcome/Division of Labour Contradiction

The collective subject in this thesis valued having highly qualified teachers working with infants and toddlers, and this was their object of activity. I understand that this value was connected to their outcome of activity of having high-quality care and education for infants and toddlers. However, employing qualified teachers with infants and toddlers was typically not supported by practice in the early childhood field, or by government policy. The Australian government did not see the value of having BEd qualified teachers working with infants and toddlers as they were advised by the Productivity Commission report (Productivity Commission, 2015a, 2015b) released at the time of data collection. The Productivity Commission is the Australian Federal Government's principal review and advisory body on microeconomic policy, regulation, and a range of other social and environmental issues. I understand this in CHAT terms, to mean that the early childhood field and government prioritised three to five year old children in a qualifications-based division of labour.

This secondary contradiction was asserted and maintained by recommendations made to the Australian government at the time of data collection (Productivity Commission, 2015a, 2015b). The recommendation most relevant to this thesis made in the Productivity Commission report included a greater number of educators with minimum-level qualifications, working with children under the age of three, in early childhood settings (Productivity Commission, 2015a, 2015b). As mentioned in Chapter Two, the Productivity Commission's draft report (Productivity Commission, 2014) received considerable backlash from the Australian early childhood community. The backlash was communicated by academics and the early childhood field in the form of submissions challenging the Commission's draft recommendation to lower the level of qualifications required for educators working with infants and toddlers (Degotardi & Cheeseman, 2014; Sims, 2014a). However, the final report from the Productivity Commission released the following year continued to reject the idea that children under the age of three required an educator with a university qualification (Productivity Commission, 2015a).

Dayna believed that the predominant view of ambivalence toward qualified teachers working with infants and toddlers in Australia maintained a contradiction (between her outcome of activity and the qualifications-based division of labour in the field), which suggested that having teachers with infants and toddlers is unnecessary:

The idea of having a teacher with babies just doesn't even circulate around the radar let alone hit it. With the attitudes still out there why would you have a [teacher]. People feeling very much the lowest of the low if they're working with the babies. The visible ones, they're doing fabulous work, but I think they only comprise maybe 20% of what is actually happening out there in the field in New South Wales. Melbourne has got that different tradition; the regulations in New South Wales always covered both preschool and long daycare (Dayna, I, 20.06.14).

I understand Dayna's experience of educators feeling, "the lowest of the low", when working with infants and toddlers, as illustrative of the contradiction that, not only she, but educators in the early childhood field internationally (Fleet & Farrell, 2014; Goouch & Powell, 2012, 2013) experienced in relation to a contradiction between the field's division of labour and its outcome of activity. The notion that, "having a teacher with babies just doesn't even circulate around the radar", reinforces the qualifications-based division of labour, where the lowest-qualified educators, are most likely to work with infants and toddlers.

In Dayna's story of revisiting conversations with colleagues in the early childhood field about having teachers work with infants and toddlers, she described a recent change that has seen some organisations demonstrating an interest in having teachers with infants and toddlers in Australian early childhood settings:

I think individual organisations are starting to recognise the need and importance of it. A number of years ago I wanted to go into [research] in a particular organisation and they were ok with it, but there was a whole lot of negotiation. Finally, we agreed to not go in; their comment was half of the issue is that you're looking for teachers and we don't have teachers in the baby's' room. I recently had a great conversation with the same CEO of that organisation who was so on board with having teachers in baby's' rooms, so there's that real shift in understanding (Dayna, I, 20.06.14).

The, "shift in understanding", described by Dayna, demonstrates an unusual change in the organisation mentioned, that of beginning to prioritise younger children through consideration of having teachers working with infants and toddlers. The shift in attitude mentioned in Dayna's example was the only example provided by the participants, highlighted by the other examples provided in this section of the thesis. Nevertheless, it does suggest, that there was a desire from some people in the early childhood field, to have highly qualified teachers working with infants and toddlers.

Despite Dayna's awareness that attitudes are shifting within some organisations in the EC field, she identified that these attitudes are not the norm in the early childhood field. Dayna was continually challenged by pervasive rules of society that suggest working with infants and toddlers is a low-qualified job:

I think there's a pervasive idea that it's a low-qualified job. Whether that's linked to maternalistic ideas or gender-based ideas, I don't know. If I ask a group of 250 undergraduate students if I had them all in the room and I asked them in their first year how many of you think you would like to be teachers of under-two year old children. If I got five hands going up... (Dayna, AUFC, 17.12.14).

Susan quickly responded to Dayna's hope for five undergraduate pre-service teachers, who would like to work with infants and toddlers by responding, "You wouldn't" (Susan, AUFC, 17.12.14). This led to a shared agreement in the focus conversation, amongst the three Australian participants, who collectively lamented that the majority of the pre-service teachers they taught, would not go on to work with infants and toddlers. The lack of interest of early childhood teachers in working with infants and toddlers, particularly in Australia, was further illustrated by Dayna:

The whole idea of teachers who work with babies, they're such a minority. In [State], we're getting more teachers working with babies, but they're still absolutely a minority, and in other states [in Australia] the idea of teachers working with babies is unheard of (Dayna, *AUFC*, 17.12.14).

In the focus conversation, the Australian participants discussed that the majority of the early childhood teacher education pre-service teachers they taught would be highly unlikely to work with infants and toddlers. For many early childhood teacher education pre-service teachers as Dayna explains, "the idea of teachers working with babies is unheard of". They associated this cultural norm with the lowly status often associated with teachers working with infants and toddlers (Fleet & Farrell, 2014). The Australian participants mentioned that they typically found the majority of early childhood teacher education pre-service teachers, would only be interested in working in preschool or kindergarten settings. They felt this was due to low levels of qualifications requirements for educators, who work with infants and toddlers in Australian early childhood settings, a low-level job with little formal knowledge and qualifications required (Imig & Imig, 2008). Collectively the participants in this thesis understood there to be a prevalent message in society that you did not need to have highly qualified teachers working with infants and toddlers, as supported by the dominant viewpoint communicated in the Productivity Commission report (Productivity Commission, 2015a, 2015b).

At the time of data collection, changes in government funding in Aotearoa, New Zealand had reduced the funding connected with qualified teachers in early childhood education. These changes were implemented by new early childhood policy, managed by a National (conservative) government, which came into power in Aotearoa, New Zealand in late 2008. The conservative government's reversal in 2009 from the 10-year early childhood strategic plan: *Pathways to the Future: Ngā Huarahi Arataki* (Ministry of Education, 2002) begun in 2002, with the aim of having all early childhood education teachers qualified at a Bachelors level in early childhood settings (Smith, 2015), was a source of discussion in the Aotearoa, New Zealand focus conversation. Dahlia's comments illustrated her thoughts that this reversal was more likely to have affected staffing with infants and toddlers, than any other age group in the early childhood field:

Typically, you have 80% of your staff qualified, which is the highest most centres will have now because of the funding. You've still got 20% who are not qualified, and the likelihood is that they will work with infants and toddlers (Dahlia, NZFC, 03.09.14).

However, it was important to note that the desire that Dahlia expressed for all teachers being fully qualified in early childhood settings is frequently not the reality in the international early childhood field, particularly within Australia. This was because in

order to attract funding provided by state governments for licensed kindergartens or preschools in Australia, services must have a BEd qualified teacher in the preschool or kindergarten classroom, not with infants and toddlers (Sumsion, 2007). Kindergarten or preschool classrooms were therefore given priority when there is a limited supply of fully qualified teachers in a service. Dahlia's example was another illustration of the contradiction between the early childhood field's desire for teacherled early childhood education and the lack of teachers working with infants and toddlers.

Dahlia's speculation on why the majority of unqualified educators typically work with infants and toddlers explained what she understood to be a pervasive rule towards educators working with infants and toddlers. "It's likely because the attitude is that you don't need to know very much" (Dahlia, NZFC, 03.09.14), echoing the deprofessionalisation agenda (Imig & Imig, 2008). Dahlia had made a commitment to challenge this dominant rule in her work as a teacher educator. Her advocacy for intellectual rigour for infant and toddler teachers was clear. "I think the people that teach infants and toddlers have to be strong intellectuals as well as people who are good with people" (Dahlia, I, 28.08.14). I argue that Dahlia attempted to reinforce her object of activity by desiring highly qualified teachers to work with infants and toddlers, through her commitment to supporting infants and toddlers.

However, if early childhood settings have the opportunity to have all BEd qualified teachers if early childhood settings can put a BEd qualified teacher with infants and toddlers, they are less likely to (Rouse et al., 2012). Dayna perceived that the Australian Children's Education and Care Quality Authority (AECECQA) perpetuated this inadequacy by requiring meagre proportions of infant and toddler curriculum and pedagogy and practicum in Australian early childhood teacher education qualifications. Her perception of this inadequacy was based on her knowledge of the high-number number of infants and toddlers enrolled in early childhood settings at the time of data collection (Australian Bureau of Statistics, 2015; Education Counts, 2015; OECD, 2015).

ACECQA was established in 2012 as a new national agency to engage in regulation and assessment of early childhood services and qualifications in Australia (Goryl, Neilsen-Hewett, & Sweller, 2013). Dayna found, what she perceived as a lack of support from a member of the community in the activity system—ACECQA, confronting:

When you've got bodies like ACECQA, who set the rules for teacher education saying you need 80 days of prac [practicum], only ten have to be with babies. That's a huge problem, I was appalled. I thought hold on a sec, we're actually talking about 40% of the age range of nought to 5, and you're saying that 12% of the prac, only 12% of the prac. Their argument was, in a lot of places you don't have to have teachers with babies. You don't have to have teachers in long daycare. They're supposed to be the people who are advocating for decent qualifications (Dayna, I, 20.06.14).

Dayna understood ACECQA's lack of interest in raising the amount of infant and toddler curriculum and pedagogy and practicum in early childhood teacher education in Australia despite the growing number of infants and toddlers in early childhood settings, to be illustrative of their lack of commitment to having teachers working with infants and toddlers. "They're supposed to be the people who are advocating for decent qualifications". In further stating, "That's a huge problem", Dayna made note of the tension, she felt within this contradiction between her outcome of activity and the division of labour from the early childhood field. I understand Dayna's frustration as illustrating the value she placed in practicum, as a sub-system within early childhood teacher education, in the development of highly qualified early childhood education teachers. Dayna explained that the teacher registration bodies typically allocate the majority of practicum hours for pre-service teachers to gain experience with children in preschool or kindergarten settings. Therefore, I argue Dayna's perspective of the lack of involvement that pre-service teachers have with infants and toddlers in their practicum experiences further illustrates this outcome/division of labour contradiction. Dayna perceived this as a disparity between the rule with respect to experience with infants and toddlers in the practicum (12% of allocated time) versus the number of infants and toddlers in early childhood settings (40% of enrolments).

5.5 A Rule/Outcome Contradiction: Low Status versus Goals for High-Quality Care and Education

As previously addressed in Chapter Two, difficulties with status and professionalisation have been common in the infant and toddler field, and have been regularly and continually addressed within early childhood literature (Clark & Baylis, 2012; Dalli, 2012; Fleet & Farrell, 2014; Goouch & Powell, 2012; Ireland, 2007; Rockel, 2009, 2010; Stonehouse, 1989). A particular argument claims that despite many researchers revisiting issues of status and professionalisation in the early childhood field, the work of infant and toddler teachers, fails to be recognised as legitimate work. In this section, I will highlight how the failure of infant and toddler

teaching to be recognised as legitimate work draws attention to the sedimentation of practices within the infant and toddler field.

This section of the chapter argues that participants understood there to be a rule that the general population consider working with infants and toddlers as being low status. This rule perpetuated by societal attitudes, provided the participants with motivation, for the outcome of activity of the participants, which demonstrates their commitment to high-quality care and education for infants and toddlers. It is important to note that, a key aspect of the participants' commitment to their outcome of activity, included raising the level of professionalisation and status for teachers, who work with infants and toddlers.

Ruby had a strong level of concern about historically sedimented practices occurring with infants and toddlers in the early childhood field. She noted, she was not alone in observing this phenomenon, stating that many of her colleagues shared her concerns about practice with infants and toddlers in the EC field. She discussed how her observations of early childhood teacher education pre-service teachers on practicum confirmed her beliefs about the sedimentation of practices commenting, "Things aren't changing":

Why aren't they changing with infants? I've heard university supervisors sit in their car after they've visited a student and burst into tears because they've been so distressed about what they've seen. You would hope that over 20 years you would have seen some change in status and the career with infants would be improved. There are pockets of brilliant teachers doing wonderful things, and there's still this huge interest like a dry sponge. They want to get more ideas, they want better leadership, and it's not easily available because it is still low status (Ruby, I, 01.09.14).

Ruby's description of the historical sedimentation of practices in early childhood highlighted the failure to bring about change with regard to status and professionalisation, for working with infants and toddlers. Despite the, "pockets of brilliance", she had observed in her twenty years of working in the early childhood field, she acknowledged that practices and status had historically remained sedimented, throughout her time in the early childhood field, consistent with early childhood literature (Carroll-Lind & Angus, 2011; Dalli, 1993, 2010; Goouch & Powell, 2013; May, 1991, 2007; Rockel, 2009, 2013).

An aspect of the struggle for legitimacy for infants and toddlers in the early childhood field in terms of status and professionalisation was the contradiction between what the early childhood field desired, and how, in the participants' view, ACECQA, the governing national body in Australia, failed to assert the importance of infant and toddler curriculum and pedagogy. Dayna captured this contradiction when she discussed the pervasive belief that anyone can work with babies:

I think that there is still this idea that anybody can work with babies and that there's a low-status thing attached. You've just got to be nice, warm and fuzzy. You don't need skills, you don't need qualifications. I think that it's reflected in ACECQA, only requiring a ten-day prac[ticum] for babies; I think there's a pervasive idea that it's a low-qualified job (Dayna, AUFC, 17.12.14).

Dayna found the, "pervasive idea", that it was acceptable for qualification requirements to be low for educators who work with infants and toddlers confronting. Dayna not only recognised these pervasive attitudes from the early childhood field but also felt this message was upheld and reflected in requirements from ACECQA, "only requiring a ten-day prac[ticum] for babies". Debates in Australia amongst practitioners, about the most suitable qualifications, (including debates around levels of both theoretical and practical knowledge and experience) for educators in early childhood settings remain unresolved (Lyons, 2012). This has been a recursive historical issue. Stonehouse (1989) referred to confusion in the Australian early childhood field about the most suitable qualifications for educators in early childhood settings. The greater likelihood of educators with the lowest level of early childhood education qualifications working with infants and toddlers is a further example of the failure to assert, defend, and anchor the place of dedicated infant and toddler curriculum and pedagogy in the early childhood field.

Dayna identified the contradiction between the espoused commitment to very young children and high-quality care and practices that undermine this commitment, such as the lack of cultural artefacts in the form of empirical evidence related to infants and toddlers:

We have the lowest status of all [in] education; somehow, it's been linked to age. But I would argue that as a profession we're also doing that to infants and toddlers. If you look at the textbooks that come out if you look at the journals. You do a count of how many journal articles, how many textbook chapters. We're getting better, the profile is being raised, but then you get people who come out and go well an intelligent person can then read this stuff and then translate it to infants and toddlers. If people say oh you can read a book on high school teaching and translate that into early childhood, we'd be up in arms. But we still do that as a profession to infants and toddlers. I don't think that's good enough. I think that we've got to wake up to ourselves and say we're actually doing the same (Dayna, AUFC, 17.12.14).

Dahlia's consciousness of the contradiction between her commitment to high-quality care and the lack of status for infants and toddlers was illustrated by her awareness of the continual lack of scholarly artefacts related to infants and toddlers in education. Her comment, "do a count of how many journal articles, how many textbook chapters", was telling. Carroll-Lind & Angus' (2011) report on the effects of childcare in nonparental care and education settings on infants and toddlers in Aotearoa, New Zealand, noted, a similar lack of empirical research related to infant and toddler curriculum and pedagogy. Dayna understood that the rule of low status for infants and toddlers was maintained by the early childhood field and that, "we still do that as a profession to infants and toddlers". In CHAT terms, I understand Dayna's awareness of the lack research artefacts related to infants and toddlers in early childhood, to illuminate sedimented practices in the early childhood field. However, despite sedimented practices identified by Dayna, I see Dayna and the other participants' commitment to engaging in research and publishing about infants and toddlers in early childhood education as, buds or shoots, growing opportunities, (Engeström, 1993) for the future of infant and toddler curriculum and pedagogy. Alongside are opportunities for the professionalisation of teaching, as a learned profession (Imig & Imig, 2008). Engeström (1993) makes the point that, "an activity system always contains sediments of earlier historical modes, as well as buds or shoots of its possible future" (p. 68). As Dayna decreed, "we've got to wake up to ourselves".

It was interesting to note that Dayna's initial awareness of the lack of representation of infants and toddlers in early childhood research literature was highlighted when she was undertaking her Master degree. "I would open whole textbooks about early childhood education and not see one reference about working with babies, or whole textbooks on play, and see nothing about under two year olds. I thought these children are invisible" (Dayna, I, 20.06.14). Dayna's consciousness of the lack of infant and toddler curriculum and pedagogy, in both research and practice literature, as artefacts available to the early childhood field, aided in building her passion towards contributing to the early childhood field. "That's when the passion started to be ignited in me, and I thought, I'm going to involve myself here with this" (Dayna, I, 20.06.14). I recognise this as an example of buds or shoots for future opportunities (Engeström, 1993). Dayna's commitment to involving herself in research related to infants and toddlers in early childhood education was further echoed in Wendy's commitment to advocating for the participants' collective outcome of high-quality care and education,

and increased status of infants and toddlers, through publishing as her form of advocacy. "My pen is my sword" (Wendy, NZFC, 03.09.14).

Dayna made a strong commitment to challenging the rule of low status for infants and toddlers in early childhood education and to publishing her research about infants and toddlers. In challenging this sedimented practice, Dayna was attempting to create buds or shoots for opportunities for the future of infant and toddler curriculum and pedagogy, through her contribution of research artefacts related to infant and toddler curriculum and pedagogy (Engeström, 1993). Dayna's awareness of the lack of early childhood-related infant and toddler empirical and practice-focused artefacts supported her, "passion to be ignited". Dayna also illustrated sedimented practices in the general education field that the early childhood field had challenged when attempting to achieve higher status in the field of education:

We've been jumping up and down about for a long time with the general education field. We're still doing that with infants and toddlers and that impacts on professionalisation. That impacts on professional status when infants and toddlers are still not quite invisible, I wouldn't say that anymore, but they're still kind of put around the corner a little bit. If you're working with infants and toddlers [it] is going to impact on your status. You'll just not feel like you're being represented in the literature in a professional field. So, I think as a profession we need to wake up to that and really start to challenge (Dayna, AUFC, 17.12.14).

I understand Dayna's awareness of sedimented practices—"we're still doing that with infants and toddlers"—in the early childhood field to illustrate a historically accumulating lack of commitment within the early childhood field to embracing infant and toddler curriculum and pedagogy. Not only was Dayna purposely contributing to research literature in order to create artefacts about infants and toddlers, but also, she was bringing the consciousness of this contradiction to her colleagues. "As a profession, we need to wake up to that and really start to challenge."

Ruby also shared her awareness of the contradiction between the rule and the view of teachers working with infants and toddlers as being low status (Rockel, 2013) and her outcome of activity of high-quality care for infants and toddlers:

I think it's very frustrating that it's a low status career for many teachers and it's not just a matter of salary. It's a public attitude to infants who don't have a voice, and despite that, we have made great attempts to change policy only to find they've just hit a brick wall (Ruby, NZFC, 03.09.14).

Ruby's frustration in response to this rule/outcome contradiction was not only related to the status of a career in working with infants and toddlers—"it's not just a matter of

salary"—but also related to the invisibility of infants and toddlers in society and the early childhood field. The advocacy that Ruby and the other participants engaged in for infants and toddlers was, paradoxically, a source of frustration to them as there was a sense that they had, "just hit a brick wall", in making changes for infants and toddlers in regards to early childhood policy.

5.6 A Quaternary Contradiction between Outcome and Outcome: Sociohistorical Divides between Care and Education

I have argued so far in this chapter that the struggle to legitimise teachers working in infant and toddler care and education is a historically sedimented practice in Australia and Aotearoa, New Zealand. As outlined in Chapter One, care and education for infants and toddlers was initially provided in both Australia and Aotearoa, New Zealand with a charitable and welfare focus, for single parents who needed care for their children while they worked (Brennan, 1998; Elliott, 2006; May, 2013). In this research, the six participants spoke about the resulting sociohistorical context of a divide between care and education, in each country, and, how they had observed this divide had developed over time in the early childhood field.

The term quaternary used in this chapter to describe a particular type of contradiction, as outlined in Chapter Three. Quaternary contradictions are a consequence of an interaction with another system. In the participants' work, they were interacting with and negotiating three systems of activity: the early childhood field; early childhood teacher education; and the university.

5.6.1 The care and education divide in Aotearoa, New Zealand

Wendy described her awareness of the care and education divide in early childhood at the beginning of her career as a teacher in the 1980s in Aotearoa, New Zealand. Initially, Wendy worked with infants and toddlers in the mid-1980s; later she moved from working in childcare to working as a kindergarten teacher:

It was in the early to mid-1980s when I graduated from teachers college with a two-year kindergarten diploma for nice ladies as it was in those days. When I graduated in those days there was a very strong demarcation between childcare work, and it was called work, and you were a worker. We had separate unions, and I recall going to a Workers union where I was quickly encouraged to see and respond to the huge influence of politics on what we did in ECE. This was an era of enormous professional and personal growth for me, but in the end I swapped from childcare to kindergarten, which was seen as a much more professional domain (Wendy, I, 29.08.14).

Wendy described the divide between childcare and kindergarten in Aotearoa, New Zealand in the 1980s in terms of the, "very strong demarcation between childcare work". The beginning of her career in early childhood education in the mid-1980s "was an era of enormous professional and personal growth for me", moving from childcare work to working as a kindergarten teacher, "which was seen as a much more professional domain". Wendy shared the level of prestige associated at that time in the early childhood field in working as a kindergarten 'teacher', rather than as a childcare 'worker':

I was very keen to get a kindergarten job. I also came from a teaching family and had my father telling me that I needed a proper career. There were no jobs in kindergarten when I graduated. It was very competitive and perhaps for that reason [it was] also seen as more prestigious. When a job came up at the university nursery working with children from birth to three [years of age] I took it. I was fortunate to get that job as it allowed me to continue my studies and tutoring, and I ended up working there for that year. But I do have to say that when the kindergarten job came up, I left after that year to go to kindergarten where the so-called real education took place. How wrong I was (Wendy, I, 29.08.14).

Wendy experienced the division between care and education in education initially in the 1980s through the competitive nature of achieving a job as a kindergarten teacher. "Perhaps for that reason [it was] also seen as more prestigious". In Wendy's case, the division between care and education also existed outside the early childhood field, in the form of pressure from her family of teachers, advising her that she, "needed a proper career". Wendy's family's views were typical of the majority of views held at that time, categorising working in childcare with infants and toddlers, as being lower status, than working as a kindergarten, or preschool teacher (Bussey, 2012; Chesters & Baxter, 2011; Dalli, 1993; Dalli & Rockel, 2012; Elfer & Dearnley, 2007; Goouch & Powell, 2012; Kane, 2008; Lally, 2005; Rockel, 2010; Sims et al., 2002; Stonehouse, 1989). This societal view offers an example of the deep-rooted and historical divide between care and education (Cooper & Royal Tangaere, 1994; Dahlberg & Moss, 2005; Dalli & Meade, 2010; Elliott, 2007; Wangmann, 1995). This societal view, maintained by Australian government policy, reinforces the care and education divide, by providing a higher level of funding for early childhood qualified teachers to work in preschool programs, rather than with infants and toddlers (Tayler, 2011).

Wendy acknowledged the enticement she experienced in the 1980s of the higher status role of the kindergarten teacher in Aotearoa, New Zealand:

I got kind of fooled into that better working conditions, higher pay, professional professionalism, prestige, societal focus. But also the fact that there was no way we had to talk about our caring work within the educational domain – at least I didn't know how to do it even though I could see from the outset how vital it was to learning (Wendy, I, 29.08.14).

Wendy's description of her career in the mid-1980s in Aotearoa, New Zealand illustrated the divide between childcare and kindergarten in early childhood, despite extensive advocacy occurring in the early childhood field at the time, instigated by strong advocates and the union movement. Wendy explained that at that time in Aotearoa, New Zealand there was little recognition of the value and importance of care for infants and toddlers in early childhood education settings, "there was no way we had to talk about our caring work within the educational domain", despite her view of the vital role that care plays in education. I argue this lack of recognition is due to the historical ambivalence of the presence of infants and toddlers in early childhood education settings, specifically childcare. Understandings of care and its relationship to infant and toddler curriculum and pedagogy have since been investigated in Aotearoa, New Zealand (Bussey, 2012, 2013; Bussey & Hill, 2016; Dalli, Kibble, Cairns-Cowan, Corrigan, & McBride, 2009; Rockel, 2009). I interpreted Wendy's experience as an early childhood teacher in Aotearoa, New Zealand in the 1980s as another example of the early childhood field's failure to recognise the value of infant and toddler programs in early childhood settings. The care and education divide was, in part, upheld and maintained by the cultural norms and rules associated with working as a teacher in kindergarten as being, "more prestigious", when compared with the role then known as being a childcare worker (May, 2007).

The historical separation between care and education has been recognised internationally in early childhood education through the differentiation between teacher education and professionalisation, and also between the clear definition of roles by using terms such as, 'minder', 'worker', 'educator' and 'teacher' (May, 2007). The specific dichotomy between care and education has not been endured by anywhere else in education (Cooper & Royal Tangaere, 1994). After government lobbying from leaders in the early childhood field in the 1980s, as described in Chapter One, reforms were made in early childhood education and Aotearoa, New Zealand was the first country in the world to bring all early childhood care and education settings under the umbrella of education (Moss, 2000).

5.6.2 The care and education divide in Australia

As there are eight states and territories in Australia and both federal and state-run education systems, as described in Chapter One, there have been longstanding variations between types of early childhood care and education settings across Australia. Preschools or kindergartens are funded by state governments, and childcare centres are funded by the federal government. The level of funding provided for early childhood settings that employed a kindergarten or preschool teacher in a licensed preschool or kindergarten program was higher than that provided to services with lower qualification levels, that is, those required for educators to work with children under the age of three (Tayler, 2011). Nina shared her thoughts about states in Australia that she understood to have the strongest care and education divide:

Victoria [state in Australia] was the strongest with the care and education divide. I think it's probably for historical reasons because the councils [local government bodies] ran all of the preschools. So they [childcare and kindergarten] did grow up as two different systems. Sydney had *Sydney Day Nurseries*, and they started looking after the babies of single parents who needed to work. The federal 1972 Early Childhood Education Act [1972 Child Care Act]. I think the word education does not exist anywhere. You first get that turn to start to fund childcare as a form of workforce support. Moving into a human capital type of focus episode rather than a social approach, and that's quite marked in the legislation (Nina, I, 16.06.14).

Nina's example of how childcare and preschool grew up as, "two different systems" in Australia illustrated the strong divide in the early childhood field between care and education. Preschools were initially set up to offer educational programs prior to school for children aged from three to five years of age (Press & Wong, 2013). The artefact Nina referred to is the 1972 Child Care Act (Commonwealth of Australia, 1972), which had been described as a, "critical juncture". in the development of care and education in Australian early childhood history (Logan et al., 2013, p. 84). Nina brought attention to the 1972 Child Care Act (Commonwealth of Australia, 1972) as an artefact that illustrated the historical divide in Australia between care and education, as, "the word 'education' does not exist anywhere" (Nina, I, 16.06.14). I interpreted Nina's identification of the absence of the word education in the 1972 Child Care Act (Commonwealth of Australia, 1972) to further highlight the sociohistorical context and the divide between care and education in the early childhood field in Australia, at the time of the launch of the act (Logan et al., 2013).

Susan was particularly frustrated by the quaternary contradiction evident in sociohistorical divides between care and education, and the refusal by many people,

who work in the early childhood field, and early childhood teacher education, to acknowledge continuation of this divide:

For years, there was a complete refusal to acknowledge that there's a care-education divide. The article that just come out in [journal] recently was actually initially refused because the reviewers said that there's no care-education dichotomy; we don't need to talk about it. People are saying to me, Susan its rubbish talking about the care-education divide. It's gone we don't talk about it anymore. Care is part of education; relationships are part of that, let it go. I'm saying, but I'm sorry if you ignore it, you will go the same way that that has happened in the UK and ten years from now you will look back and say we lost relationships. I've been starting to write on that, and I had a huge fight to get one of my articles published because the reviewers were adamant that the care education divide is old fashioned, we don't need to talk about it anymore, it's a load of rubbish trying to publish about it (Susan, I, 02.07.14).

Susan's experience of denial, "It's gone we don't talk about it anymore", from the early childhood field in relation to the care and education divide was particularly frustrating for her. She experienced this struggle not only in a refusal to discuss the divide between care and education with colleagues but also in her attempt to create artefacts in order to further debate this contradiction. "I had a huge fight to get one of my articles published".

Dayna reflected on what she also saw as a contemporary challenge of the divide between care and education:

I still think that that care-education divide is so strong, it's still there. And my students struggle with it, a lot of people, practitioners, struggle with it hugely, and I think we need to get past it. We need to embrace it; it's an obligation in our role it's actually professional duty. We have a professional duty to care, and not just physically care, but care about (Dayna, I, 20.06.14).

Dayna attempted to get past the care and education divide in her work in the early childhood field by encouraging the early childhood field to, "embrace the professional duty to care". I understand Dayna's strategy to embrace care and education to illustrate Rockel's (2005) argument that, "care and education can be viewed as mutually constitutive. This is based on the premise that there is care in education, and education in care, and one does not exclude the other" (p. 84). I understand Dayna's awareness of the contradiction between care and education, and her attempts to resolve this quaternary contradiction, as further evidence of the sedimentation of practice related to infants and toddlers in the early childhood field in Australia and Aotearoa, New Zealand.

As I listened to Nina, Susan, Dayna, and Wendy's accounts of the division between care and education in the early childhood field, my CHAT orientation led me to be struck by the way their stories collectively illustrated the contradiction between the actual outcomes of the early childhood field and the desired outcomes of the six participants in this research.

My main argument here was that the responses of these participants highlighted a quaternary contradiction between the early childhood field as a whole as a system of activity and the sub-system of infant and toddler early childhood inhabited by collective participants in this thesis.

5.7 Chapter Summary

This chapter has illuminated four themes relating to sedimentation of the early childhood field. I argued that this sedimentation serves to sustain four contradictions that have accumulated historically and continue to be experienced by the participants over their careers as infant and toddler, teacher educators.

While the participant quotes shared in this chapter are individual, it is important to return to acknowledge, in CHAT terms, that the experiences of the participants in this research are understood as those of a collective subject. Labour is a process accomplished by not just one person. Instead, labour is achieved through circumstances, where people are engaged in joint activity, in circumstances, where they are part of a collective group of people, and in a social and collectively articulated way (Leont'ev, 2005). In this study, the aim was to understand the nature of work as an infant and toddler specialist in universities in Australia and Aotearoa, New Zealand. Therefore, the investigation of labour as a collective subject was a key focus.

In this chapter, two of the research questions were addressed in relation to the early childhood field. This chapter explained the sociohistorical context of the early childhood field in relation to the participants' work, and the impact this has made on the direction of their work as infant and toddler, teacher educators.

The following chapter explores contradictions experienced by the participants in relation to their struggle to represent infants and toddlers in early childhood teacher education, in universities in Australia, and Aotearoa, New Zealand as the day-to-day context for their work.

Chapter 6

The Struggle to Represent Infants and Toddlers in Early Childhood Teacher Education in Australia and Aotearoa, New Zealand

6.1 Introduction

In this chapter, I argue that the participants struggled to represent infant and toddler curriculum and pedagogy in early childhood teacher education in their work in universities in Australia and Aotearoa, New Zealand. This struggle took a number of forms. Their struggle was evidenced by the continual silencing the participants experienced when they engaged in advocating for infant and toddler curriculum and pedagogy in early childhood teacher education. The silencing the participants experienced was operationalised through implicit mediation practices (Wertsch, 2007). The silencing of advocacy related to infant and toddler curriculum and pedagogy was enacted by their colleagues and was practiced primarily within negotiation of early childhood teacher education program curriculum and pedagogy in universities across Australia and Aotearoa, New Zealand. In this chapter, I outline a situation the participants described, where the hierarchy of objects of activity for the participants did not match the hierarchy of objects of activity for their colleagues. In this thesis, I argue that the participants' object of activity was to give greater prominence, credibility, and acknowledgment to the needs of infant and toddler curriculum and pedagogy in early childhood teacher education.

In this chapter, I revisited the CHAT concepts of contradiction and sedimentation (Engeström, 1993) in the early childhood field as discussed in the previous chapter. These CHAT concepts were revisited to explain the participants' engagement in advocacy to raise the inclusion and importance of infant and toddler curriculum and pedagogy in early childhood teacher education. The CHAT concepts of explicit and implicit mediation (Wertsch, 2007) were also used to explain the ways in which the participants experienced their colleagues' attempts to remove and reduce infant and toddler curriculum and pedagogy in university-based early childhood teacher education programs. Essentially, Wertsch (2007) describes explicit mediation as what happens in schools as teaching—where something is intentionally introduced into an activity system. Implicit mediation is what happens in everyday life, as it is natural

and related to the language of the activity system. They argued that the everyday life and general viewpoint of the pre-service teachers and the participants' early childhood teacher education colleagues appeared to be that infants were not very important.

In this chapter, it was important to return to a point made in Chapter Three—that I understood the participants' colleagues, in CHAT terms, to be a key group in the community of this activity system. However, for these participants, they also referred to colleagues or community outside of the university. But, in the case of this thesis, and as a primary focus in early childhood teacher education at their universities. The colleagues I refer to typically also worked in the early childhood teacher education programs or universities as systems of activity in which the participants worked. At the time of data collection, the colleagues referred to were at a range of similar and differing levels in relation to years of experience in the early childhood field and early childhood teacher education, qualifications, titles, roles and responsibilities.

I returned to a point made in the introductory section of the thesis regarding commonly used terms; in Aotearoa, New Zealand, discrete units of study were typically referred to as papers or modules. As explained earlier; for the purposes of this thesis, I referred to the term unit, even when a participant quote mentioned the term 'paper'.

This chapter made three arguments in relation to contradictions described by the participants in their struggle to represent infant and toddler curriculum and pedagogy in early childhood teacher education:

- A secondary rule/artefact contradiction: infant and toddler curriculum and pedagogy as a specialised unit versus an integrated birth to five early childhood teacher education program.
- Artefact adaptation as advocacy: working on the artefacts of qualifications and unit outlines as temporary objects of activity as a strategy to advocate for specialised infant and toddler curriculum and pedagogy in early childhood teacher education.
- 3. A quaternary rule/rule contradiction: Infants and toddlers are important, but literacy and numeracy, and therefore preschoolers, are *more* important.

The term quaternary was used in this chapter to describe a particular type of contradiction. Quaternary contradictions are a consequence of an interaction with another system of activity. In this case, a rule in the collective subjects system of activity and a rule in the early childhood field as an activity system. In the participants'

work, they were interacting with and negotiating three systems of activity: the early childhood field; early childhood teacher education; and the university as a system of activity.

In this chapter, I outlined the sociohistorical context of infant and toddler curriculum and pedagogy in early childhood teacher education. In doing so, I addressed the first research question for this thesis, which was to understand what being a university-based infant and toddler, early childhood teacher education specialist involved. I argue that raising the importance and inclusion of infant and toddler curriculum and pedagogy in early childhood teacher education was an object of the participants' activity. This simultaneously addressed the third research question in this thesis, which asked what the participants' work was directed at?

6.2 A Rule/Artefact Contradiction: Infant and Toddler Curriculum and Pedagogy as a Specialised Unit versus an Integrated Birth to Five Early Childhood Teacher Education Program

In this section, I discuss a rule/artefact contradiction. I understand the rule from early childhood teacher education to be that infant and toddler curriculum and pedagogy is adequately addressed in the early childhood teacher education program. This was derived by many attempts from the participants' colleagues to offer a generalised birth to five early childhood teacher education program, rather than specialised infant and toddler units. However, the participants argued the artefacts such as unit outlines that mediated between rule and object of activity were not adequate to achieve their object of activity, which was to give greater prominence, credibility, and acknowledgment, to the needs of infant and toddler curriculum and pedagogy, in early childhood teacher education.

6.2.1 Debates between integrated and specialist units

The participants experienced continual debates with their colleagues around the benefits of integrated curriculum units and the importance of specialist units. In referring to, 'integrated curriculum', I use Beane's (1997) definition of integrated curriculum design, stating that curriculum design should be:

concerned with enhancing the possibilities for personal and social integration through the organization of curriculum around significant problems and issues,

collaboratively identified by educators and young people, without regard for subject-area boundaries (pp. x-xi).

However, for curriculum integration to transpire, Beane argued, that boundaries between subject domains must disappear, and for curriculum to be formed around, "significant problems and issues, collaboratively identified by educators and young people" (Beane, 1997, p. 19). In the case of early childhood teacher education in university programs, curriculum integration decisions occurred before the involvement of pre-service teachers.

The participants collectively agreed there was limited infant and toddler curriculum and pedagogy in early childhood teacher education programs across their universities, and at other universities in Australia and Aotearoa, New Zealand. This claim was reinforced by the first phase of data collection in this thesis, as outlined in Chapter Four, which analysed infant and toddler curriculum and pedagogy across university web pages in Australia and Aotearoa, New Zealand in 2014.

Through the process of analysing information on university web pages (Appendices D and E) about infant and toddler curriculum and pedagogy, in early childhood teacher education programs in Australia and Aotearoa, New Zealand in 2014, I found curriculum and pedagogy related to infants and toddlers was not regularly represented in early childhood teacher education programs in universities. Despite this limited representation, 35 universities identified as providing a BEd ECE teaching degree catering for children birth to age five in 2014.

Five of the six universities in Aotearoa, New Zealand that offered a BEd ECE teaching degree at the time of data collection provided at least one infant and toddler specialist unit in their degree. One university in Aotearoa, New Zealand also provided a second optional infant and toddler unit in the second year of the degree, and another university offered a postgraduate infant and toddler unit. In Australia nine of the 29 universities that offered a BEd early childhood education, teaching degree at the time of data collection offered a specialist infant and toddler unit. One of the universities in Australia offered two infant and toddler units in their early childhood teacher education program, and another university offered a bi-annual postgraduate infant and toddler unit, not on offer at the time of data collection.

Universities that did not offer a specialist infant and toddler unit described a broad program. For example, the one university in Aotearoa, New Zealand that did not offer

an infant and toddler unit stated, "This Bachelor of Teaching (Early Childhood) programme is for people interested in working with children from birth to approximately five years old in early childhood services". One of the universities in Australia that did not offer a specialist infant and toddler unit stated on their website, "Bachelor of Education (Birth to Five Years) prepares effective future practitioners employed in the birth to five years education sector." Universities in Australia and Aotearoa, New Zealand, claimed to have infant and toddler curriculum and pedagogy, and, are required to include curriculum and pedagogy related to children from birth to five years of age, by accrediting bodies. In Australia, early childhood teacher education qualifications, accredited by the Australian Children's Education and Care Quality Authority (ACECQA), mandated a minimum of ten days of professional practice experience with children birth to two years of age (often known as practicum or professional placement). It is interesting to note, despite mandatory professional practice experience with infants and toddlers they do not mandate specialised infant and toddler curriculum and pedagogy in early childhood teacher education programs (ACECQA, 2016).

The lack of specialist infant and toddler units in early childhood teacher education programs, in both countries (Appendices D and E) reinforced the participants' claims that, early childhood, teacher education programs do not adequately represent infants and toddlers. Instead, the early childhood teacher education programs analysed emphasised the majority of the program's curriculum, and pedagogy focused on children aged three to five years of age. As infant and toddler curriculum and pedagogy covers the first three years, then early childhood teacher education program, curriculum and pedagogy, should also address the first three years, rather than just focusing on two years from three to five years. This argument was consistent with literature from Aotearoa, New Zealand and Australia that, discussed the dearth of infant and toddler curriculum and pedagogy, in early childhood teacher education (Bussey, 2013; Bussey & Hill, 2016; Carroll-Lind & Angus, 2011; Fleet & Farrell, 2014; Garvis et al., 2013; Garvis & Manning, 2015; Ireland, 2004; Rockel, 2013; White et al., 2016).

However, the struggle for the inclusion and retention of infant and toddler curriculum and pedagogy, in university-based early childhood teacher education was not limited to Australia and Aotearoa, New Zealand, but also recognised internationally. In the US, a national survey conducted in 2004 of all early childhood teacher education

programs that, offered early childhood Bachelor degrees pointed to specific deficits in relation to infant and toddler curriculum and pedagogy. Maxwell, Lim & Early (2006) found that only 49% of the early childhood Bachelor degree programs that, specifically stated that, they included curriculum and pedagogy in their programs related to children aged birth to three years of age, offered a specialised infant and toddler unit within their programs. There has been continuing debate about specialist infant and toddler units, rather than integrated units that cover a broad age range of children in early childhood teacher education programs (Carroll-Lind & Angus, 2011; Rockel, 2013). This debate applies to other marginalised groups in teacher education such as indigenous studies, and children with additional needs and strengths (Kane et al., 2005).

Ruby questioned the lack of knowledge in the early childhood field and early childhood teacher education about infant and toddler curriculum and pedagogy:

How can we be a reflective practitioner when we don't know enough? I have enormous respect for these [infant and toddler] teachers and a lot of disrespect for institutions who have not recognised that there needs to be much more specialised knowledge to support these teachers (Ruby, I, 01.09.14).

Ruby experienced a contradiction between her personal values in which she saw infant and toddler teachers as being committed to their work, and the failure by universities and other tertiary education providers, to recognise the need for specialist infant and toddler curriculum and pedagogy, in early childhood teacher education programs.

Rockel's (2013) research investigating infant and toddler curriculum and pedagogy in early childhood teacher education in Aotearoa, New Zealand advocated for a higher priority for specialised infant and toddler curriculum and pedagogy in early childhood teacher education programs, rather than a more generalised approach addressing children under the age of five. Garvis & Pendergast's recent (2015b) study in Australia found that, despite the generalised embedding of infant and toddler, curriculum and pedagogical concepts across subjects in early childhood teacher education, that early childhood teacher graduands reflected a lack of knowledge about infants and toddlers. The approach of embedding and generalising infant and toddler curriculum and pedagogy into a broad age range was queried by the authors (Garvis & Pendergast, 2015b).

Rockel (2013) and Garvis & Pendergast (2015b) challenged the effectiveness of the prevalent approach in early childhood teacher education of weaving infant and toddler

curriculum and pedagogy throughout units. Ruby similarly questioned university early childhood teacher education programs, as systems of activity that were not achieving the outcome of activity she was working toward in her work—to have high quality infant and toddler care and education. She felt that there was a contradiction, which detracted from her ability to achieve her outcome of activity high quality infant and toddler, teacher education, and that, the scarcity of infant and toddler curriculum and pedagogy artefacts, (such as journal articles, book chapters, books, and DVDs) available, in order to help teachers to understand more about the children with whom they worked, compounded and maintained this contradiction.

Wendy found the approach at her university, which claimed that curriculum and pedagogy related to children birth to five was woven throughout the program, challenging:

The nature of the program here where it is claimed that infants and toddlers' experiences, needs, priorities, developmental specificity and all of the rest are woven throughout the program. I can't teach in every paper, just the way it's structured I have no say in what happens in other courses necessarily (Wendy, 29.08.14).

Wendy and Ruby raised their concerns about the unknown amount of infant and toddler curriculum and pedagogy, "woven throughout", generalised units across their programs. As mentioned earlier in this chapter, Ruby was concerned about the lack of breadth of information and artefacts relating to infants and toddlers that was shared in generalised units, stating that, "I had to chop things out but not know how much is covered with this age group" (Ruby, NZFC, 03.09.16). Wendy was also aware of her limitations to address the issue and include infant and toddler artefacts, due to workload constraints making it impossible for her to, "teach in every paper".

6.2.2 Still not enough infant and toddler curriculum and pedagogy

Susan saw the notion of subsuming infant and toddler curriculum and pedagogy into a generalised birth to five early childhood teacher education program as a risk in early childhood teacher education programs:

I think that there's the risk in our course as in lots of courses that the infant and toddler stuff would be subsumed into birth to whatever and people would feel that that was ok, and would completely overlook the special infant and toddler stuff (Susan, I, 02.07.14).

The lack of awareness of infant and toddler curriculum and pedagogy and silencing of this curriculum and pedagogy in early childhood teacher education was of particular concern for all participants in this research. They struggled to advocate for infant and toddler curriculum and pedagogy due to their concern that generalised early childhood teacher education units and programs would as Susan said, "completely overlook the special infant and toddler stuff". Colleagues who engaged in implicit mediation practices through the dominance of the generalised approach to early childhood teacher education and a silencing and lack of interest toward infant and toddler curriculum and pedagogy, continually hampered their advocacy efforts.

Ruby, one of the Aotearoa, New Zealand participants in this thesis, argued that she felt there was inadequate representation of infant and toddler curriculum and pedagogy in early childhood teacher education. When asked about other early childhood teacher education colleagues and whether they would cover content related to infant and toddler curriculum and pedagogy in their units she answered:

Some do, but I'm not in favour of an integrated course, because A, the expertise of the lecturer may not be in the first years. B, the assignments don't necessarily cover, so we're not assessing the learning of the students in these early, first years. C, unfortunately, the literature and the research base is often inadequate in this area in the course. Particularly as the subject domain is the focus, not the learning focus... In order to look at things in a broader perspective in this area of understanding how infants learn and develop you can't just have one session. They might have been away that day, so if you don't have assignments that have assessed the students' learning in that area. Well, how are you going to know whether the degree itself is appropriate for people who work with infants? All you are doing is assuming that there's a basic set of learning outcomes that have been approved that people are teaching to (Ruby, I, 01.09.14).

Ruby was aware that the early childhood teacher education, curriculum and pedagogy that pre-service teachers were taught at her university was primarily focused on the research and practical experience that her colleagues had in working with children aged three to five years. As expressed by Ruby, "unfortunately the literature and the research base is often inadequate". Zaslow, Tout, Halle, Whittaker, & Lavelle's (2010) literature review also refers to a inadequate research base on infant and toddler curriculum and pedagogy. At Ruby's university, as the majority of her colleagues had only researched and worked with children between the ages of three and five years, the curriculum and pedagogy in the early childhood teacher education program was typically focused around this age group, rather than infants and toddlers. The issue of a predominantly preschool focus in early childhood teacher education programs is also reflected in international literature (Fleet & Farrell, 2014; Garvis et al., 2013; Ray et al., 2006). Alongside the complexity of a recent trend for many early childhood teacher

education programs combining with primary degrees and primary curriculum and pedagogy dominating. Ruby was concerned that there was a lack of infant and toddler curriculum and pedagogy in traditional curriculum domain units such as science and literacy. Ruby questioned whether the degree at her university would prepare teachers to work with infants and toddlers, "How are you going to know whether the degree itself is appropriate for people who work with infants?"

Dahlia explained in her interview how she understood her university addressed infant and toddler curriculum and pedagogy at the time:

There are other courses which include coverage of infant and toddler material. For example, courses on art, literacy, human development, children's rights, advocacy, and professionalism. All of these [units] have a component that refers to infants and toddlers. It does depend on the interests and focus of the lecturer (Dahlia, I, 28.08.14).

Dahlia was aware that some of her colleagues in early childhood teacher education included some infant and toddler curriculum and pedagogy in their units. However, she was conscious that this was entirely dependent, "on the interests and focus of the lecturer", which echoed Ruby's concern that, "the expertise of the lecturer may not be in the first years". If their colleagues did not have a particular interest or experience in working with infants and toddlers, then the participants found that it was more likely that the visibility of infant and toddler curriculum and pedagogy would be limited.

This experience was repeated by Nina who had a very similar story to tell with respect to how infant and toddler curriculum and pedagogy was included in her university's early childhood teacher education program:

Those generic ones [units], languages and literacies is meant to be from birth through and the same with inclusive education, what does it look like for a sixmonth-old? You are meant to spend so many weeks across on the birth to two. But that depends on the lecturer. The woman I work with in [domain focus] has a strong focus because she actually had long day care and teaching experience before she did her PhD (Nina, 16.06.14).

The phrase, "meant to", in relation to infant and toddler curriculum and pedagogy content in early childhood teacher education programs, recurred many times throughout Nina's story. The other participants struggled with notion of, "meant to", at their universities as well. I understand the phrase, "meant to", as Nina's attempt to bring this contradiction to consciousness; that the early childhood teacher education program stated coverage for birth to five, but that colleagues repeatedly silenced specific infant and toddler curriculum and pedagogy content and units. The

participants, who had very few colleagues with interest or experience in working with infants and toddlers, consistently made efforts to bring this contradiction to consciousness with those colleagues, but the inclusion of curriculum and pedagogy related to infants and toddlers in early childhood teacher education programs remained an ongoing struggle.

Ruby shared her concern about the lack of collegial discussions where she could learn about what was included in other units:

Our institution isn't particularly multi-disciplinary, and that's my concern that there are huge gaps. For example, when I design the course [infant and toddler unit], what do I leave out? You can only put so much in because of the limited time, and one of the things that I talked about in my interview was the lack of discussion collegially. I had no idea what was going into those other papers. For example, I don't cover language, but I do have a bit of an idea that early language is covered, but not in the way that I would cover it if I had more time with Trevathen's [a Professor specialising in brain development and infant communication] work on musicality etcetera. That was a disappointment to me that I had to chop things out but not know whether for example in a music paper or the arts, how much is covered with this age group (Ruby, NZFC, 03.09.14).

Ruby's concern about her lack of awareness about the inclusion of infant and toddler curriculum and pedagogy in the generalised early childhood teacher education units at her university was apparent, "that's my concern that there are huge gaps". Her concern was focused on the limited amount of time included in generalised units to cover a wide breadth of infant and toddler curriculum and pedagogy and she questioned how much infant and toddler curriculum and pedagogy was included in other generalised early childhood teacher education units.

The struggle the participants experienced in relation to limited infant and toddler curriculum and pedagogy in early childhood teacher education supports the argument I made in earlier chapters related to specialised qualifications. The late development of qualifications for educators that work with infants and toddlers in Australia and Aotearoa, New Zealand demonstrated the sociohistorical struggle to include infant and toddler curriculum and pedagogy in early childhood teacher education. A significant explicit rule noticed by all of the participants was that their university claimed to offer an early childhood teacher education program that covered children aged birth to five years. However, despite rising levels of infants and toddlers in early childhood settings (Australian Bureau of Statistics, 2015; Dalli, White, et al., 2011; Education Counts, 2015; OECD, 2015), they were aware of the contradiction that infant and toddler

curriculum and pedagogy was largely inadequate across the units that offered generalised birth to five curriculum and pedagogy.

6.2.3 Infant and toddler curriculum and pedagogy continually sidelined

Wendy was challenged by implicit mediation (Wertsch, 2007) practices imposed by colleagues that continually silenced infant and toddler curriculum and pedagogy in early childhood teacher education programs. In CHAT terms, artefacts such as assessment tasks acted as mediational means within early childhood teacher education. In her own university, she confronted regular practices in units to set assessment tasks for pre-service teachers encouraging the preclusion of focusing on infants, toddlers or young children:

If you're going to look at maths and infants, there's not much out there. It said in the assessment outline "you can look at infants, young children, or toddlers". The students all chose young children. I said, "why was that?" It was because we gave an out, we gave an option, and once again infants and toddlers were sidelined (Wendy, 29.08.14).

Wendy struggled with the contradiction that this implicit mediation (Wertsch, 2007) practice of continually giving pre-service teachers a choice between the three age groups perpetuated in unit outlines. I argue that the pre-service teachers experienced this choice as implicit mediation practice in their everyday experience of the early childhood teacher education program. While Wendy's colleagues may have been attempting to follow the rule of including infants and toddlers in units, this practice actually reinscribed the issue of the lack of infant and toddler curriculum and pedagogy research artefacts when pre-service teachers attempted to seek them out to use in assignments. For example, pre-service teachers who attempt to do their assignments on mathematics with infants and toddlers very quickly learned through implicit mediation that they do not have the mediational means to expand their object of activity, as research about mathematics and infants and toddlers is very limited. Therefore, pre-service teachers learned from unit outlines that it was challenging to represent infants and toddlers in their assessment tasks. Data suggested the exclusion of infant and toddler curriculum and pedagogy is an explicit practice, probably based on the participants' colleagues' historical experience of implicit mediation within the early childhood teacher education field.

Wendy argued that giving an option of the age group to focus on meant, "once again infants and toddlers were sidelined". Offering a choice of infant, toddler or young children in assessments at the early childhood teacher education program at Wendy's

university reinscribed the dearth of early childhood education focused infant and toddler research artefacts. Wendy understood this explicit mediation practice as continually sidelining infant and toddler curriculum and pedagogy through offering a choice of age group to focus on, as this was often not a realistic option for pre-service teachers to choose.

Ruby also struggled with the challenge of the option provided to pre-service teachers to choose between infants, toddlers and young children in assessment tasks:

In so many courses, we're not increasing student's understanding of these first years because there's an option if there's an integrated course for infants, toddlers and young children. To me, that is extremely dangerous because A, we don't have the research necessarily to provide students with that clear option. We don't have the teaching expertise for them to be a true choice. So they'll opt to the big research and teaching base, which is young children [three to four year olds]. We're not assessing their understandings of working with infants (Ruby, NZFC, 03.09.14).

Ruby identified that the gap in research about infant and toddler curriculum and pedagogy did not, "provide students with that clear option". I understood this, in CHAT terms, to be an example of a contradiction between assessment tasks as artefacts and the rule of maintaining an integrated birth to five program. This detracted from Ruby's object of activity—for pre-service teachers to understand infants and toddlers. The lack of early childhood, teacher educators' knowledge, research of and experience of infants and toddlers and infant and toddler care and education settings Ruby identified was also reflected in Maxwell, Lim, & Early's (2006) report, which questioned the lack of infant and toddler curriculum and pedagogy provided by early childhood teacher educators, who were limited in experience of working with children aged birth to four years (Maxwell et al., 2006).

6.2.4 Strategic practices to increase infant and toddler curriculum and pedagogy in early childhood teacher education

The participants described a range of strategies they employed in their work in response to their concerns about depth and coverage of infant and toddler curriculum and pedagogy across their programs. Susan, for example, admitted to, "sneaking in", infant and toddler curriculum and pedagogy in other generalised units when she could. "I teach a third-year unit and a part of that unit is infant and toddler stuff, but it's sort of sneaking in under the radar rather than being formally a dedicated infant and toddler unit" (Susan, AUFC, 17.12.14).

The notion of engaging in stealthy practices in order to include infant and toddler curriculum and pedagogy when they could in their work was a commitment that the majority of the participants referred. I argue that using practice with infants and toddlers as examples from the early childhood field in order to illustrate particular concepts or practices that were being discussed in classes was a particular advocacy strategy used by the majority of the participants. Dayna included infants and toddlers in whatever she was talking about; "I make a conscious decision that whatever I am talking about, infants and toddlers are present in that lecture or in that curriculum and pedagogy that they get. They have readings that are infant and toddler-specific" (Dayna, I, 20.06.14). Using infant and toddler-focused artefacts of video, photographic images, and readings in their work were further strategies all of the participants described themselves using in order to stimulate discussion and reflection about infant and toddler curriculum and pedagogy.

Wendy shared another strategy to advocate for infants and toddlers she had recently used in a general early childhood publication she had published:

Almost all of the examples in this book are of infants and toddlers. I say at the beginning of the book, I make no apology because how many books do we read on early childhood which are entirely about three and four year olds? So, there are a few a couple of examples of three and four year olds, but this book is almost entirely about infants (Wendy, I, 29.08.14).

Wendy was aware of the contradiction between official descriptions of early childhood teacher education curriculum and the lack of infant and toddler curriculum and pedagogy, and dearth of curriculum and pedagogy and artefacts related to infants and toddlers in the program. I argue that Wendy was attempting to engage in artefact adaptation to re-mediate the learning of teachers and pre-service teachers in the wider early childhood field and early childhood teacher education field through her book. Wendy's advocacy for infants and toddlers through the artefacts of early childhood teacher education curriculum demonstrated her commitment to challenging the rule and normative position of foregrounding three and four year olds maintained through integrated units. I argue the participants in this thesis were attempting to resolve the rule/artefact contradiction through advocacy. However, despite their advocacy, I recognise that the contradiction, in this case, is bigger than they are.

Nonetheless, they were trying to find a way to negotiate the contradiction rather than to just live with it and try to influence it. Ideally, I recognised the participants would attempt to try to resolve this contradiction, but this contradiction was complex as it

related to the historical trajectory of the early childhood field and early childhood teacher education. I argue that the participants were, 'forward anchoring', (Sannino & Laitinen, 2014) to a time when they will not have to advocate in this way. In this scenario, the forward anchor is early childhood education as a cultural form, where infant and toddler curriculum and pedagogy is valued.

By 'forward anchoring' I ascribe to a term used by Sannino & Laitinen (2014), who refer to a fishing method commonly known as kedging employed by sailors and fishing crew in order to move their boat forward, particularly in tide changes or when the boat needs to move from a tricky situation. The crew throws the kedging anchor into the distance and pulls their boat towards it. This, 'forward anchoring', or kedging is described by Nuttall & Brennan (2016) to be, "used as an alternative to staying fixed in one spot – as a metaphor for agentic work towards an imagined future. This metaphor points to the centrality in CHAT of desired outcomes in motivating collective work" (p. 377). The advocacy strategies the participants engaged in challenged them by casting forward to an uncertain future of infant and toddler curriculum and pedagogy in early childhood teacher education.

I now turn to the next argument of this chapter to explain the participants' attempts to work on particular artefacts in early childhood teacher education programs, as their object of activity, in order to advocate for infant and toddler curriculum and pedagogy in early childhood teacher education.

6.3 Artefact Adaptation as Advocacy

In this section, I discuss the participants' attempts to raise the consciousness of their colleagues through an explicit strategy, through making artefacts such as unit outlines their temporary objects of activity. In doing so, the participants advocated for increased infant and toddler curriculum and pedagogy. I understood this to be both an attempt at consciousness-raising with their colleagues, but also an attempt to re-mediate high status artefacts. Unit outlines are critical artefacts in early childhood teacher education because they are high-status artefacts, as they are omnibus artefacts that contain readings, assessment, as well as curriculum and pedagogy. The participants recognised that unit outlines are high-status artefacts that mediated not only their work but also the work of pre-service teachers in their understandings about infants and toddlers. The participants looked for every opportunity to engage in explicit mediation of the

pre-service teacher's learning with respect to infant and toddler curriculum and pedagogy.

Throughout the period of data collection in this thesis, I became aware that the participants took every opportunity to make key artefacts—namely early childhood teacher education qualifications and unit outlines—the object of their activity, as illustrated by Figure 6.1.

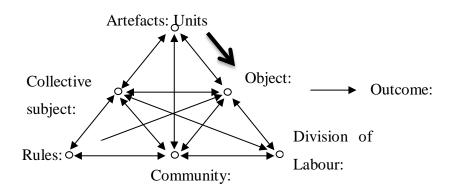


Figure 6.1 Activity system diagram with unit outlines the object of their activity. Adapted from Engeström (2014)

I claim that focusing on artefacts as objects of activity to be a deliberate advocacy strategy in their work. The participants repeatedly raised concerns about the lack of infant and toddler curriculum and pedagogy in early childhood teacher education as a form of advocacy, aiming to raise the consciousness of their colleagues about infant and toddler curriculum and pedagogy through highlighting contradictions in the delivery of the early childhood teacher education program. A specific example of this was the way the participants drew on the concepts of neuroscience (Schore, 2005; Shonkoff & Phillips, 2000; Shore, 1997) to demonstrate how the first three years are crucial in brain development (Fox & Rutter, 2010). This was an attempt to counter practices undertaken by their colleagues in early childhood teacher education that silenced the sharing of infant and toddler curriculum and pedagogy.

I understand that the participants were working on artefacts as temporary objects of activity because their original object of activity was the learning of the graduate preservice teachers. The participants were attempting to get a new, expanded, adapted, and high-quality infant and toddler-focused object of activity into the artefacts. In their workplace activity system, the unit outlines mediated work practice, predominantly because they dictated so much about what teacher educators and pre-service teachers

have to do in early childhood teacher education programs. In this case, units that mediated the activity of pre-service teachers motivated the participants.

Dahlia was asked if she included infant and toddler curriculum and pedagogy throughout her units that were not specifically focused on infants and toddlers. She replied, "Well, inevitably you do, but inevitably I talk about issues around love and care, and [when] I'm talking about professionalism my examples are always from the infant and toddler work from the field in there" (Dahlia, I, 28.08.14).

Dahlia's response provided an example of a collective rule that the majority of the participants demonstrated in their work. As mentioned earlier in this chapter, the participants showed a strong commitment to always representing infants and toddlers in their work. I understood this to be a collective rule - "We value issues related to infants and toddlers" – that was evidenced in their attempts to advocate for infant and toddler curriculum and pedagogy in early childhood teacher education.

For example, Dayna's commitment to including infant and toddler curriculum and pedagogy whenever she was speaking about early childhood education demonstrated, in CHAT terms, a rule she upheld in her work:

I am conscious, so there are images all through my lectures that show infants and toddlers. There's theory that is infant and toddler specific, and also I show them things that are often not even associated with infants and toddlers. So, we have a lecture on games, which often is never talked about apart from older children. I give them examples of infant - toddler games and how infants and toddlers are already establishing and playing by the rules. I'm very conscious of making it all the way through that (Dahlia, I, 28.08.14).

Dayna's explicit mediation (Wertsch, 2007) of her pre-service teachers' learning through using, "images all through my lectures that show infants and toddlers" evidenced this collective rule, that infant and toddler curriculum and pedagogy must be included in early childhood teacher education. The decision to include infant and toddlers each time she engaged in lecturing or talking about her work demonstrated that Dayna continually attempted to advocate for infant and toddler curriculum and pedagogy in her work. I understand Dayna engaged in rule bending practices by continually including infant and toddler examples in generalised early childhood teacher education programs. Rule bending is a sensitising concept where participants respond to contradictions they experienced between rules in their workplaces and their emergent practices. This concept is borrowed from the work of Edwards, 2010.

Dayna's practice of teaching in other generalised units, but only she sharing examples for infants and toddlers, illustrated rule bending.

Dayna and the other participants' advocacy and inclusion of infant and toddler curriculum and pedagogy in their work consistently demonstrated their efforts to bring early childhood teacher education programs and units outlines into the object of activity. I returned to a CHAT concept that artefacts can become objects of activity for a time, for example during curriculum development.

For some of the participants in this research, the procurement of specialist units that addressed infant and toddler curriculum and pedagogy took a considerable length of time to achieve. In Dahlia's case, the struggle to obtain permission to include an infant and toddler specialist unit in the early childhood teacher education program had been considerable. Dahlia explained her experience as a strong infant and toddler advocate at her university for over 20 years, "We've only introduced this infant and toddler paper in the last few years, like five years. I remember it being introduced after long debates and advocacy by external people on our program advisory group" (Dahlia, I, 28.08.14).

For Dahlia, support and advocacy from the early childhood field was crucial in obtaining this infant and toddler unit. In this example, support from the early childhood field through, "external people on our program advisory group", provided stronger advocacy than backing from early childhood teacher education colleagues within the university itself. Without support from the early childhood field, the practice of infant and toddler curriculum and pedagogy being subsumed into general early childhood, curriculum and pedagogy, would continue to implicitly mediate the learning of preservice teachers. Therefore, the silencing of infant and toddler curriculum and pedagogy would have continued to be maintained at Dahlia's university.

I understand the participants' attempts to raise the consciousness of their colleagues to be aware of the contradictions in their work was not an attempt to overthrow their colleagues' interests through the process of the development of early childhood curriculum and pedagogy, in the teacher education program. Instead, they were attempting to adapt the course outline as an artefact. In CHAT terms, I interpret this to mean that the participants made artefacts of unit outlines and curriculum and pedagogy their temporary objects of activity. In this case, they engaged in practices where they suspended what they were doing in their other work to work on the artefact. For

example, artefacts such as early childhood teacher education assessment rubrics, and approaches to assessment in early childhood teacher education.

What the participants endeavoured to do through their attempts to challenge curriculum and pedagogy in early childhood teacher education programs in their universities at the time was to attempt to ensure there was an increase in and raised awareness of, infant and toddler curriculum and pedagogy. In the participants' attempt to adapt course outlines as artefacts, I understand the participants were trying to mediate their relationship with the community through these artefacts of early childhood teacher education programs and unit outlines. In making an artefact the object of activity, this process tends to highlight the contradictions, and force them to arise.

I now turn to the final contradiction and argument shared in this chapter. The dominance of curriculum and pedagogy focused on three to five year olds in early childhood teacher education has been mentioned throughout this chapter. This final section addresses a quaternary contradiction between rules of the participants and the rules of the community. The community often refers to participants' colleagues in the university as a system of activity. But, this section refers to the community in the early childhood field.

6.4 A Rule/Rule Contradiction: Infants and Toddlers are Valued, but Preschoolers, Literacy and Numeracy are Valued More.

A shared rule as addressed earlier in the chapter between the participants was that they believed in order to value infants and toddlers that early childhood teacher education programs in universities, required more infant and toddler curriculum and pedagogy. The participants were staunch protectors of, and valued, specialised infant and toddler units in their workplaces. However, all of the participants were aware that explicit mediation practices that they engaged in of including more infant and toddler curriculum and pedagogy in early childhood teacher education was typically not supported by their early childhood teacher education colleagues — key members of the community. The community valued pre-schoolers, numeracy and literacy more, as a rule. The contradiction between rules of participants and rules of not valuing infant and toddler curriculum and pedagogy, by some early childhood teacher education

colleagues was demonstrated through explicit mediation (Wertsch, 2007) practices of attempting to remove infant and toddler curriculum and pedagogy.

I understand that the participants were concerned about implicit mediation practices resulting in a lack of pre-service teachers' interest in infant and toddler curriculum and pedagogy. The participants aimed to interrupt the perpetuation of historical silencing of infant and toddler curriculum and pedagogy in early childhood teacher education and the field more widely (Ray et al., 2006; Rockel, 2013), thereby maintaining the rule/rule contradiction. In this section, I return to the socio-historical struggle as addressed in the previous chapter in relation to issues of status and professionalisation in the early childhood field. This section describes a very particular instantiation of this struggle, which is the participants' lived experience of attempting to achieve representation of infants and toddlers, curriculum and pedagogy in all early childhood teacher education programs, in Australia and Aotearoa, New Zealand. They valued infants and toddlers, as an underlying rule, but they were aware that the community's underlying rule of valuing pre-schoolers, literacy and numeracy took precedence.

6.4.1 The struggle for advocacy despite preschool dominance

I understand the community's rule to be that, while infants and toddlers are valued in early childhood teacher education, that the community demonstrated belief in another rule through explicit mediation practices. This rule being that, preschoolers', literacy and numeracy are valued more in early childhood teacher education. This contradiction provided an example of the normative and dominant position of preschoolers in early childhood teacher education. Despite the explicit mediation practices attempted by the participants by introducing neuroscientific concepts (Schore, 2005; Shonkoff & Phillips, 2000; Shore, 1997), the participants reported that the regular removal and attempted removal of infant and toddler curriculum and pedagogy and units in early childhood teacher education programs persisted. I argue that this provides evidence of a contradiction within the rules of early childhood teacher education maintained by the community, and is closely related to the wider issue of status. I develop this argument in the final section of this chapter.

Ruby reflected a rule of the collective subject that infant and toddler curriculum and pedagogy was important in early childhood teacher education when she shared her affinity to specialist infant and toddler units in early childhood teacher education in the focus conversation. Frustrated by the lack of recognition of the specialist nature of infant and toddler curriculum and pedagogy Ruby shared these thoughts:

I'm still tied to this idea of the specialism. I feel that if we continue as we are, not giving our graduates sufficient professional knowledge in this area, then, we'll get what we've always got. We have to change it (Ruby, NZFC, 03.09.14).

The participants in this thesis shared an understanding that infant and toddler curriculum and pedagogy was specialist knowledge that is needed in early childhood teacher education. They argued that, in order to increase knowledge about infants and toddlers both in the field and in early childhood teacher education, that specialist infant and toddler curriculum and pedagogy should be included in early childhood teacher education programs. As Ruby advocated, "we have to change it". This argument was shared in the literature. Rockel (2009), supported the participants' specialist focus, describing infant and toddler curriculum and pedagogy as a specialised area of knowledge.

The specialist nature of infant and toddler care and education was also reflected in the early childhood curriculum: *Te Whāriki* (Ministry of Education, 1996). The Aotearoa, New Zealand early childhood curriculum states, "Providing for the care and education of infants requires specialised knowledge and practice." (Ministry of Education, 2017, p. 14). Carroll-Lind & Angus' research project, which investigated the care of infants and toddlers in Aotearoa, New Zealand (2011), reported an insufficient amount of infant and toddler curriculum and pedagogy in Aotearoa, New Zealand early childhood teacher education programs. One of the significant recommendations made for early childhood teacher education in their project was for the provision of specialised infant and toddler qualifications at a postgraduate level (Carroll-Lind & Angus, 2011).

Ruby explained the shift that had occurred at her university in moving to a subject-domain focus within early childhood teacher education. She had observed this shift occurring before the College of Education merged with the university, a historical development explained in Chapter One. Ruby was aware of a few colleagues who included some infant and toddler curriculum and pedagogy in their units, but she noted that this was not a particularly common practice within her university:

The [particular domain] paper was taught by a lecturer who definitely was inclusive with the first years, but some of the other lecturers coming from a kindergarten background; they wouldn't have been as inclusive. It would have meant that in those courses, the assignment would not have covered infant-

toddler education to any significant degree. Because it would have been integrated, so, there would have been a subject domain focus, rather than a focus on how infants learn. For example, with the brain research, I think that now it should take a much stronger place because we didn't have psychology. Many papers that I taught as a team member you had very little control over the input in relation to infants and the first years. The focus was more on four-year-olds (Ruby, I, 01.09.14).

Ruby consistently experienced a push from her colleagues in early childhood teacher education towards an integrated early childhood teacher education program where infant and toddler curriculum and pedagogy was subsumed into a general focus of children birth to five years. As Ruby discussed, her experience was when focusing on a subject domain that the curriculum and pedagogy was dominated by being "more on four year olds". This example further illustrated the contradictions experienced by the participants in this thesis, and in literature where early childhood teacher education programs described an inclusive program covering birth to five, but the majority of the curriculum and pedagogy covered children three to five years of age (Garvis & Pendergast, 2015b; Rockel, 2013).

6.4.2 The fight against attrition

Through the process of sharing quotes from the individual interviews in the focus conversation (a key methodological strategy described in Chapter Four), I discovered that over half of the participants in this thesis had experienced attempts from colleagues in early childhood teacher education teams to remove infant and toddler units. Some of the participants had experienced complete removal of infant and toddler units from programs in their universities. The removal of infant and toddler units occurred when participants were absent from meetings where considerable changes were made in the development of program structure. In this thesis, I interpreted the participants' experiences of the removal of programs as a continual struggle to achieve the participants' object of activity, which was to give greater prominence, credibility, and acknowledgment to the needs of infant and toddler curriculum and pedagogy in early childhood teacher education.

In the process of sharing quotes from Aotearoa, New Zealand, participants' interviews in the Australian focus conversation a particular quote launched a barrage of discussion amongst the three Australian participants. The quote used in the focus conversation was:

I missed a meeting because I was away at a conference, they removed the infant paper from the postgrad program, and I was heartbroken about that. It has felt

very lonely. I haven't lobbied other colleagues as much as I could've. [I could've] been much smarter over the years, but I think it's been enough to be an advocate in terms of publishing, and policy and being an advocate at that policy level with the local Ministry [of education], but also national Ministry [of education]. I suppose that's preoccupied me more (Ruby, I, 01.09.14).

Nina connected to the quote shared in the focus conversation and explained that a similar situation had also happened to her at her university. "That is exactly what happened to me when two people designing the Grad Dip came in, and there was no infant-toddler course in the proposed one. Luckily, around the table people spoke up from the early childhood team" (Nina, AUFC, 17.12.14).

I understand Nina's experience to illustrate the sociohistorical struggle to include infant and toddler curriculum and pedagogy in early childhood teacher education programs in Australia. In this instance, even though Nina did not receive an invitation to the meeting about program structure, a couple of other early childhood teacher education colleagues, intervened on her behalf.

Dayna's story described a similar situation to Nina where advocacy from particular colleagues also supported her in her infant and toddler advocacy. It was interesting to note that the situation at Dayna's university occurred in the period of data collection, in the time between her interview and the focus conversation:

I was very grateful for the people that stood up for my unit because it nearly went. It's that kind of climate within the department sometimes that you think; you'd known I was going to go on my first holiday for a very long time. You knew I was going away on holiday and you scheduled all these meetings for when I was away. It was only a few people, [who] stood up and said you know Dayna's going to just hit the roof if you get rid of that unit she's been fighting for, for years (Dayna, AUFC, 17.12.14).

In this scenario, Dayna managed to retain infant and toddler curriculum and pedagogy at her university through support from a few colleagues, who challenged other early childhood teacher education colleagues, who had organised meetings while Dayna was away. In this instance, their attempt to remove the infant and toddler unit from the early childhood teacher education program was halted. The contradiction between rules of participants and rules of not valuing infant and toddler curriculum and pedagogy by some early childhood teacher education colleagues was demonstrated through the explicit mediation (Wertsch, 2007) practices of attempting to remove infant and toddler curriculum and pedagogy.

I claim these examples of silencing of infant and toddler curriculum and pedagogy in early childhood teacher education programs provide further evidence of the participants struggle to represent infants and toddlers in higher education. The explicit mediation (Wertsch, 2007) practices Dayna described were temporarily disrupted by other members of the early childhood teacher education community. Dayna's colleagues temporarily achieved advocacy so that she could continue to challenge this proposal once she returned to work.

After listening to Dayna's story, emphasising the struggle the participants experienced within early childhood teacher education programs Nina asserted her thoughts:

You were going away, this person was away, I wasn't away, but I wasn't part of the discussions of what was going into the new one. So, that sort of almost deliberately doing it behind your back and the person said they hadn't lobbied other colleagues enough. Now, why should you do that? (Nina, AUFC, 17.12.14).

Nina expressed frustration at the thought she should have to lobby other colleagues in order to maintain, or obtain, infant and toddler, curriculum and pedagogy in the early childhood teacher education program, as evidenced by her questioning, "why should you do that?"

Susan followed the flurry of conversation in the focus conversation and made a comment about the struggle to retain infant and toddler curriculum and pedagogy as being a situation that she had not personally experienced in her current workplace. However, the occurrences mentioned by other participants were familiar to Susan. She had observed similar challenges experienced by other colleagues in other universities with regard to removal of infant and toddler curriculum and pedagogy from early childhood teacher education programs. Susan commented, "I think the sad thing about it is actually early childhood people doing it" (Susan, AUFC, 17.12.14).

I understand Susan's reflection that early childhood people were behind the attempted removal of infant and toddler curriculum and pedagogy to reflect the recursive insecure anchoring of infant and toddler curriculum and pedagogy in early childhood teacher education. I return to an argument made in the previous chapter that the struggle the participants experienced in the early childhood field was an analogue of a deeper epistemic problem. This problem is that very few people in society understand that working with infants and toddlers in care and education requires educators who have tertiary-level qualifications, which include infant and toddler curriculum and

pedagogy. This problem connects to the historical trajectory of the divide between care and education as explained in Chapter Two, and the lack of qualifications that focus on infants and toddlers in teacher education. This was reinforced by recommendations developed in Australia at the time of data analysis. The Australian Government Productivity Commission released a report (2015a) that suggested that educators who work with infants and toddlers should hold a certificate III qualification, as long as they work with a colleague who has a diploma. "In many centres, this would mean more certificate III and fewer diploma level workers than are currently required" (Productivity Commission, 2015a, p. 18). I argue, therefore, that recommendations provided to the Australian government reinforced the broad lack of understanding of the importance of bachelor-qualified teachers working with infants and toddlers in early childhood settings (Garvis & Manning, 2015).

In her interview, Dayna explained that she was aware of the challenges faced when developing the early childhood teacher education program and unit outlines:

It still frustrates me that the infant-toddler specific unit with our new program is only going to be in the birth to fives. That's frustrating for me, but again, that's politics for you. You win some; you lose some. Though sometimes it's heard, and sometimes it's not, we're a department, and sometimes I can influence, sometimes I don't. I will express my opinion very clearly. But, the people that ultimately have to make those decisions, they have a lot of things that they have to work around as well (Dayna, I, 20.06.14).

Dayna further clarified that she understood the politics of organising the early childhood teacher education program and, that there were many different areas of curriculum and pedagogy that were necessarily included in the early childhood teacher education programs. However, later on in the year, her colleagues attempted to remove infant and toddler curriculum and pedagogy by strategically organising meetings when Dayna was on annual leave. During the focus conversation, she revealed her anger and disappointment towards her colleagues' explicit mediation practices of silencing infant and toddler curriculum and pedagogy. "You knew I was going away on holiday and you scheduled all these meetings for when I was away" (Dayna, AUFC, 17.12.14). What Dayna had previously seen as support from colleagues, "sometimes I can influence" (Dayna, I, 20.06.14), for her commitment to further developing infant and toddler curriculum and pedagogy in her work, she later questioned in the focus conversation.

6.4.3 Linking back to issues of status and professionalisation

Susan brought the rule/rule contradiction of omitting infant and toddler curriculum and pedagogy in early childhood teacher education programs to consciousness in the Australian focus conversation by explaining the issue that, "most places [universities] wouldn't have literacy for infants and toddlers, they'll have a literacy unit and someone will say oh we kind of... Oh, we touch on this" (Susan, AUFC, 17.12.14). Dayna quickly replied to Susan's comment and acknowledged her consciousness of the contradiction between the rules of valuing infants and toddlers, but valuing preschoolers more. "Oh, we always touch on this" (Dayna, AUFC, 17.12.14). Rockel (2013) also raised concerns that curriculum and pedagogy related to the first three years of life could be omitted with early childhood teacher education programs that take a more generalised approach.

Susan explained the perils of an integrated early childhood teacher education curriculum from the point of view of the participants. The challenge of, "touching on this", revealed issues of status and professionalisation as revisited throughout this thesis:

It creates the perception that these children, because you're only touching on it you might have half a lecture in a whole course on literacy mentioning the pre stuff that babies do, which really reinforces the care/education stuff. It reinforces these kids aren't ready for education because 99.9% of our unit on literacy is what you do with kids over-three (Susan, AUFC, 17.12.14).

The dominance of curriculum and pedagogy related to children over the age of three "99.9% of our unit on literacy is what you do with kids over-three", as stated by Susan was frustrating for all of the participants. Susan was attempting to reject the care and education divide, which was analysed in Chapter Two. Her rejection of the care and education divide shared through her frustration at the, "touching on it", reinforcing, "the care/education stuff".

Ruby was aware that her desire for specialised infant and toddler units was a value not typically shared by her colleagues in early childhood teacher education, who characteristically advocated for a more generalised approached to units covering children aged birth to five years:

Some people in the early childhood team feel that it shouldn't be separated; it's not a specialism, that it should be integrated. I don't agree with that; I think at

this point in our history we need to look at it as a specialism, because there's a lot of catch-up to do. It is not the same - a three year old/four year old as a baby, as a toddler. In my opinion I think we need to specialise a lot more. I think that's a real shame that the other papers aren't really taught by people who understand what does music mean for infants (Ruby, I, 01.09.14).

The general lack of understanding about infant and toddler curriculum and pedagogy amongst early childhood teacher education colleagues was a concern for Ruby, "other papers aren't really taught by people who understand". I understand Ruby's desire to represent infants and toddlers in early childhood teacher education drew her forward in terms of her advocacy practice. Wendy shared her concern at the lack of theorisation of infant and toddler, pedagogy in early childhood teacher education when I asked her about the early childhood teacher education program at her university and the amount of infant and toddler curriculum and pedagogy involved, "Neither could I say that infant pedagogy is adequately theorised in my view. And what that means is society's values of infants and toddlers being invisible, and, it's not real teaching, it's not professional" (Wendy, I, 29.08.14). I recognise this dominant view as being connected to the deprofessionalisation agenda (Imig & Imig, 2008).

The notion of silencing of infant and toddler curriculum and pedagogy in early childhood teacher education as argued earlier in this chapter echoed in Wendy's statement, "society's values of infants and toddlers being invisible". The notion of infants and toddlers, being silenced and invisible in society, was a source of contention for all of the participants. The invisibility of infants and toddlers in society and the early childhood field was a notion addressed by Dayna in the previous chapter. "I thought. These children are invisible" (Dayna, 20.06.14). I argue that the silencing of infant and toddler curriculum and pedagogy occurred due to the major focus on the three to five year age group, in early childhood teacher education, curriculum and pedagogy.

Dayna's awareness of what she understood as a general lack of knowledge amongst early childhood teacher educators about infant and toddler curriculum and pedagogy demonstrated what she recognised as a struggle to understand infant and toddler curriculum and pedagogy:

We do not have an understanding about infant pedagogy. I think that we're developing a better one, but infant pedagogy is different. It's not a watered down version of preschool or kindergarten; it's completely different. And until we recognise that specialisation then we're not going to make a great deal of progress (Dayna, AUFC, 17.12.14).

The concern Wendy and Dayna shared about a general lack of understanding about infant curriculum, and pedagogy was shared by White (2014), who emphasised the significance of articulating and theorising infant and toddler pedagogy.

The lack of understanding and interest in infant and toddler curriculum and pedagogy in university-based early childhood teacher education programs was a concern for the entire collective subject. They saw infant and toddler curriculum and pedagogy as a requisite key concept. They understood infant and toddler curriculum and pedagogy needed advocacy and support in order to obtain and maintain high quality infant and toddler, care and education. The participants in this research understood that contributing to infant and toddler curriculum and pedagogy allowed them to get closer to their shared object of activity and, therefore, outcome.

Ruby reminisced about historical challenges she had experienced in sharing information about infant and toddler curriculum and pedagogy with her colleagues:

When I first started [working at the College of Education] I remember calling a meeting with the other lecturers about infants, and nobody turned up. I thought right; it's not top priority around here. There's always something else that replaces it, because infants are the least interesting. If you're looking at other issues, they're always more important than where does neuroscience fit in our program (Ruby, I, 01.09.14).

Ruby had been historically concerned about the lack of interest in learning and teaching about infant and toddler curriculum and pedagogy amongst her early childhood teacher education colleagues. I understood the historical and ongoing lack of interest, "there's always something else that replaces it", attitude from Ruby's early childhood teacher education colleagues to illustrate the contradiction between the rule of the collective subject valuing infant and toddler, curriculum and pedagogy in early childhood teacher education and the rule of the community placing higher value on preschool-aged children.

Dayna, Wendy and Ruby concurred in their comments about infant and toddler curriculum and pedagogy, curriculum, and pedagogy in early childhood teacher education. They all believed that infant and toddler curriculum and pedagogy was low on their university's agenda in early childhood teacher education and contended that there was currently not enough infant and toddler curriculum and pedagogy in their early childhood teacher education program.

The participants' work of specialising in research and teaching about infant and toddler curriculum and pedagogy meant that they were often seen as different from the majority of their colleagues in teacher education. Grieshaber (2001) describes advocates in early childhood as being known for being, "resistant, hard to handle, and questioning" (p. 70). The participants' early childhood teacher education colleagues' would regularly remind the participants that they thought that infant and toddler curriculum and pedagogy necessarily belonged with the rest of the broader curriculum and pedagogy. The resistance from participants against the push from their colleagues to subsume infant and toddler curriculum and pedagogy was due to the typical absence of infant and toddler curriculum and pedagogy when an integrated early childhood approach is taken (Rockel, 2013).

6.4.4 The early childhood teacher education program is not fit for purpose

The course outline and unit guides mentioned throughout this thesis were artefacts that have particularly inherent meanings. It was important to note that these particular artefacts contained high-stake concepts. The concepts were directly related to higher education and curriculum and pedagogy and course curriculum and pedagogy. I argue that if early childhood teacher education program curriculum and pedagogy concepts do not include specialist units on infants and toddlers, then as the participants questioned, how can early childhood teacher education pre-service teachers access concepts related to infants and toddlers? As mentioned earlier in Australia early childhood teacher education qualifications were accredited by the Australian Children's Education and Care Quality Authority (ACECQA). ACECQA mandated a minimum of 10 days of professional practice experience with children birth to two years of age (often known as practicum or professional placement). Despite mandatory professional practice experience with infants and toddlers, it is interesting to note that they do not mandate specialised infant and toddler curriculum and pedagogy in early childhood teacher education programs (ACECQA, 2016).

In Aotearoa, New Zealand, it was a slightly different situation around curriculum, as a representative for the Education Council explained:

As we do not have a prescribed curriculum for ITE as some countries do, it is over to the provider of the ITE programme to present a programme that is aligned to their Conceptual Framework and their Graduate Profile that the approval panel will consider appropriate to ensure graduates have the required knowledge, experience and dispositions to be effective teachers for ECE and to meet the Graduating Teacher Standards at the time of graduation. Panels will look in particular for infant and toddler coverage, and currently we don't accept 'infants, toddlers and young children' in the courses as sufficient. Many providers are including specific papers/courses on infants and toddlers recognising that this is a specialist area that needs a separate focus. (D. Wansbrough, personal communication, 6 September 2016)

Clearly, the situation for infant and toddler curriculum and pedagogy, in early childhood teacher education is complex in Australia and Aotearoa, New Zealand.

For the participants in this thesis, there were concepts related to infants and toddlers that were standard for them as a collective subject. There were also concepts related to infants and toddlers that the participants saw as high value in relation to infant and toddler curriculum and pedagogy that were not assigned high value by their colleagues. This illustrated a contradiction the participants were aware of in this thesis. They felt that the course outline was not fit for purpose in early childhood education, as it did not provide graduates with adequate knowledge about infants and toddlers. It appeared that their colleagues were fundamentally saying if we put more infant and toddler curriculum and pedagogy in early childhood teacher education program then it reduces its fit for purpose across children aged birth to five years.

The participants challenged this rule by advocating that adding infant and toddler curriculum and pedagogy increased the course outline's fit for purpose. Therefore, there was a fundamental contradiction, not in terms of the fundamental concepts per se, as the community and collective subject agreed that infancy was important, but that community valued curriculum and pedagogy related to preschoolers *more*. It was interesting to consider throughout the process of data collection how concepts related to preschool-aged children have more weight and significance in early childhood teacher education programs in Australia and Aotearoa, New Zealand.

The participants maintained that the inclusion of infant and toddler curriculum and pedagogy within early childhood teacher education provided opportunities for preservice teachers engaged in early childhood teacher education to learn more about this age group. This collective rule was further supported by Carroll-Lind & Angus' (2011) report, in which they directed Ministerial officials in the Aotearoa, New Zealand Ministry of Education to encourage early childhood teacher education providers in Aotearoa, New Zealand to include infant and toddler curriculum and pedagogy in their programs. Rockel (2013) also advocated for a review of infant and toddler curriculum

and pedagogy in early childhood teacher education as her study revealed lack of infant and toddler-specific, curriculum and pedagogy in early childhood teacher education programs in Aotearoa, New Zealand. Inclusion of infant and toddler curriculum and pedagogy in early childhood teacher education has the highest potential in order to engage and challenge and rejection of the dichotomy between care and education (Stonehouse & Woodrow, 1992).

I understand that some of the participants perceived that they were seen and positioned as ideological in their work as they advocated for more infant and toddler curriculum and pedagogy in their early childhood teacher education course outlines. I understand Ruby's identification of herself as a, 'squeaky wheel', in advocating for infant and toddler curriculum and pedagogy in early childhood teacher education as demonstrative of her colleague's perception of her ideology towards infants and toddlers in early childhood teacher education:

I think I've been a squeaky wheel over the years and it seems to me the only way I've been able to make change is by constantly harping on but what about infants? Probably people thought oh no there's Ruby going on and on again. But that's been the only way is to never ever miss an opportunity (Ruby, I, 01.09.14).

Ruby's agency in the form of advocacy in her work is revisited in the following chapter as she explained that she continually challenged sedimentation in the early childhood field and early childhood teacher education by attempting to create buds or shoots for opportunities (Engeström, 1993). "The only way I've been able to make change", for the future of infant and toddler curriculum and pedagogy in the early childhood field and early childhood teacher education.

6.5 Chapter Summary

In this chapter, I shared the participants' struggle to represent infant and toddler curriculum and pedagogy in higher education in university-based early childhood teacher education in Australia and Aotearoa, New Zealand. The CHAT concepts of implicit and explicit mediation (Wertsch, 2007), contradiction (Engeström, 2014), and sedimentation (Engeström, 1993) were used to illustrate the ways in which participants experienced struggle in their work to include infant and toddler curriculum and pedagogy in early childhood teacher education.

All of the participants in this thesis strategically worked on researching and publishing research related to infant and toddler curriculum and pedagogy in order to challenge

the gap in early childhood artefacts related to infants and toddlers. I interpreted this as strategic advocacy work that the participants engaged in as vital for the development of infant and toddler curriculum and pedagogy. I return to this focus on advocacy in their work in the following chapter. I understand the participants to be engaging in advocacy because they see it as a key strategy in order for pre-service teachers to internalise the concepts of infant and toddler curriculum and pedagogy.

The high level of emphasis on early childhood teacher education program curriculum and pedagogy related to children three to five years of age (Rockel, 2013) illustrated the higher status accorded to this age group. I argue that the limited amount of infant and toddler curriculum and pedagogy, and silencing of this curriculum and pedagogy by colleagues through practices of implicit mediation (Wertsch, 2007) described by the majority of the participants reflected the lack of status for infants and toddlers and those that work with them. In part, this lack of status can be attributed to the historical nature of their struggle as infant and toddler teacher educators illustrated by Ruby when she said, "there's a lot of catch-up to do" (Ruby, I, 01.09.14). This is further supported by Stonehouse and Woodrow (1992) with their commentary on the early childhood profession in Australia more than 24 years ago. "The early childhood profession has always been attributed low status. The younger the child, the less status is accorded to those that work with them, both by the general community and the education profession" (pp. 208-209). I return to the challenge of status and professionalisation for infant and toddler curriculum and pedagogy in the early childhood field and early childhood teacher education in the following chapter.

I described how participants brought contradictions in their work in early childhood teacher education to consciousness within the community of their activity system by advocating, which I understood to be a form of advocacy. In the following chapter, I turn to the relationship between motivation and advocacy together with, how the participants negotiated and navigated their work, across three deeply inter-penetrating activity systems: the early childhood field; early childhood teacher education; and the modern university.

Chapter 7

The Struggle to Advocate for Infant and Toddler Teacher Educators in Universities

7.1 Introduction

This chapter brings the three findings chapters together and analyses the ways in which the participants constantly engaged in negotiating and advocating in their work across three interpenetrating systems of activity. This three-level system of activity included; the early childhood field; early childhood teacher education; and higher education.

Over the three findings chapters I have built up a complex picture of what has happened in the early childhood field in relation to infant and toddler curriculum and pedagogy through the lifeworld experience of the six participants in early childhood teacher education. The early childhood field as a system of activity was addressed in Chapter Five, early childhood teacher education as a system of activity was addressed in Chapter Six. The work of this chapter is to address the modern university as an activity system.

In Chapter One, I discussed teacher education as a discipline and the effect on teacher educator's work. In this chapter, I share the experience of working in teacher education in universities for these six women and ultimately how they attempted to live with and transcend the contradictions they experienced.

In order to describe their experience in terms of the Cultural-Historical Activity Theory (CHAT) conceptual framework, it is important to focus on the sociohistorical context of their work. This is because I understand that assumptions about the significance of activity cannot be made by analysing the current-day context only (Lave, 1993). Therefore, I seek to explain, why the context of the work of the participants transpired at the time of the data collection. I achieve this by explaining the historical and current circumstances that give rise to the description of the nature of the work of this group of infant and toddler, teacher educators.

The circumstances of their work are partly due to the particular historical moment we are currently experiencing in teacher education in Australia and Aotearoa, New Zealand and the historical moment that the participants were experiencing in 2014 when data collection occurred. The underpinning principle, the historical aspect of

CHAT is central to this research. The historical aspect of CHAT specifies that all activity systems are comprised of a past, a present, and a future. However, the circumstances are also sociological, due to the issues of status, professionalisation, and power that relate to the collective group of infant and toddler, teacher educators engaged in this study.

This chapter illustrates the participants' movement and inter-penetration across these three systems of activity, how the participants organised this, and what this meant for them and their work. I understand the participants' negotiation of the three interpenetrating systems to be demanding affecting both them and their work. I will argue that the participants tried to stay true in their practices to what they saw as core values within the early childhood field (particularly collaboration and partnerships in early childhood teacher education), while also negotiating their work in the highly competitive modern university. The participants had experienced collaborative working environments in the early childhood field, that were then maintained for a time in early childhood teacher education before neoliberal changes were made in teacher education. I will show how the participants in this thesis attempted to live out these deeply embedded, collaborative, early childhood values in a university system organised by corporate individualism (Giroux, 2002).

This chapter makes three arguments in relation to systemic contradictions to describe the participants' struggles and experiences in their work as infant and toddler specialists in the modern university:

- 1. That the participants were experiencing a crisis in their hierarchy of motives: accountability pressures from universities versus academic priorities.
- 2. That the participants were attempting to negotiate a rule/rule contradiction: Siloing experienced through collective rules from the early childhood field and individualistic rules from higher education.
- That the participants use advocacy as a meta-strategy to negotiate the contradictions they experienced in their work across three interpenetrating systems of activity.

These contradictions are each influenced by the overarching focus of this chapter, which is the participants' hierarchy of motives in their work. In CHAT, 'hierarchy of motives' refers to negotiation of multiple simultaneous objects of activity that provide motives for professional practice.

Over the last two findings chapters, I have built up a complex picture. There are many contradictions across many different levels, both within these systems and across them. However, in order to address my research questions, the three lines of argument summarised above are those I have chosen to foreground to interpret what I understood the participants to be communicating about their work.

I base my arguments on what the participants told me about the sociohistorical context of the modern university in Australia and Aotearoa, New Zealand, as it related to their work. In doing so, I address the second research question, which asks what is the sociohistorical context for their work. In turn, this highlights the way the participants struggle with their hierarchy of motives, and how they organise their object of activity; speaking to the third research question, which asks what the participants' work is directed at.

In the case of the six participants engaged in this research, they constantly made strategic decisions about their hierarchy of motives in their work, as they were constantly working on multiple objects of activity. I argue that their objects of activity were focused on three main practices in their work:

- Focusing on teaching early childhood teacher education pre-service teachers to
 understand theory and practices to support high quality care and education for
 infants and toddlers in the early childhood field.
- Increasing the amount of infant and toddler curriculum and pedagogy in early childhood teacher education.
- Engaging in research related to infants and toddlers.

This chapter describes the participants' experiences of being teacher educators and struggling to research infant and toddler curriculum and pedagogy in higher education. This chapter makes the argument that such research was a key strategy within their advocacy of their work. As I have argued in previous chapters, including more infant and toddler curriculum and pedagogy and, paying attention to infant and toddler curriculum and pedagogy in early childhood teacher education is one form of advocacy. In this chapter, I show how the research work the participants engaged in was also driven by their advocacy for infant and toddler curriculum and pedagogy in higher education.

There is evidence the participants were resourceful in their work; all have successful careers, have a high-level of experience in academic roles, and are recipients of

promotion within the university system. They operated resourcefully in the ways they used the systems available to them, which Edwards (2010) refers to as "resourceful practice" (p. 5).

The participants exhibited a very strong sense of agency and desire in their work, recognised from the start of my research journey, through my awareness of their research and teaching work in early childhood teacher education. I identified the participants as suitable for involvement in this research initially due to their advocacy work for infant and toddler curriculum and pedagogy, in the early childhood field and in early childhood teacher education.

The six participants in this thesis represent a sub-culture in early childhood teacher education in their work as infant and toddler specialists. Being a member of a sub-culture is hard work, and in order to continue in their work, they have had to be persistent. I understand that they were attempting to work against the everyday culture of the early childhood field, where many of their colleagues favoured the dominance of curriculum and pedagogy based on children aged three to five years. It seems to me that the participants were trying desperately to cultivate the bud of change and development for infant and toddler curriculum and pedagogy (Engeström, 1993) in a non-conducive climate of sedimented practices, in early childhood teacher education.

At the end of this chapter, I conclude the three findings chapters with a focus on the role of the participants as advocates.

7.2 A Crisis in their Hierarchy of Motives: Accountability Pressures from Universities versus Academic Priorities

The first claim I make in this chapter is that the participants struggled to balance the hierarchy of motives in their work. I use Leont'ev's (1978) description of hierarchy of motives, to explain the way in which the participants decide the importance of the range of motives that individual people have. In times of tension, conflict or contradiction, the hierarchy of motives determines which motive will be focused on at that time (Leont'ev, 1978).

For example, the participants experienced increasing pressures from universities to focus on research in their work; however, it is typically challenging for infant and toddler curriculum-focused research projects to obtain funding as the majority of funding in early childhood is focused on children aged three to five years. Therefore,

the participants struggle with balancing their commitment to promoting infant and toddler curriculum and pedagogy in the early childhood field and in their teaching of pre-service teachers, with their ability to succeed in an academic environment that prioritises external funding and high-level publications.

Before developing the argument, it is important to return to points made in Chapter One about the sociohistorical story of early childhood teacher education and its development in higher education in Australia and Aotearoa, New Zealand. Internationally, teacher education has not held a secure position within higher education (McNamara, 1996), due to the relatively recent inclusion of teacher education as a field in universities. Teacher education shifted from Colleges of Education in Aotearoa, New Zealand and Colleges of Advanced Education in Australia into universities from the 1990s to the mid-2000s. The majority of the mergers of teacher education institutions into universities were involuntary and due to government decisions (Harman, 2000). As Nina recounted, "when the amalgamations happened, [university name] didn't want education, but they were told they had to have us. Then [they] said, Okay we'll have everybody except for early childhood" (Nina, AUFC, 17.12.14). The reluctance of universities to include education as a discipline and, once education was imposed upon them, the reluctance to include early childhood within initial teacher education, demonstrated the lowly status early childhood has within the university.

The mergers with universities Nina referred to led to shifting expectations of research for teacher educators and an increase from a predominantly teaching focus in early childhood teacher education, to significantly more emphasis on research for early childhood, teacher educators' roles (Luke et al., 2000; May, 2010). Conducting empirical research within teacher education was one of the most recent additions to the role of early childhood, teacher educators, impacting upon the teacher educators' workload. Heavily engaged in working on research in their roles, the participants evidenced the notion that research had come to dominate many teacher educators' workloads (Harris, 2005).

The participants were each aware of the strong level of pressure they were under to obtain external research funding in universities:

Being in an institution such as this, there's some pressure to get funding and I have been turned down for the last four years on *Marsden*'s and *TLRI*s [The Marsden Fund and Teaching and Learning Research Initiative – both peak

funding bodies for education research in Aotearoa, New Zealand]. I'm almost at the point where I don't want to fit, I'm almost at the point where I just want to walk away from it and continue to do research that interests me and which I think makes a contribution to the field (Wendy, I, 29.08.14).

I recognised Wendy's rejection of this pressure from the university as an attempt to rebalance her hierarchy of motives, specifically to focus on research about infant and toddler curriculum and pedagogy. I was aware that this group of participants are subject to policy pressures from higher education. As these participants are located in Australia and Aotearoa, New Zealand they are subject to national research initiatives—Performance-Based Research Fund (PBRF) in Aotearoa, New Zealand and Excellence in Research for Australia (ERA) in Australia (Nuttall, 2012).

Wendy recognised the importance of empirical research, but was cognisant of the length of time this work took:

If you want to do empirical work, I think it speaks to policy. Empirical work and philosophical work both take time. They're not things you can just whip up overnight. They've now put this graph up in our system where you go into this program, and it shows you on a graph how much you've published each year, and it's supposed to be at the same level, but there was one year where it dropped because I was doing this research. Because I was actually generating data from which to make sense of the findings, so there was a period where I wasn't publishing, and it drops. Somebody said to me at the time, "Oh you can't possibly apply for a promotion because it's not consistent". It's a crazy game we're in, but, we have to play it or step out of it. I choose to play at this stage of my career because I think I can make a difference on this board game if I am strategic (Wendy, I, 29.08.14).

University expectations regarding consistent production of research outputs challenged Wendy in her attempts to succeed and progress in her career as an early childhood, teacher educator, taking the time to research and develop her empirical work. Despite the "crazy game" that Wendy had to play, continually publishing in order to progress her career, I understand Wendy focused on making a difference in the early childhood field and, early childhood teacher education by engaging in research about infant and toddler curriculum and pedagogy.

Demonstrated by her fulfilment of university requirements to publish in high-level journals. Wendy attempted to remain strategic in her career. However, her simultaneous publishing in local early childhood field publications demonstrated her simultaneous commitment to the early childhood practice field:

I've tried every time that I do a piece of research to do something for a higher level journal and try and get something in that local journal around the same ideas. That's sort of been my kind of practice to try and speak to the practitioners (Wendy, I, 29.08.14).

I argue that the participants tried to create an infrastructure of research outputs and curriculum content. As illustrated through Wendy's efforts to, "do something for a higher level journal", at the same time as moving the early childhood field forward by making a commitment to, "get something in that local journal", and, "try to speak to the practitioners".

While most of the participants were motivated to publish about infant and toddler curriculum and pedagogy in high-level publications to achieve their object of activity, some of the participants were also motivated to publish in high-level journals by reminding themselves of the superior motive in their work, which was to teach preservice teachers to become excellent teachers of infants and toddlers.

The majority of early childhood researchers in Australia and Aotearoa, New Zealand work in universities. This context contributes its own contradictions. As Nuttall & Grieshaber (2018) argue:

The relationship between their research activity and the realities of working in university environments is highly contradictory. These tensions are experienced by all university researchers in applied fields to some extent, but the rapid and simultaneous shifts in early childhood policy and higher education in Australia during the last four years have resulted in a particularly intense time for early childhood education researchers. (Nuttall & Grieshaber, 2018, p. 16)

These shifts in early childhood policy and higher education Nuttall & Grieshaber (2018) refer to have resulted in the pressures that Wendy and other participants experienced through research intensification in early childhood teacher education. Wendy expressed frustration in the lack of funding available to engage in longitudinal research involving infant and toddler curriculum and pedagogy. "We've asked and asked to do long, substantial longitudinal research. We're poised to do it, but you know" (Wendy, NZFC, 03.09.14). It appeared to me that it was a struggle for all of the participants to acquire funding in order to engage in large-scale research about infant and toddler curriculum and pedagogy. I am aware that education research as a field, does not; by its very nature have an immediate impact on children. I recognise that it was likely to be challenging for the participants to prepare case for major funding bodies about the benefit of a long-term research project with infants and toddlers in relation to curriculum and pedagogy. This struggle was echoed by Dayna in the

Australian Focus Conversation in her discussion about the one positive thing to come out of the Productivity Commission report (Productivity Commission, 2015a, 2015b):

I think something that really did come through with the Productivity Commission kind of stuff was exactly what you've just touched on there. That the policy makers, the government and that want what I tend to refer to, and not disrespectfully, as white coat research. They want big, longitudinal, measurement based research and which we know can give us some interesting stuff (Dayna, AUFC, 17.12.14).

Dayna was aware of the type of research that government and policy makers recognised and desired most. I was aware that the majority of the participants had been researchers involved in *Australian Research Council* (ARC), or *National Health and Medical Research Council* (NHMRC) projects in Australia and in addition, *Teaching and Learning Research Initiative* (TLRI) research projects in Aotearoa, New Zealand, all government-funded research initiatives in both countries. However, none of the participants had been involved in longitudinal research studies they recognised as being highly desirable by the government and policy makers. I recognise that longitudinal research about the impact of early childhood education of infants and toddlers would contribute to capacity building in the early childhood and early childhood teacher education research field. However, as Nuttall and Grieshaber (2018) describe, these increased demands on early childhood teacher education are likely to work against capacity-building in early childhood research.

The pressures of meeting increased demands on early childhood teacher education, whilst also responding to the competitive and anti-collaborative nature of the ERA process, has the potential to work against capacity-building in the early childhood education research field, which is principally located within the already stretched research field of teacher education. (Nuttall & Grieshaber, 2018, p. 17)

Dayna explained some of the strategies the university encouraged early childhood teacher educators to adopt in order to streamline their, 'stretched', roles in early childhood teacher education. "There's this constant push [to] align your research with your teaching, align it, which makes sense in today's climate in particular" (Dayna, I, 20.06.14). Dayna, aware of pressures to engage in research in the university attempted to negotiate her advocacy for infant and toddler curriculum and pedagogy in her work in early childhood teacher education.

Dayna also explained the shift in the focus in early childhood teacher education towards research. "You can't do ok as an early childhood [teacher educator in] a

University department anymore unless you are doing ok with the research" (Dayna, AUFC, 17.12.14). In the past, there had been key cultural norms, or, in CHAT terms, a rule in the early childhood teacher education team dictating a stronger focus on collective teaching. With the shift of early childhood teacher education into universities, a new rule had been imposed from the university; research is the main priority.

For some of the participants, publishing in high-level rated journals was a strategy they used in order to not only support their career advancement but also their work advocating for infant and toddler curriculum and pedagogy. As Wendy acknowledged, "my pen is my sword" (Wendy, I, 29.08.14). I understood this to be a personal rule for Wendy's work, and her commitment to publishing about infant and toddler, pedagogy was strong. In her career as a teacher educator, she had published a large amount of academic research. I interpret Wendy's commitment to publishing academic research as her way of advocating for infants and toddlers. I recognise that at times her commitment to publish a large amount of academic research compromised her personal life:

I'm working until ten o'clock every night and then half of a weekend. But then, having said that I'm very grateful, I was just given study leave. There are peaks and troughs to this academic life that we need to understand and utilise in order to survive the journey (Wendy, I, 29.08.14).

The notion of survival in engaging in empirical research was supported by Susan's awareness of having realistic expectations for engaging in research activity. Susan was aware that she had to be pragmatic in choosing the research areas in which she could realistically obtain funding:

Research, in the end, comes down to the pragmatics of what can I get money to do. How can I make the most of that in terms of outcomes, and it's really frustrating when you put in *ARC*'s and *NHMRC*s and the referees say, "oh yes, but she hasn't got a track record in this particular area, her track area is there" (Susan, I, 02.07.14)

I identified Susan's frustration as further illustrating the limitations that the participants experienced in their work of researching within a marginalised field. It appeared that the participants needed to be strategic about the research in which they engaged. Susan was aware that this came, "down to the pragmatics of what can I get money to do". I argue that this further illustrated my finding that the participants struggled to obtain research funding for projects related to infant and toddler curriculum and pedagogy.

Ruby recognised the growing research focus in early childhood teacher education but had some reservations about the suitability of the role of the research-only academic within early childhood teacher education:

There's a much stronger research focus in the early childhood team now, [more] requirements for early childhood research. I like the idea of research and teaching, rather than being a pure researcher. I think the links with the field are incredibly important (Ruby, I, 01.09.14).

Ruby had a strong commitment to the historical notion of the early childhood, teacher educator as engaging not only in research, but being involved in the early childhood field through teaching pre-service teachers. Ruby's interest in maintaining connections with the early childhood field was clear in her comment, "I think the links with the field are incredibly important". I identified that Ruby understood teaching pre-service teachers to be a key aspect of the role of the teacher educator.

The majority of the participants were trying to build their careers through their research productivity, as is required in their work as early childhood, teacher educators in universities. They were also attempting to build the infant and toddler field by teaching infant and toddler curriculum and pedagogy in early childhood teacher education programs. However, it appeared to me that the participants found that higher education organisation makes their work highly contradictory. I argue that they responded to this contradiction in their work at the level of activity—both psychological activity and practical activity—through the practice and concept of advocacy. I recognise that advocacy is the way the participants held their work together. In a sense, advocacy was the way they managed to live out the contradictions in their working lives.

Advocacy was used as an attempt by the participants to overcome contradictory aspects of their work. They pushed back against colleagues who were trying to silence infant and toddler curriculum and pedagogy in early childhood teacher education. All of the contradictions that the participants described were historically accumulating tensions; these tensions had distressed and challenged them for a long period of time in their work. Engeström (2001) describes this experience, "as the contradictions of an activity system are aggravated, some individual participants begin to question and deviate from its established norms. In some cases, this escalates into collaborative envisioning and a deliberate collective change effort."(p. 137). In the case of these six participants, I understand them to be, "questioning and deviating from established norms", and through advocacy, as a particular strategy, they are working towards,

"collaborative envisioning", and aiming for, "collective change" (Engeström, 2001, p. 137).

As mentioned earlier in the chapter both Australia and Aotearoa, New Zealand teacher education programs moved in the 1990s to 2000s from colleges of education, with a stronger focus on teaching, to universities with a stronger focus on research. Since the introduction of performance-based funding measures such as the Performance-Based Research Fund (PBRF), introduced in Aotearoa, New Zealand in 2003, and Excellence in Research for Australia (ERA), introduced in Australia in 2010, there have been high levels of pressure placed on teacher educators to intensify their research activity (Hill & Haigh, 2012).

There is evidence that the move into universities has dramatically increased workload for all teacher educators (Hill & Haigh, 2012; Middleton, 2005, 2006). Dahlia had begun to question whether it had been a strategic move to shift early childhood teacher education into universities:

I actually do wonder [about] the lure of putting teacher education in a university setting so that it is research based. I have questions about it from many different angles. I have not revisited the idea that that teachers need to be reflective and informed by research, I don't doubt that for a minute. But I think we've put together requirements for staff in university settings that are almost impossible to live up to. I think it really stretches people beyond the limit of living a decent, balanced life (Dahlia, NZFC, 03.09.14).

Dahlia had a certain level of discomfort about the heavy workload that she and other colleagues experienced, particularly since early childhood teacher education moved into universities. "I think it really stretches people beyond the limit of living a decent, balanced life". Her concern was repeated in the focus conversation in Aotearoa, New Zealand. "I've been saying for a number of years that being an academic is more suited to people who want to live a monk-like existence" (Dahlia, NZFC, 03.09.14). The solitary nature of working as an academic Dahlia referred to described, a key aspect of the work of a teacher educator described by the participants. I was aware that, in a sense, the participants in this thesis are not necessarily experiencing research intensification differently to other academics. However, I do argue they experience the challenges of academic life within a particularly marginalised field. Essentially, I describe a group that is advocating for a marginalised field (infant and toddler curriculum and pedagogy), within the already marginalised field of early childhood teacher education (within the university), within a low status field in the university, that of teacher education.

The solitary existence that arose from the individualistic interpretation of research performance in the university challenged the participants' previous experience of the cultural rule of working as a member of an early childhood team. This leads me to turn to the participants' sense of isolation, which I explain using the concept of 'siloing'.

7.3 Isolation through the Experience of Siloing: a Rule/Rule Contradiction

The second claim I make in this chapter is that working as an infant and toddler, teacher educator in universities in Australia and Aotearoa, New Zealand has become isolating due to the push in universities for teacher educators to work in a more individualistic way. Wendy described this notion of individualistic work in universities as, "siloing" (Wendy, I, 29.08.14), a notion I recognised as suitable to describe the isolation the participants experienced. The majority of the participants in this research moved into their roles in early childhood teacher education from a background of working in the early childhood field, where they experienced more collectivist styles of working. I argue that the shift to a more individual working style in the university, compounded by pressures through competitive and individualistic research initiatives, through PBRF and ERA, (Middleton, 2005, 2006) is challenging for the participants.

I understand the rule of individual work within the university, results from the strong focus universities have towards research, as mentioned earlier in the chapter. This research focus also raises the level of competition between universities, within universities, and even within early childhood teacher education teams (Nuttall & Grieshaber, 2018).

Wendy was aware of divisions between different disciplines within the university and recognised that siloing was also present in early childhood teacher education. "One of our big problems is this siloing of disciplines that we keep encountering. Hell, even within the discipline we struggle to work together—let's face it" (Wendy, NZFC, 03.09.14). Wendy had an interest in working with other academic disciplines to foster the growth of research for infant and toddler curriculum and pedagogy. However, she was aware this could be unlikely as she recognised that "even within the discipline we struggle to work with one another". Wendy identified getting, "out of the silos", to have discussions as a particular strategy to support herself and other infant and toddler specialists in their work:

I think we're at a stage where we don't fully understand either our capacity or our roles within the larger sector of infant and toddler research and practice. I think everybody's trying to do everything. This is why we need to get out of the silos and have these discussions (Wendy, I, 29.08.14).

Wendy's call of, "we need to get out of the silos", illuminates her desire to connect with other colleagues about infant and toddler, research and practice. I argue the disruption and tension an individual-oriented work culture brings to the participants is due to the shift from more collectivist values brought to the university from the early childhood communities they previously inhabited. The early childhood teams shifted to a primarily individualistic focus within wider schools or faculties of education. In CHAT terms, I recognise the individual-oriented work culture as a set of rules, practices, and divisions of labour that are distributed across a cultural setting.

Ruby's description of the, "team approach", in the early childhood field illustrated the rule of collective work from the early childhood field that many of the participants attempted to maintain in their work in the university. "You appreciate the team and that's the thing about early childhood, it's very much the team approach" (Ruby, I, 01.09.14). However, maintaining a sense of collegiality with their colleagues in early childhood teacher education had become challenging for the participants in early childhood teacher education teams in universities. This rule/rule contradiction was described by Dahlia in the form of competitiveness she had observed in Universities in Aotearoa, New Zealand, most specifically since the introduction of the PBRF. She described the isolation of early childhood teacher educators in universities:

I think the structure of university departments has acted to break down the sense of collegiality and the sense that we're fighting the good fight together. I think there are some dynamics that are unhelpful. The PBRF competitiveness has limited our ability to link up with other early childhood colleagues in the rest of the country in collaborative ventures. There's such a lot of competition amongst universities to be the best, the top (Dahlia, I, 28.08.14).

The level of competition between teacher educators Dahlia described was high. Middleton's (2005, 2006) research in Aotearoa, New Zealand described the introduction of PBRF to teacher education as giving rise to competitive and individualistic practices. Universities compete against one another through research auditing strategies, such as PBRF and ERA, to be top in their country and, in their field of research; in the case of this research, the field of research is education. A major factor affecting the levels of research rating for universities is the number of academic staff publishing in highly rated publications. The increased pressure from universities for teacher educators to initiate research that could lead to prestigious research grants,

heightened the tension between teaching and research, as teaching is typically a very time consuming role (McInnis, 2000). The reduction in academic autonomy that has intensified since the introduction of PBRF and ERA has also led to a greater separation of teaching and research, with teaching becoming devalued (Curtis & Matthewman, 2005).

The individualistic nature of work in universities and the level of tension and discomfort with this trend was echoed by Dayna in Australia:

The University has made people very individualistic. It might not just be ERA; it's the intense pressures that we're being placed on. I went to a meeting yesterday where we were discussing workload and the person convening it gave us all a fortune cookie. She said I want you to look at your fortune and relate it to something about workload. Mine said, 'you are always helpful and never selfish with your time'. I said, 'I hate to say I am becoming less helpful and more selfish with my time because I feel like I am being made to be that way. I don't want anybody else to come to my door. I don't want my phone to ring because I know that it's going to be somebody asking for help'. I've become quite individualistic. I think all of those demands are making me much more protective of my own little interests, which I really don't like (Dayna, I, 20.06.14).

Dayna's comment, "all of those demands are making me much more protective of my own little interests, which I really don't like", illustrates her discomfort. I argue that Dayna's uneasiness illuminated competitive and individualistic tensions she felt in response to the contradiction between the division of labour shifting from the collaboration within the early childhood field and, the division of labour that enforced individualistic work practices within the university.

The participants reflected that the level of collegiality within early childhood teacher education teams had reduced, and the silos were present even between early childhood teacher education colleagues. The pressures of change within many universities to being more focused on organisational professionalism. In this dissertation, I use Evetts' (2009) notion of organisational professionalism to describe the pressures and changes the participants and other academics experience. Evetts' defines organisational professionalism as being:

Manifested by a discourse of control, used increasingly by managers in work organizations. It incorporates rational-legal forms of authority and hierarchical structures of responsibility and decision-making. It involves increasingly standardized work procedures and practices, consistent with managerialist controls. It also relies on external forms of regulation and accountability measures, such as target-setting and performance review. Professional

discourse at work is used by managers, practitioners and customers as a form of occupational control, motivation and expectation. (Evetts, 2009, p. 248)

In the context of this thesis, this means that individualisation and competition is much more prominent. I understand this to be due to the pressures imposed upon teacher educators from universities by linking individual teacher educator's performance to the rating of the University (Evetts, 2009). As Wendy mentioned earlier in the chapter, "They've now put this graph up in our system where you go into this program, and it shows you on a graph how much you've published each year." The competitive climate in universities, constructed by rating systems such as PBRF and ERA, provides many challenges for teacher educators (Lee & Boud, 2003).

Facing the realities of the competitive climate in the university Ruby mourned the loss of the sense of a collaborative team in early childhood teacher education:

It's been very sad seeing the loss of the collaborative early childhood team. We were a school of early childhood. Restructuring from a very open, transparent environment. That has completely changed. There are many meetings, but many of the decisions are made behind closed doors, there's a lack of transparency and a lack of involvement. A withdrawal into this individual focus of achieving your PhD or your research (Ruby, NZFC, 03.09.14).

The changes about the university early childhood teacher education teams, mentioned by Ruby, were illustrative of siloing occurring in the university. The competitive nature of the individualisation of teacher educators had developed through output and performance measures (Evetts, 2009).

Wendy described the change she had experienced through the development of research intensification in early childhood teacher education in universities in Australia and Aotearoa. New Zealand:

It's been a huge shift in so many respects. [Name omitted] once described it as a shift from research-led teaching to teaching-led research. It's a whole flip, a shift and that whole extra layer was added, but, yet people came from this very strong teacher education orientation (Wendy, NZFC, 03.09.14).

The individual focus following the shift into research intensification Wendy described led to a high-level of challenge for the participants in their work, particularly those who had historically come from a, "very strong teacher education orientation". Therefore, I argue that research audit strategies undertaken in Australia and Aotearoa, New Zealand developed and maintained a rule of individual performance in universities.

In the case of these six participants their experience of, and struggle with, siloing in their work in early childhood teacher education led to a crisis in their hierarchy of motives in their work. I argue that this contradiction between rules from the early childhood field that the participants attempted to maintain despite the university rule of individual work practices interfered with the achievement of their motives. On one hand, the participants were attempting to be collaborative with early childhood colleagues, maintaining the rule from the early childhood field of working together collectively in teams. However, on the other hand, they were trying to succeed in their careers in highly competitive universities.

All of the participants were at advanced stages of their career in early childhood teacher education. I was aware that each of the participants had been successful within their careers in universities and had been promoted in universities over their many years as early childhood, teacher educators. While the participants had been successful in their careers as teacher educators in universities, the crisis they experienced in their hierarchy of motives through balancing their focus on research or teaching, with advocacy as a focus across both roles, was particularly challenging for them in their work. I argue that, in the case of these six infant and toddler specialist teacher educators, the crisis that they experience in their hierarchy of motives is not experienced by many other teacher educators in universities, particularly as the opportunities for research and publishing about infant and toddler curriculum and pedagogy were limited internationally.

Wendy recognised the high-level of competition that the research focus had on colleagues in universities:

For those of us in academia, we've been pitched against one another. The PBRF environment has created this tendency for people to do research studies in pockets, or they'll only invite people in who are under threat. I don't understand it, but I think there's some really great work we could do across both Australasia or internationally. If we could suspend some of those fears and anxieties, and if we could somehow remove ourselves from constantly playing this game. I speak for myself as much as anyone else whether it's sustainable to continue working like I am forever, I don't think so (Wendy, I, 29.08.14).

Wendy's interpretation of the academic environment as being, "pitched against one another" after the introduction of PBRF in Aotearoa, New Zealand recognised the push to engage in individual research and her desire to work collaboratively and achieve high level research with colleagues in early childhood both nationally and

internationally. Middleton's research (2005, 2006) echoed the notion of being, "pitched against one another", as she described the introduction of PBRF to teacher education in Aotearoa, New Zealand as being individualistic and competitive.

In early childhood research in Australia and Aotearoa, New Zealand, the most prominent funding initiatives at the time of data collection were the Australian Research Council (*ARC*) grants in Australia and, *TLRI* grants in Aotearoa, New Zealand. However, despite the recent introduction of these funding initiatives, many teacher educators continued to struggle in their work to become productive researchers (Hill & Haigh, 2012). The struggle to engage in research was noted by the participants, even though the majority of them would be seen as productive and successful researchers in their work in universities.

The participants in both focus conversation groups claimed that rules from the university about individual research had led to a higher level of secrecy amongst early childhood teacher education colleagues in relation to prospective research opportunities. As Dayna described, "Keep your ideas to yourself, don't discuss them with anybody else because they'll be the ones who'll go and get the grant" (Dayna, AUFC, 17.12.14). Nina's experience echoed the notion of individualistic work in a climate of secrecy:

I think research has made us all secretive, work with the people you trust, or we've had people trying to get people to help other people especially when they started getting rid of people who weren't research active. Then they came along and said "oh can you put somebody on to this", you noticed that some people got tapped on the shoulder to leave, some people got tapped on the shoulder to include them in this grant (Nina, AUFC, 17.12.14).

Nina's observation of secretive activity to either include people on research projects in order to maintain their jobs or, as she noted, to, "get rid people who weren't research active", indicated the high-level of pressure that teacher educators in early childhood teacher education had started to experience as a consequence of PBRF and ERA. Susan also recognised a level of secrecy amongst other colleagues in early childhood teacher education:

But we also don't have time to sit down and chat and find the person who shares an interest. So instead, you put in a grant, I put in a grant. They're probably very similar and could've been much stronger if we'd done them together. We don't realise, and so we're actually competing with each other when we could've done something [together] (Susan, AUFC, 17.12.14).

Susan's comment highlighted her sense of frustration, "We're actually competing with each other when we could've done something [together]". Susan identified the irony of the siloing nature of universities, noting that grant proposals, "could've been much stronger if we'd done them together".

Siloing within early childhood teacher education had further developed within Universities, not only through rules related to research pressures but also through the lack of provision of social and meeting spaces in some universities. These meeting spaces previously provided by the University created and maintained specific cultural practices of meeting together and sharing about the work they were undertaking. I argue that meeting spaces afforded structured ways of organising activity within the specific community of teacher education at the University (Stetsenko, 1999). Nina discussed how her University got rid of all of the tearooms [also known as staff rooms]. "That happened about four or five years ago, and since then it's just gone downhill" (Nina, AUFC, 17.12.14). I interpret Nina's concern with the experience of working as a teacher educator in universities going downhill as being in relation to the rule of collectivist approaches to working in early childhood teams. Nina and the other participants in the focus conversation discussed how the removal of these social and communal spaces aided the individuality and siloing that had developed in universities. Therefore, I argue that siloing in universities emerged not only due to rules from universities, which created more individualistic work habits but also due to the disappearance of physical, communal spaces.

The opportunity to discuss work the participants and their colleagues were involved in was, at times, virtually non-existent. Dayna spoke of a strategy she had used in recent years to learn more about her colleagues' research. "I often go to my colleagues' presentations at conferences to find out what they're doing because I don't know. We are so busy that the idea of sitting down and having whole days to discuss our research just doesn't happen" (Dayna, AUFC, 17.12.14). I interpreted the strategy that Dayna used at conferences to represent the participants' attempts to "get out of the silos", as Wendy had called upon infant and toddler teacher educators to do.

In the third section of this chapter, I shift to describing the role advocacy played in the participants' work as a meta-strategy, in their attempts to negotiate the contradictions in the participants' work and achieve the object of activity motivating their practices.

7.4 Advocacy as a Meta-Strategy to Negotiate the Contradictions they Experience in their Work across Three Interpenetrating Systems of Activity

The final claim I make in this chapter is that, despite all of the challenges in their work described across the three findings chapters, the participants were strong advocates for infant and toddler curriculum and pedagogy. In this section, I argue the participants used advocacy as a meta-strategy, to negotiate the contradictions they experienced in their work across three interpenetrating systems of activity: the early childhood field; early childhood teacher education; and the university. By meta-strategy I refer to a high-level type of strategy incorporating collaborative work that focused on a shared mission and shared objects of activity (Huxham & MacDonald, 1992).

The historical lack of support from Ruby's university, because they, "didn't see the infant area as being hugely important", appeared to motivate Ruby's drive to advocate for infant and toddler curriculum and pedagogy. "Thinking back in my own working life I had good will from my colleagues, but the institution probably didn't see the infant area as being hugely important. Always a struggle, always a battle; that need to advocate strongly" (Ruby, I, 01.09.14). I understand Ruby's pledge to struggle, battle, and, "advocate strongly", to demonstrate her object of activity, which was to teach preservice teachers to become excellent teachers of infants and toddlers.

When asked what motivated her in her work Wendy described her willingness to engage with a wider range of academic disciplines:

I guess I'm a pretty stubborn person that when someone tells me no, I don't accept that. The fact that there's no one else, I don't say that lightly. There is no one else that I know of who gives infants and toddlers this lens. I'm really committed to seeing a future which I think is coming, where we break through these silos. I can't traverse neuroscience, philosophy and teacher education and psychology and health and nursing. I can't do it all, but I can be part of a community that might be able to (Wendy, I, 29.08.14).

Wendy's commitment to, "breaking through the silos", to connect with a more diverse community was a feature of her practice, motivated by her commitment to improving the understanding of infant and toddler curriculum and pedagogy. Wendy suggested undertaking a range of strategies to include more infant and toddler curriculum and pedagogy in early childhood teacher education:

I think getting out of the silos, getting heard having the dialogues, we need to have a succession plan. We need to work better with our students. I can't, I

can't say to you that everything that I think teachers should know, or should experience, or should discuss happens to them in the undergraduate program here. But then, can anyone? (Wendy, I, 29.08.14).

Wendy's advocacy strategy included having, "a succession plan", to foster others to continue with advocacy work for infant and toddler curriculum and pedagogy.

Ruby reflected Wendy's concerned about the lack of future voices to advocate for infants and toddlers. She noted, "There's no strong infant voice, there are researchers, of course, it's like the rising tide lifts all boats, but it isn't lifting the boats. But there is a rising tide of research that's coming that we can call upon" (Ruby, NZFC, 03.09.14). Ruby was also concerned about the lack of a "succession plan". Despite Ruby's acknowledgment of support from the, "rising tide of research to call upon", her concern for a strong infant voice remained. I interpreted Ruby's concern to demonstrate her uneasiness about the lack of voice for infants and toddlers in the early childhood field, as well as early childhood teacher education. Despite the challenges the participants experienced in their work, I recognise that they were committed to, 'forward anchoring' (Sannino & Laitinen, 2014), in their work as advocates of an, "imagined future" (Nuttall & Brennan, 2016, p. 377), they hold for infant and toddler curriculum and pedagogy in early childhood teacher education.

Ruby identified herself as a, "squeaky wheel", in terms of advocating for infants and toddlers:

Being a squeaky wheel in terms of advocating for infants and toddlers I suppose I've had to take that mantle of there goes Ruby again going on about infants and toddlers. I haven't ever felt that there's been anybody really stepping into the breach. They've been there in the wings, but they haven't spoken up, in my opinion, loudly enough (Ruby, NZFC, 03.09.14).

I understand Ruby to be expressing a concern about the lack of a succession plan for infant and toddler advocates; this was also described as a lack of support. "I haven't ever felt that there's been anybody really stepping into the breach". I argue that individualised modes of practice reduced the likelihood of being able to develop succession plans, since succession plans rely on collaboration. Grieshaber (2001) describes advocates in early childhood as having, "the strength to endure the personal and professional costs of being questioned by colleagues as resistant, hard to handle, and questioning" (p. 70), which aligns to the role of the advocate that the participants in this thesis uphold.

7.4.1 We argue and take risks

I recognised that Wendy was aware of the risks she took in her career by publishing and researching almost solely about infant and toddler curriculum and pedagogy. Wendy experienced siloing in her work not only within the university through the university's focus on individual research, but also through the focus of her work on infant and toddler curriculum and pedagogy. Despite these challenges, Wendy continued to advocate for further research about infant and toddler curriculum and pedagogy. In her interview, Wendy described a paper that she was about to submit to a journal. "What I'm saying in this paper is we choose one route for infant research and scholarship at our peril because we ignore the others, and that's where I see my current contribution" (Wendy, I, 29.08.14). Grieshaber (2001) notes the "emotional investment", teacher educators engage in as advocates, as echoed by the comments Wendy made, "we choose one route for infant research and scholarship at our peril". Grieshaber cautions of the potential for teacher educators' actions as advocates to be seen as, "high-cost" (p. 69).

I recognise that advocacy was a way for the participants to shift away from the individualistic focus of work in the modern university, and to advocate for the larger collective infant and toddler community. As Roth (2010) notes, "The advantage of activism over other theoretical categories is that learning can no longer be thought as something that individuals will do. The category orients us to the collective (society) and to life as a whole" (p. 288). Everything that advocates do is organised by their collective motive, in this case, infant and toddler specialists within early childhood teacher education, and following this, the goals are shaped for individual actions by the participants of the activity system, whereby activists become conscious of their particular activity (Roth, 2009).

Wendy resisted suggestions by her colleagues that she look at other areas outside of infant and toddler curriculum and pedagogy, in order to further her career. Her colleagues suggested that if she did so, she was far more likely to receive external funding grants and promotions. Wendy was not willing to compromise her commitment to infant and toddler curriculum and pedagogy. "I realise that maybe it's a career killer not to get those things, but you're playing a tension game, it's constant, and of course the journals that our work is recognised in are also not well recognised" (Wendy, I, 29.08.14). As noted earlier the time of data collection there was only one academic journal that focused primarily on infant toddler curriculum and pedagogy.

The First Years Ngā Tau Tuatahi New Zealand Journal of Infant and Toddler Education was a journal run out of the University of Auckland in Aotearoa, New Zealand. There were other journals that provide an opportunity for academics to publish articles about infant and toddler curriculum and pedagogy. However, content in these early childhood journals, is generally dominated by articles that, focus on children aged three to five years.

Dayna also described her strategy of infant and toddler advocacy within research and teaching:

I advocate at the moment through the research and the teaching that I do. That is a major advocate role for me to get the research out there that can then be translated into textbooks. That is my contribution and to teach this undergraduate unit and the postgraduate unit. To teach them well and to inspire passion in those students so that they see working with infants and toddlers as not only a central part of their role, even if they don't end up working with that age group. They will probably be the only teacher qualified in the centre; they will have a leadership role with the people that are working with infants and toddlers. My ultimate aim is out of that, 25% of them would go I do want to work with this age group. I realise that not everybody will, but that they actually get a passion for working with this age group. To me, that's a major advocate role because you're getting people out there who want to work with that age group and that's how you're going to get that change. It's wanting to do a little bit of good for these infants and toddlers and the educators who work with them. What motivates me is also I think to a certain extent the frustration that despite now quite overwhelming evidence of the importance of the first two years of life we still have people from the highest offices in the country ignoring it. Saying we just need to make childcare affordable, we just need to get more little bums on more little seats, and the quality doesn't really matter. Well, we know it does (Dayna, 20.06.14).

Dayna experienced contradiction in her work, evidenced by her frustration about lack of recognition of the, "overwhelming evidence of the importance of the first two years of life". Dayna's commitment to motivating pre-service teachers to work with infants and toddlers in the early childhood field, through her teaching, research, and creation of textbooks, were examples of her use of advocacy as a meta-strategy. Dayna identified the contradiction between the rule from neuroscientific research (Schore, 2005; Shonkoff & Phillips, 2000; Shore, 1997) that, demonstrates that the first three years are crucial in brain development, and, what she understood as a rule from the government that, *quality* in infant toddler settings was less important than, the *quantity* of childcare places. As noted by Dayna, "we just need to get more little bums on more little seats, and the quality doesn't really matter".

Wendy echoed, a strong commitment to advocate for infant and toddler curriculum and pedagogy through, "publishing and research":

[My career has taken] me to where I sit today which is very strongly oriented towards this [birth to three] age group. In an advocacy role because I think that is definitely there. I see my advocacy role as through publishing and research and where I can – teaching (Wendy, I, 29.08.14).

It was interesting to note Wendy's hesitancy to include teaching as an advocacy strategy, as demonstrated by her comment, "and where I can—teaching". I interpreted Wendy's hesitancy to reinforce the challenge she experienced in her workplace to include infant and toddler curriculum and pedagogy in the early childhood teacher education program (an argument addressed in the previous chapter, where Wendy described pre-service teachers in her university choosing not to focus on infant and toddler age groups in assessment tasks). As she recounted, the task gave students, "an option, and once again infants and toddlers were sidelined".

Wendy argued that showing an interest in infants and toddlers in the early childhood field or early childhood teacher education automatically made someone an advocate. "It is an advocacy role, whether we like to admit it or not for infants and toddlers. To be that person who says, 'Hang on a minute', or, 'But did you notice?'" (Wendy, I, 29.08.14). Here Wendy was expressing a personal rule in early childhood teacher education, that if you pay attention to infants and toddlers in your work, you became an advocate for this marginalised group.

Dahlia was motivated to advocate for a different cause for the early childhood field. She advocated for a more intellectually rigorous workforce of teachers who work with infants and toddlers:

I think the people that teach infants and toddlers have to be strong intellectuals as well as people who are good with people. They have to be able to inspire on many different levels. Intellectually as well as practice, so it lifts the field beyond this taken for granted idea that all you need to do is love children. You need to love children, but you also need to make an ethical commitment to that love being a professional love that is informed by a range of disciplines. Disciplines that cover the field of human development and health, and neurology, neuroscience. Sociology, policy, fully grounded in the realities of people's lives. But that intellectual rigour, I cannot emphasise it enough (Dahlia, I, 28.08.14).

Dahlia was concerned that educators, who worked with infants and toddlers were often educators with lower qualifications than educators who worked with preschool aged children, and therefore were perceived as having lower levels of intellect. She challenged the rule that a, 'nice lady who loves children' (Stonehouse, 1989), was enough to be a teacher that worked with infants and toddlers, expressed in her desire, "to lift the field beyond this taken for granted idea that all you need to do is love children". Dahlia demanded a high-level of professionalism and intellectual rigour for teachers who worked with infants and toddlers and, in doing so, advocated to raise the status of infant and toddler curriculum and pedagogy. This advocacy connected to the historical challenge of professional status for infant and toddler teachers (Dalli, White, et al., 2011; Rockel, 2009, 2013), as explained in Chapter Two.

When I asked Ruby what motivated her in her work, she prioritised involvement in political issues related to infant and toddler curriculum and pedagogy. Ruby's advocacy focused on raising the professional status of working with infants and toddlers:

The political dimension has been very important for me, particularly in the infant area because of the low status for the people who work with infants and the lack of research in the area. I'd like to see some closer things happening with Australia; I think that we've got a lot to support infant people in Australia and vice versa. We are geographically close, and it's cheaper to fly to Melbourne than it is to parts of New Zealand. I'd like to see a lot more dialogue going on there in the infant area particularly perhaps sharing ideas in a political sense. What can we do to make change politically? The infant world is very small. When you're with somebody [who knows] about infants, you immediately feel relaxed because they know exactly what you're talking about (Ruby, I, 01.09.14).

Ruby's desire to break the silos down to, "support infant people in Australia", was evidenced by her commitment to the rules of collaboration in the early childhood and early childhood teacher education field. A sense of collaborative community within early childhood teacher education was a high priority for Ruby, and she continued to seek other academics who know, "know exactly what you're talking about", with infants.

As mentioned earlier, Dahlia focused on raising the status of infant and toddler educators through intellectual rigour. She argued infant and toddler units needed "to be academically robust".

I've been very mindful that it [the infant and toddler unit] needs to be academically robust. People coming into the course will come in because they love babies. While you want them to love babies and you wouldn't want anyone not loving babies in the course it cannot be the only reason. That is one of the things that I am fierce about. I am very fierce about this, it has got to be academically robust (Dahlia, I, 28.08.14).

Dahlia's call to shift away from the notion that pre-service teachers come into early childhood teacher education programs because they, "love babies", reinforced her commitment to reject a norm in society that, "nice ladies who love children" (Stonehouse, 1989), make suitable early childhood teachers to work with infants and toddlers. Shortly after discussing the role of teachers who work with infants and toddlers, Dahlia shifted her focus to cautioning against the role of the academic in early childhood teacher education:

You have to have research to inform your teaching as well. But now that I'm an academic who has gone this sort of circuitous route of being a teacher, being an academic and then back to teacher education. I often wonder how compatible all of these roles are together in the space of time we have. The demands are immense when you put them together. To be a good researcher, to have the time to think and reflect and turn that reflection into good scholarly publications, that's a big ask. To on top of that be an excellent teacher for teachers to say Ruby inspired me. Not just ok, get by with average evaluations if I'm teaching I want students to say she's inspirational. So, to be a really good researcher but to also be a good lecturer who can inspire teachers, other teachers who will do well. Sometimes you can be one or the other but to be both is a big ask. Some of the skills are transferable, but some others are not. To be a good keynote speaker as well, it's different and a lot of things we're asking our academics who work in teacher education to be so. The translation from teacher education to researcher is hard, but also from being a researcher to being a teacher. It's a lot to put into one role (Dahlia, NZFC, 03.09.14).

I understand Dahlia's caution about the role of the academic in early childhood teacher education as further demonstrating the crisis in the participants' hierarchy of motives. The participants were pressured in their roles with many different demands. I return to a point made earlier in the chapter, in CHAT terms, the hierarchy of motives is a way in which to decide the importance of the range of motives that individual people have. In times of tension, conflict or contradiction, the hierarchy of motives determines which motive will be focused on at that time (Leont'ev, 1978). I argue the participants' crisis was not experienced by many other teacher educators in universities, due to the lack of opportunities for infant and toddler-focused publications. As Dahlia noted, "you have to have research to inform your teaching", but this is a key challenge for this particular group of participants. As they have to, "be a good researcher, to have the time to think and reflect and turn that reflection into good scholarly publications", in a context where opportunities for research and publishing about infant and toddler curriculum and pedagogy were limited internationally.

7.4.2 Raising the profile of a marginalised group

While I recognise that the participants were strong advocates for infant and toddler curriculum and pedagogy, they were also workers in higher education who were attempting to raise their profile as academics. They were trying to be resourceful and use their research as another artefact in their system of activity. The participants used material artefacts such as journal articles in order to push their activity forward. I argue they were not just trying to adapt the curriculum; they were also trying to do research that would very quickly fill the gap in the curriculum. In Chapter Six, I discussed the lack of artefacts related to infant and toddler curriculum and pedagogy for pre-service teachers with which to engage. In this chapter, I shared how the participants were working very hard to address the dearth of infant and toddler, early childhood literature.

I argue the participants were immersed in three systems of activity. They represented a marginalised group of academics in a system of activity in universities across Australia and Aotearoa, New Zealand. They were trying to represent the interests of groups that are marginalised in society — infants and toddlers, and educators and teachers who work with infants and toddlers, in the early childhood field as a system of activity. This added complexity to their work and gave rise to an added dimension in their work, that of advocating for greater emphasis on infant and toddler curriculum and pedagogy in early childhood teacher education as a system of activity in universities.

Despite the challenge that the Productivity Commission provided (Australian Government Productivity Commission, 2011; Productivity Commission, 2015a, 2015b), Dayna was able to see positive aspects of the Commission's work in Australia.

I have never heard so much talk and so much advocacy about nought to two year olds in Australia as I've heard since that Productivity Commission came out. I said, if nothing else, it's generated a lot of talk and a lot of argument. (Dayna, AUFC, 17.12.14)

Many of the points made in the Productivity Commission report, such as, educators who work with infants and toddlers should hold a certificate III qualification, as long as they work with a colleague who has a diploma. "In many centres, this would mean more certificate III and fewer diploma level workers than are currently required" (Productivity Commission, 2015a, p. 18), were particularly challenging to the early childhood field and early childhood teacher education. The force of argument in

response to suggestions made in the reports about educators who work with infants and toddlers unified the early childhood field and early childhood teacher education in Australia in advocacy for educators, infants, and toddlers in early childhood settings.

In this context, I found Sachs (2003) argument about activists in teaching and teacher education particularly pertinent for this particular group of teacher educators. I argue that in order to move forward in advocating for infant and toddler curriculum and pedagogy and in motivating early childhood teachers as advocates, the notion of the infant and toddler advocate in early childhood teacher education must be developed:

Through a socially critical form of teacher education that is predicated on learning, partnerships, collaboration and risk-taking, the rise of an activist teacher professional is possible. This will not occur overnight, but if there are examples of an activist form of teacher professionalism in place and teacher education faculties provide the intellectual leadership, then an activist teacher professionalism led by teacher educators, with the support of a variety of stakeholders, becomes a reality. For a strong teaching force, we need strong teacher education (p. 76).

In contributing to strengthening infant and toddler curriculum and pedagogy in early childhood teacher education, I argue the participants were actively using advocacy as a meta-strategy. The matter of status in infant and toddler curriculum and pedagogy in early childhood teacher education may be the crucial element in the continuation of attitudes concerning professionalisation with respect to infant and toddler teachers in the early childhood field. In order to change attitudes towards infant and toddler teachers, infant and toddler advocates have to exhibit exceptional levels of advocacy and practice (Rockel, 2013). The development of the advocate within the profession of infant and toddler curriculum and pedagogy in early childhood teacher education is important for teachers, teacher educators, and the wider community. Developing advocacy for infant and toddler curriculum and pedagogy in early childhood teacher education, requires a profound re-examination of current teacher education programs (Sachs, 2003), an object of activity the participants were working towards.

7.5 Chapter Summary

This chapter illuminated three themes relating to the participants' struggle to work as infant and toddler curriculum and pedagogy specialists in the modern university. I argue that this struggle was evidenced through three contradictions that have accumulated historically and intensified with the shift of early childhood teacher

education into universities. These contradictions have been experienced by the participants over their careers as infant and toddler, teacher educators.

In this chapter, two of the research questions were addressed in relation to the modern university. This chapter explained the sociohistorical context of the participants' experience in the modern university in relation to the participants' work, and the impact higher education had made on their work as infant and toddler, teacher educators.

Chapter 8

Conclusion

8.1 Introduction

This thesis engages with a pressing problematic for contemporary society - the quality of extra-familial care and education for very young children. Infants and toddlers are the fastest growing group in enrolments in education in Australia and Aotearoa, New Zealand (Australian Bureau of Statistics, 2015; Ministry of Education, 2015; OECD, 2015). It is critical that educators who work with infants and toddlers have a depth of understanding about the specific needs of infants and toddlers in early childhood settings. In order for this to occur, it is vital that infant and toddler curriculum and pedagogy content features in early childhood teacher education programs. By investigating the work of six infant and toddler specialists in university-based early childhood teacher education in Australia and Aotearoa, New Zealand, this thesis has contributed to understandings of the work of infant and toddler specialist teacher-educators, and their perspectives on the importance of infant and toddler curriculum and pedagogy in early childhood teacher education.

The research questions chosen for this thesis focused on a specific group of teacher educators. In this thesis the research questions have been systematically addressed by the three findings chapters and that the purpose of the final chapter is to briefly summarise these findings, then look beyond the findings.

Although infants and toddlers are growing in numbers in education settings, there has been limited research into preparation of educators to work with children under the age of three. By investigating the work of infant and toddler, specialist teacher educators I illuminate the importance of including infant and toddler curriculum and pedagogy in early childhood teacher education in order to support educators working with children under three years of age. This topic was chosen, as they were simultaneously participants in both the infant and toddler domain in the early childhood field, and the higher education domain in universities. Infant and toddler, specialist teacher educators are not common internationally, and there is currently a gap in the literature about their perspectives on their work (Horm et al., 2013; Norris, 2010; Pearson, 2016; Whitebook, 2009).

In this final chapter, I revisit the central claims of the thesis, that advocacy is the chosen way forward for infant and toddler teacher educators in universities. The participants engaged in a series of meta-strategies in order to engage in advocacy, which I outline. I will address these in this chapter in terms of their implications for the literature, limitations, contribution, and future research. A key purpose of this chapter is to go beyond the limits of the thesis to indicate potential future issues and research potential.

8.2 Advocacy as the Overarching Motive for the Participants' Work

In this thesis, I have claimed that advocacy is the chosen way forward for infant and toddler, specialist teacher educators in universities. I have brought to attention the complex nature of this work. I have illustrated this complexity to highlight not only the importance of advocacy but to bring attention to the difficult nature of their work. I have provided a platform from which to say that the work of this group of infant and toddler specialists in early childhood teacher education in Australia and Aotearoa, New Zealand is important for the international early childhood field and early childhood teacher education. In highlighting their working lives, I contribute to the advancement of infant and toddler interests in the early childhood field and early childhood teacher education.

To speak out against systems of activity that do not support your work is challenging. It requires a tenacity that the participants in this thesis have demonstrated through their commitment to uphold the importance of including infant and toddler curriculum and pedagogy in early childhood teacher education at all times. They showed they were able to maintain infant and toddler curriculum and pedagogy in their teacher education programs by, 'bending the rules', such as through including infant and toddler images and examples of practice in general early childhood teacher education units. They, 'pushed back', against their colleagues when those colleagues attempted to remove infant and toddler content from early childhood teacher education programs. They worked far beyond the hours their employment contracts required. They strategically negotiated the' high-stakes' realities of publishing research, whilst also strategically ensuring they kept their voices alive and active within early childhood spaces that tend to focus on three to five year olds.

I argue the participants in this thesis had learned how to navigate multiple systems of activity in order to be successful within higher education, despite university norms of

siloing, individualism, and competitiveness. These norms did not support them as infant and toddler specialists in early childhood teacher education. University rules resulted in deep contradictions that challenged their commitment to their historical values of collegiality and the team approach, maintained from the conventions encouraged in the early childhood field. If this was what it, is like for this group of senior-level infant and toddler specialists in early childhood teacher education, who are at the top of their field, what will this mean for people who are early career researchers and junior academics?

This thesis itself aims to be a form of advocacy to support infant and toddler teacher educators in their work. The overarching motivation behind this advocacy is to support the professionalisation of infant and toddler educators and fight against attrition of infant and toddler curriculum and pedagogy in early childhood teacher education programs. As an infant and toddler specialist, myself I came to this thesis knowing that these threats were real. I wanted to make a difference. I hope this thesis achieves this aim by drawing attention to the working lives of infant and toddler, specialist teacher educators in universities in Australia and Aotearoa, New Zealand, highlighting their working lives, and providing a platform from which to say that their work is important for the advancement of infants and toddlers in the early childhood field. I aim to reinforce their place within early childhood teacher education.

However, as Grieshaber (2001) notes the work of advocacy has both a personal and a professional cost. She asks the question, "Is it all worth it? Is it worth the risk?", If I were to ask my participants this question, I believe they would tell me it was worth the risk. I make this claim because they spoke of the rewards of their labours. The battles they fought saw them winning highly competitive grant money that they then used to advocate for infants and toddlers in the early childhood field. Knowing the competitiveness and low success rates in the awarding of grants in universities, this shows that they knew how to succeed in the university whilst also advocating for the field. They knew the rules maintained by the university as a system of activity and how to play by the rules, but also how to bend the rules in responding to contradictions (Edwards, 2010) in order to engage in the work of advocacy. Therefore, despite the contradictions, tensions, and struggles they experienced, I argue they had succeeded in their careers as senior academics with a high-level of experience and who had achieved promotion within the modern university. The myriad ways in which the

participants engaged in this meta-strategy in their work is evidence of the complexity of engaging in advocacy:

- In order to challenge policy, the participants needed to be well aware of the direction of policy change, as part of a commitment they had to supporting the early childhood field.
- They included images and examples of infants and toddlers in their teaching of pre-service teachers in order to inspire an interest in working with infants and toddlers.
- They engaged in the political dimensions of infant and toddler advocacy work through dialogue and advocacy with key stakeholders, government, and policy makers.
- They spoke at conferences advocating for infant and toddler curriculum and pedagogy.
- They strategically published both research and practice literature about infant and toddler curriculum and pedagogy in research and practitioner journals in order to influence a wide-range of audiences.
- They published textbooks about infant and toddler curriculum and pedagogy to engage with the early childhood field.
- They engaged in empirical research to speak to policy and raise understandings of infant and toddler curriculum and pedagogy.
- The participants advocated for specialist infant and toddler curriculum and pedagogy units, rather than an integrated birth to five early childhood teacher education program.

Each of the strategies outlined designed to move the early childhood field towards the forward anchor. I recognise early childhood education as a cultural form of a 'forward anchor' (Sannino & Laitinen, 2014), where infant and toddler curriculum and pedagogy is valued.

By 'forward anchoring' I describe a term used by Sannino and Laitinen (2014) to refer to a fishing method, commonly known as kedging, employed by sailors and fishing crew in order to move their boat forward, particularly in tide changes or when the boat needs to move from a tricky situation. The crew throws the kedging anchor into the distance and pulls their boat towards it. This 'forward anchoring' or kedging is described by Nuttall and Brennan (2016) to be "used as an alternative to staying fixed

in one spot – as a metaphor for agentic work towards an imagined future. This metaphor points to the centrality in CHAT of desired outcomes in motivating collective work" (p. 377). Therefore, what the participants were doing in their advocacy work was recognising that they were working in uncertain conditions. The tide was shifting beneath their feet. Without forward anchoring, the possibility of sinking was real. But they had not fallen victim to the possibility of sinking and had instead developed a set of strategies that, 'forward anchored', their work, in order to keep their work moving into the future whilst always knowing that the future is itself an uncertain one. This required a deep commitment on their behalf, a belief that this work was worth the struggle. I recognise this to mean that the participants in this thesis were people whom Apple (2011) would each describe as a, "deeply committed member, as someone who demonstrates through her or his life what it means to be both an excellent researcher and teacher" (p.230).

Apple (2011) call for the critical activist in teacher education to be an, "excellent researcher and teacher" (p. 230). Apple sees these two roles as blended together in order to, "embody the dual commitments to exceptional and socially committed research and participating in movements whose aim is interrupting dominance" (Apple, 2011, p. 230). I recognise this group of participants to be deeply committed to their work, demonstrated through the myriad forms of advocacy they engaged in so that their work would disrupt the dominant focus on children aged three years and older.

Initially when I started this thesis I thought the participants would be working on advocacy in relation to education; for example, making sure there were quality graduates who knew about infant and toddler curriculum and pedagogy. However, as I went through the process of data analysis, I realised their forms of advocacy were more than that. For the participants in this thesis, having high-quality graduates was only *one* form of advocacy they engaged in. The participants had an expansive, wideranging view of advocacy that manifested across all of their work activities. I came to understand advocacy, in essence, to be the underlying theme or a motif for everything they did in their work.

Moreover, the participants in this thesis were working within a contemporary policy context where neo-liberal burdens on education, alongside neoconservative and managerialist inclinations (Apple, 2011), were already having an effect on teacher education. The themes touched on in my literature review describe the struggle for

professionalisation in the early childhood field, alongside the simultaneous struggle against deprofessionalisation in teaching and teacher education. These are examples of historically accumulating contradictions or structural tensions as referred to in Chapter Three (Engeström, 2001) for groups of workers in this contemporary policy context. This thesis adds to the ongoing story of struggle for teachers of infants and toddlers in the early childhood field and the work of teacher educators in universities.

This thesis shares rich understandings of forms of advocacy for people engaged in infant and toddler curriculum and pedagogy, both in the early childhood field and higher education. This includes infant and toddler educators and teachers, and early childhood teacher educators. This thesis is part of my commitment to advocating for infants, toddlers, their families, educators and teachers who work with infants and toddlers, and I will stay committed to advocating for infant and toddler curriculum and pedagogy in early childhood teacher education. In considering my role as an infant and toddler advocate. I am aware that advocates are most effective when organised around a collective motive. Based on this shared motive, goals are shaped for individual actions by the participants of the activity system and, thereby, activists become conscious of their particular activity (Roth, 2009).

It was a privilege to spend time with six women who told me about what it is like to be amongst a small number of specialist teacher education academics in Australia and Aotearoa, New Zealand. This thesis has provided readers with an opportunity to be aware of the struggles of infant and toddler teacher educators in their work. In doing so, I have aimed to articulate a clear picture of the important role that advocacy plays in the participants' work as infant and toddler specialists.

8.3 Unanticipated Methodological Insights

8.3.1 Journaling my personal reservations: the panic of academia as a career

In reflecting on Grieshaber's (2001) questions about advocacy in early childhood and whether it is worth it, and worth the risk, I returned to a significant moment in my data collection. An excerpt from my research journal entry titled, 'The Panic of Academia as a career', explains the tension arising from my reflection on the challenges of being an infant and toddler specialist and advocate. The realisation of the extensive workload, long working hours, lack of autonomy, and huge amounts of pressure from Universities as being the reality of work as an infant and toddler, teacher educator had

been an alarming realisation for me throughout the process of this thesis. This sat alongside my growing awareness that this was the reality irrespective of the employing university. The process of collecting data with participants who spoke openly about the challenges of their working lives as teacher educators was confronting for me as a researcher:

Doing this research has been very confronting for me as a future academic. There have been several times while transcribing, analysing, reading through the data from my interviews, and even taking part in the focus conversations where I have felt very concerned about my future. I remember one point when I was transcribing the focus conversation from NZ, and the participants were talking about the sacrifices that they make personally for their work – in particular talking about their families and how their families mention on a regular basis that they are always working. I had to leave my office, go sit up on the top of the roof garden in the Daniel Mannix building [at ACU's Melbourne campus] and I started to ask myself a question that would end up being a recurring issue throughout the journey of my thesis – "Do I really want to pursue this as a career?"

This was a very confronting realisation for me to make alongside the journey of this thesis. I am an intimate insider to this thesis, an idea I discussed in depth in Chapter Four. Being an intimate insider to this thesis offered me a window into the lives and work of this group of infant and toddler, teacher educators. I was familiar with the nuances of what it means to be an infant and toddler specialist before embarking on the PhD. Being an intimate insider assisted me in developing quick understandings of the experiences of the teacher educators who participated in this thesis.

Therefore, I was well aware of the long hours and struggles that my colleagues were engaged in, in their work as infant and toddler teacher educators, before I collected data with the participants. However, the confronting realities of this heavy workload, lack of autonomy, and continual struggle as potentially being *my* future reality as an academic was alarming. This was particularly resonant for me personally, as I have been a 'workaholic' throughout my entire career. However, the aspect that was most alarming for me was the lack of autonomy that I apparently faced as a future academic, since the freedom to pursue my interests in my work had been the reality for me throughout much of my career. I started to realise that becoming involved in a University system of activity could involve situations, which would push me into work that would not be supported by my previous working experience nor would it be connected to my interests in infant and toddler curriculum and pedagogy. However, at the end of this journal entry, I summed up my thoughts and concerns about beginning

a career as an academic and realised what I ultimately felt about this future role. I realised I was well aware of the struggles and the difficulties that I will have:

But then there is a feeling that keeps popping up each time I ask myself if I can do this? The 70-hour weeks, the lack of focus on infants and toddlers, the siloing, the fight for infants and toddlers. The overwhelming feeling is. 'But I can't not'.

8.3.2 The need to revisit my Literature Review

In Chapter Two, I describe how I set out to study infants and toddlers in early childhood teacher education. As I reach the end of the thesis, I recognise how the balance of the thesis shifted to studying teacher education. In the process of developing the findings chapters, the lack of an infant and toddler focus in the data confronted me. My supervisor had mentioned early in the process that she thought this PhD would be less about infants and toddlers and more about the work of teacher educators; she was correct.

The process of examining the literature for this thesis was necessarily recursive. Having completed my initial literature review, I went back and read further teacher education literature as the emphasis on the participants' work as education academics came through. As the thesis progressed the emphasis on issues to do with academic work became stronger and stronger, even as infant and toddler issues remained present for them in their work. I now recognise this was because the participants were making a strong case for infant and toddler curriculum and pedagogy in early childhood teacher education.

8.3.3 Methodology as consciousness-raising

In this section on the chapter, I mention consciousness raising. In doing so, I refer to the participants bringing implicit aspects of their work to conscious awareness, with the result that they could act on (and therefore potentially change) objects of their activity. I recognise that the participants in this thesis were becoming more conscious of the artefacts, which mediate their activity. It is here I return to a point made in Chapter Three, where I refer to Vygotsky's claim that from a cultural-historical approach that advanced cognitive performance and human action are mediated by artefacts (Wertsch, 1991).

My awareness of the implications of my thesis evolved through engagement with the participants, highly educated women, who were conscious of the context and circumstances of their work. However, it was clear that the theoretical and

methodological constructs of this thesis provided further opportunities for consciousness-raising for the participants. This process of consciousness-raising took place in three ways within the data collection. The first aspect occurred through the process of sharing of artefacts in the individual interview; the second aspect was through the individual interviews followed by the focus conversation while the third aspect of consciousness raising eventuated through the process of sharing quotes from the opposite country's individual interviews in each of the focus conversations.

The first aspect—asking the participants to share three key artefacts that they used in their work as an infant and toddler, specialist teacher educator in their individual interview—turned out to be one of the most challenging questions I asked the participants. Prior to the interview, I asked the participants to bring some key artefacts to the interview. I found I was asked several different questions by some of the participants via email about what they should bring and, in some cases, what I meant by asking them to bring, 'key artefacts', with them to the interview.

Two of the participants forgot to collect the artefacts to share in the interview, which I only discovered when I asked the question about the artefacts in the interview. When I clarified what I meant by, 'key artefacts', these two participants were quickly able to share with me three key artefacts in their work. The process of sharing artefacts seemed to be challenging for most of the participants, particularly the requirement to recognise which were the most important mediating artefacts in their work. However, the methodological benefits were clear; further discussion about these artefacts provided an opportunity for each of the participants to reflect more deeply on their role as infant and toddler, specialist teacher educators.

Second, the act of interviewing the participants individually before the focus conversation sparked each participants' insightful analysis of their own work. This was illustrated through a realisation Dahlia had when talking in her interview about the challenges that stemmed from the restructuring of her University, when she said, "I can't really talk about this with anybody" (Dahlia, I, 28.08.14). Through the interviewing process, I became aware that the opportunity to discuss the work that they do, the history of their work, and what motivated them as infant and toddler specialists was novel in the current lives of the participants. Many of the participants divulged that they had not described the work that they do to anyone else; particularly to the depth, this thesis gave them the opportunity to explore.

Gathering as a group in the focus conversation in each country, the third aspect of consciousness-raising, extended this process of consciousness-raising through from the individual interviews. The focus conversations assisted participants in each country to share, examine, and reflect with colleagues on their collective experiences of being infant and toddler, teacher educators. I observed that this consciousness-raising was more apparent in the participant group where the time between the individual interviews and focus conversation was shorter than the other group of participants. I surmise that participants in the group with the shorter timeframe were able to talk and reflect about their work in reconstructed ways due to the stimulus of consciousness-raising in the individual interview with the participants between 2-6 days before the focus conversation. The focus conversation the participants engaged in, in each country provided an opportunity for them to share their own experiences, then collectively discuss, critique, and analyse these as a group. I recognise this process as raising the participants' consciousness in regards to their awareness of themselves as a group of collective subjects.

An additional act of consciousness-raising in the focus conversation was the activity of sharing some initial data through quotes from the other country's participants. These quotes drawn from the opposite country's individual interviews, and this sharing of quotes to provoke discussion and analysis of the opposite country's experience, was a process that occurred in each country's focus conversation.

This proved to be a particularly rich methodological strategy. Although the participants had knowledge of the other country's context, the depth of knowledge amongst the participants about their colleagues' contexts in their own country and, to a greater extent, in the opposite country, was extended through this strategy. If finances had allowed a possible extension of this strategy would have been to bring all the participants together in a focus conversation. Nevertheless, the process of sharing quotes from participants in the other country in the focus conversations was very powerful.

8.4 Limitations of the Thesis

The intention of the thesis was not to make generalised claims about the work of the participants or about infant and toddler curriculum and pedagogy in early childhood teacher education internationally. I recognise such generalisation is not possible, as I interviewed just six people and learned about their perspectives on their work over a period of six months in 2014. However, while I am unable to make generalised claims (Yin, 2014), I nevertheless present a complex and rich picture of the multifaceted work of infant and toddler specialists in teacher education in universities in Australia and Aotearoa, New Zealand. A larger study that only sought to make generalised claims about infant and toddler curriculum and pedagogy in early childhood teacher education may not have been able to capture this complexity. Instead, the richness and complexity of this thesis speaks directly to what it means to be an infant and toddler teacher educator.

In making a claim that the richness and complexity is a strength of the thesis, I recognise that my positioning as a simultaneous insider/outsider did present challenges as well as possible limitations. I came to the thesis with an extensive history of working as an infant and toddler specialist and a deep knowledge of the contemporary struggles of the work of infant and toddler teacher educators. Throughout the thesis, I thoughtfully negotiated my experience and knowledge. In order to make legitimate knowledge claims my experience of, and ability to understand, their experience was helpful (Collins, 2000; Miller & Glassner, 2004). I argue that without this positioning I would not have been able to connect with the participants in the same way. They shared their struggles with me during the interviews and focus conversations to a deep level. I recognise that they would not have been likely to share their work experiences with someone who could not understand this experience to a reasonable extent. Therefore, a possible limitation might also be a strength, as it allowed me to add to understandings of the work of infant and toddler teacher educators in universities in nuanced ways.

8.5 Contribution to the Early Childhood Field and to Teacher Education

Struggles around professionalisation in relation to the infants and toddler, teaching workforce continue to be a central focus of early childhood policy recommendations, both locally and internationally. Despite extensive lobbying and resistance from the

early childhood field and academics (Degotardi & Cheeseman, 2014; Sims, 2014a) in response to the Productivity Commission's draft report (Productivity Commission, 2014), the reports published post-data collection (Productivity Commission, 2015a, 2015b) have continued to reject these concerns. The final report did not reflect submissions made on the draft report, rejecting its acceptance of a low level of qualifications for work with children under the age of three. The statement that, "the evidence that specific levels of qualifications improve the learning and development outcomes for children under 3 years of age is absent, and evidence of positive impacts of qualifications, by themselves, is inconclusive" (Productivity Commission, 2015b, p. 264). Therefore, I argue that the struggle the participants experienced with respect to status and professionalisation for graduates working with infants and toddlers in the early childhood field and early childhood teacher education is an ongoing threat, which could worsen.

The Productivity Commission Report has direct implications for the work of this group of infant and toddler, specialist teacher educators. I am cognisant that this report is more likely to impact on the work of Dayna, Nina and Susan in Australia more directly than Dahlia, Ruby and Wendy in Aotearoa, New Zealand. However, the international struggle for the professionalisation of those who work with infants and toddlers in the early childhood field is ongoing (Chazan-Cohen et al., 2017; Chen, Martin, & Erdosi-Mehaffey, 2017; Dalli, 2017; Goouch & Powell, 2017; Rockel, 2013; Vandenbroeck & Bauters, 2017). Rejection of the importance of having degree-qualified teachers with infants and toddlers in early childhood settings from key government advisory groups will illuminate the advice the Productivity Commission has given internationally, providing further challenges for the field. It is vital to consider that, if recent recommendations are that qualified teachers are not required to work with infants and toddlers, then the need for infant and toddler specialists in university-based teacher education may be redundant.

I argue that the recent rapid growth of the number of infants and toddlers in early childhood settings internationally has not corresponded with an increased emphasis on infant and toddler curriculum and pedagogy in contemporary early childhood teacher education in Australia and Aotearoa, New Zealand. The participants were a marginalised group of infant and toddler specialists in an already marginalised sector (early childhood teacher education) in universities across Australia and Aotearoa, New Zealand. They were attempting to represent the interests of an even wider group

marginalised in society. As Dalli (1993) explained, infants and toddlers are the 'Cinderella' of the early childhood field.

However, in this thesis, I argued that advocacy was the way in which participants were able to hold their work together, and in turn, maintain the direction, or in CHAT terms, object of activity in their work. I argue that their object of activity was to give greater prominence, credibility, and acknowledgment to infant and toddler curriculum and pedagogy. This was a complex task at which to direct their work. They had to be able to understand a wide sociohistorical context across multiple stakeholders and systems of activity in order to advocate across the three systems of the early childhood field, early childhood teacher education, and the university they were involved with in their work. In gaining understanding of the nature of the work of infant and toddler specialists in university-based early childhood teacher education, I have come to understand that the key way in which participants directed their work was through the concept and practices of advocacy. I, therefore, argue that the participants in this research used advocacy as a meta-strategy in order to negotiate the contradictions that they experienced, working within, between, and across the three interpenetrating systems of activity. It appears, based on recent advice from the Productivity Commission (Productivity Commission, 2015a, 2015b), that the advocacy work the participants engaged in is far from complete.

Throughout this thesis, I have shared the experiences of a group of women in academia who are highly adaptive, very strategic, and persistent in their work. As identified in the previous chapter, I recognise that advocacy has been a key strategy for the participants to negotiate the contradictions they experience in their work. In this thesis, I understood the participants were engaged in a struggle, in the context of the wider devaluing of infant and toddler care and education inside an undervalued early childhood field, within the broader vulnerable field of teacher education in universities. As mentioned in the previous chapter I understand the participants' lived experience in their work to be moving across three deeply interpenetrating systems: the early childhood field; early childhood teacher education; and the university.

One overarching contribution to knowledge this thesis has made to the early childhood field is the role of advocacy work of specialist infant and toddler, teacher educators in universities. In noting it as a contribution to knowledge, I am defining advocacy as a meta-strategy that involves complex and interconnected actions that are directed at policy makers, the early childhood field, and early childhood teacher education.

Therefore, my argument is that the work of specialist infant and toddler teacher educators in universities is a form of advocacy. It is a form of work that allows specialist infant and toddler teacher educators to promote awareness of, and advocate for, infant and toddlers both in the university and in the field.

By conceptualising their work as a form of advocacy, it was possible to identify a set of strategies that guided and directed the participants' work. Identifying and naming each strategy, leads into a discussion of the contribution to knowledge in the early childhood field.

Another contribution to knowledge is through the recognition of the importance of the role of infant and toddler teacher educators in universities. This is due to the role they play in advocating for infants and toddlers in the early childhood field through the creation of infant and toddler curriculum and pedagogy artefacts for use in the early childhood field and early childhood teacher education. In the process of engaging in this thesis, I struggled to find literature related to infant and toddler curriculum and pedagogy. I am also aware it was an ongoing struggle for the participants to find literature and other resources related to infant and toddler curriculum and pedagogy. They were trying to generate research outputs focused on infant and toddler curriculum and pedagogy, as it had often been absent when they tried to find it for their pre-service teachers.

A third contribution to knowledge is the manner in which this thesis has highlighted the important role of infant and toddler, teacher educators in universities, rather than the broad birth to five generalist focus in early childhood teacher education programs. As the thesis revealed, specialist infant and toddler teacher educators had to maintain and defend their positions within the university but also with their colleagues. The move by universities to have infant and toddler curriculum and pedagogy taught by generalist teacher educators was a real threat and one that the participants in this thesis experienced on a regular basis. The threat is best understood within the current sociocultural and political context, determining their work. For example, ACECQA in Australia and the Education for Council in Aotearoa, New Zealand have both undertaken reviews of the requirements for infant and toddler curriculum and pedagogy in early childhood teacher education programs in universities. A representative for the Education Council of Aotearoa, New Zealand notes, "we do not have a prescribed curriculum for teacher education" (D. Wansbrough, personal communication, 6 September 2016). However, she had noticed a recent trend with

early childhood teacher education, "providers [who] are including specific papers/courses on infants and toddlers, recognising that this is a specialist area that needs a separate focus" (D. Wansbrough, personal communication, 6 September 2016).

The Australian review of early childhood teacher education has seen a reduction in the number of placement days that pre-service teachers have to complete in birth to three settings. The translation of this downgrading of requirements into content within an early childhood teacher education degree directly affects specialist infant and toddler, teacher educators. Their knowledge is under threat as the importance of infant and toddler curriculum and pedagogy knowledge is devalued. With this devaluing, comes the shift to have generalist teacher educators allocated to teaching infant and toddler curriculum and pedagogy. As this thesis has highlighted, the result is the removal or reduction of infant and toddler curriculum and pedagogy in early childhood teacher education programs. With this removal or reduction comes the very real threat that infant and toddler, specialist teacher educators are no longer essential agents within the activity system. However, as this thesis has highlighted, specialist infant and toddler teacher educators play a critical role in ensuring the quality of infant and toddler curriculum and pedagogy in early childhood teacher education programs in universities. In their absence, I argue, infant and toddler curriculum and pedagogy could became an historical artefact in early childhood degrees.

In light of the recent use of CHAT in several studies, to examine the work of teacher educators internationally, (Ellis et al., 2011; Ellis et al., 2014; Gunn et al., 2015; Hökkä et al., 2012; Nuttall et al., 2013; Spencer, 2013; Tuinamuana, 2016), this thesis also makes a contemporary and relevant contribution to research related to the work of teacher educators. This study contributes to research in teacher education influenced by CHAT as it supports the notion of the participants as a collective subject, despite working in different workplaces. This group of six teacher educators working in six different universities across two countries were still working on a collective object of activity and outcome. Therefore, this study further supports CHAT as a suitable theoretical basis for investigating the work of teacher educators.

The process of consciousness-raising and awareness of the participating teacher educators to clarify and identity contradictions within their work was apparent in both the individual interviews and focus conversations. The participants were aware of some aspects of the contradictions in their work. However, the process of being a

participant in this thesis in which we collectively brought attention to contradictions in their work was a significant stimulus to aid in the awareness of contradictions in their work.

8.6 Future Research Opportunities

This thesis suggests opportunities for further research. It sought to describe the working lives of a group of six women who work as infant and toddler specialists in university-based early childhood teacher education in Australia and Aotearoa, New Zealand. The early childhood and early childhood teacher education fields need further studies that actively seek to intervene and transform the activity systems of infant and toddler, teacher educators. I see this as being my ongoing work as a researcher. I also see it as opening up opportunities for other researchers as I publish from my thesis. In effect, there is significant potential for research collaborations to develop and generate research that can actively intervene into the infant and toddler, teacher education space and make a genuine difference to the working lives of infant and toddler teacher educators in universities.

A valuable extension of this research would be to engage in, 'work shadowing', of infant and toddler, teacher educators. Work shadowing is a research method used to observe participants throughout a working day. McNicholl and Blake (2013) describe work shadowing in their study of the work of teacher educators:

All participants were observed for a period of one working day by a member of the research team. Participants were asked to choose a 'typical' day for this activity (typical in terms of the work planned at that time of year) ... A member of the research team met the participant at the start of their working day and stayed with them until they left work. The researchers made field notes, including some near verbatim reconstructions of spoken interaction and took photographs to record in words and pictures the material conditions of participants' work, as well as the range of tools that were employed. (2013, pp. 290-291)

I recognise shadowing at work as a suitable research method to employ for future research opportunities when examining the work of infant and toddler teacher educators.

Questions asked in the individual interviews that related to the use of artefacts in the participant teacher educators' work were enlightening for some of the participants. Exploring the use of artefacts in their work appeared to be something that none of the participants had looked into before. An exploration of the use of key artefacts by

teacher educators is a key notion for further exploration in understanding the work of early childhood teacher educators more broadly. I return to a point made in Chapter Three about the significance of artefacts as mediational means within a CHAT analysis. Artefacts mediate the relationship between subject (the participants) and objects of activity. The subject interacts with an object of activity not directly, but by using an artefact that occasionally may be a cognitive artefact (such as thinking) (Bedny & Chebykin, 2013). For the participants in this thesis, it was the knowledge of how to use an artefact that is an important part of the concept of the artefact (Kaptelinin et al., 1999).

While this thesis situates itself within a CHAT framework, its focus on Marxian philosophy was limited; thesis authors make decisions about boundaries in any thesis to maintain the thesis' feasibility. However, I believe that having examined and described the working lives of infant and toddler, teacher educators and drawing on the tools of CHAT, there is potential for a deeper study of the working lives of infant and toddler, teacher educators that investigates work from a Marxian standpoint. This is because, addressing an analysis of the political economy of the early childhood field through a Marxist worldview, is plausible. What this could offer that was not addressed in this thesis is a deeper exploration of the struggle for status and professionalisation in the early childhood field, potentially alongside the struggle against deprofessionalisation in teacher education. My thesis suggests there is potential for further exploration of issues of professionalisation and deprofessionalisation in early childhood and teacher education, drawing on understandings of how these appear elsewhere in other workplaces. Exploring the relationship with other professions and their historically accumulating conditions under capital could be a worthwhile contribution to the broader field of education.

8.7 Conclusion

After reviewing the findings and overarching conclusions to this thesis, alongside the limitations and future research opportunities, I must pause to reflect on the significant challenges currently experienced in the early childhood field and early childhood teacher education in Australia and Aotearoa, New Zealand. I recognise that early childhood teaching and, therefore, teacher education are experiencing two concurrent agendas. One of these agendas is the professionalisation, which the early childhood field has been continually working on for decades. This agenda positions early

childhood teaching, and therefore teacher education, as a "learned occupation requiring preparation and long-term commitment" (Imig & Imig, 2008, p. 890); conversely, the deprofessionalisation agenda regards early childhood teaching as, "a short-term job requiring little preparation and much emphasis on subject matter knowledge" (Imig & Imig, 2008, p. 890). The early childhood professionalisation agenda has a direct impact on teacher education. Additionally, teacher education faces challenges including high-levels of competition, free-markets, and deregulation. These are currently experienced in teacher education internationally (Imig & Imig, 2008).

In this thesis, I argue that these pressures are also influencing early childhood teacher education. The participants in this thesis experienced simultaneous high expectations and low status as they straddled the border between the early childhood field and teacher education. In a sense, they have experienced simultaneous intensification due to early childhood policy reform at the same time as deprofessionalisation in teacher education; more is expected from teacher educators through the intensification of work in early childhood teacher education, while less is given. As Tuinamuana (2016) explains, "the work of teacher education lives on the shifting, intangible border of academia and the professions" (p. 334). The, "intangible border", (Tuinamuana, 2016, p. 334) the participants negotiated in this thesis describes the challenging nature of the participants' work.

This thesis has increased my understanding and appreciation of the complex working lives of infant and toddler specialists in university-based early childhood teacher education. Their commitment to advocacy for their unique work amidst policy reforms and intensification in their workloads is commendable.

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Appendix A - Information letter for Participants

PARTICIPANT INFORMATION LETTER

Project Title: University-Based Infant and Toddler Specialists in Early Childhood

Teacher Education in Australia and New Zealand

Principal Investigator: Associate Professor Joce Nuttall

Student Researcher: Katherine Bussey

Student's Degree: PhD

Dear Participant,

You are invited to participate in the research project described below.

What is the project about?

This project is investigating the workplace experiences of university-based early

childhood teacher educators who specialise in infant and toddler curriculum and

pedagogy. I am interested in the aims of your work, how your work is organised and

to learn more about important artefacts or resources you bring to this specialised area

of expertise. As part of the study I am also looking at course information on University

websites across Australia and New Zealand. Participation in this study will involve an

individual interview and a focus conversation, which will offer an opportunity for you

to connect with others with a similar specialisation.

Who is undertaking the project?

This project is being conducted by Katherine Bussey and will form the basis for the

degree of Doctor of Philosophy at Australian Catholic University, under the

supervision of Associate Professor Joce Nuttall. Ms Bussey will be a participant in the

study as well as conducting the research, due to her own expertise in infant and toddler

education. This means she will be interviewed and will also be an active participant in the focus conversations that form part of the project.

Are there any risks associated with participating in this project?

We do not anticipate any risks or discomforts for you in participating in this project, beyond the usual risks of normal, everyday life. However, because this is a small group of participants, there is some potential for the identity of individuals to be inferred in reports arising from the research. This possibility will be minimised by removing all names and identifying comments from the interview and focus group transcripts. The interviews and focus conversations will be held in a mutually agreed location at a mutually agreed time. Because you will know the identity of the other participants in the focus group, we will ask you to maintain confidentiality about the identity of other participants outside the focus group process.

What will I be asked to do?

- Digital recording of individual interviews and focus conversations will take place.
- You will take part in an individual interview which is estimated to take up to 90 minutes.
- This interview will be followed at a later date by a focus conversation which is estimated to take up to 2 hours and involving the three participants in each country, together with the researcher.
- The types of questions that will be asked will be about the work you engage in, key artefacts used in your work, and the aims and outcomes of the work in which you engage.

At a later time, you will also be invited to review sections of the findings chapters of the thesis, if you wish to do so.

How much time will the project take?

It is estimated each individual interview will take up to 90 minutes. This will be followed at a later time by a focus conversation involving the three participants from

the same country together with the researcher, which is estimated to take up to 2 hours. You may spend up to 1 hour after the individual interview and focus conversation at a later date checking transcripts of data you have contributed and the draft findings chapters, if you wish to do so. The interviews will be held at a mutually convenient site, where we can speak confidentially.

What are the benefits of the research project?

This research will provide you with the opportunity to connect and have in-depth discussion with colleagues who have the same academic and research focus. It is anticipated the project will also benefit the wider early childhood education and teacher education communities by providing insights into the work of teacher educators and teacher education curriculum related to infants and toddlers.

Can I withdraw from the study?

Participation in this study is completely voluntary. You are not under any obligation to participate. If you agree to participate, you can withdraw from the study, at any time up until the stage of data analysis, without adverse consequences.

Will anyone else know the results of the project?

This study will be published as a thesis and in peer-reviewed journals relevant to the early childhood and teacher education fields. All data will be managed electronically and stored on a password-protected ACU computer. The data will be identifiable to the researcher and supervisor but only de-identified and aggregated data will be published. Confidentiality will be maintained through you choosing a pseudonym in order to protect your identity, unless you wish to be identified by your real name. In order to respect your confidentiality, and as a means of protecting your identity, the data will be de-identified.

Will I be able to find out the results of the project?

You will be sent an electronic link to the final thesis by the researcher.

Who do I contact if I have questions about the project?

You are welcome to contact the researcher via email: <u>katherine.bussey@acu.edu.au</u> or

telephone: +61 3 9953 3634 or the supervisor of this study via email:

joce.nuttall@acu.edu.au or telephone: +61 3 9953 3532.

What if I have a complaint or any concerns?

The study has been reviewed by the Human Research Ethics Committee at Australian

Catholic University (Project Number 2014 127N). If you have any complaints or

concerns about the conduct of the project, you may write to the Manager of the Human

Research Ethics Committee care of the Office of the Deputy Vice Chancellor

(Research).

Manager, Ethics

c/o Office of the Deputy Vice Chancellor (Research)

Australian Catholic University

North Sydney Campus

PO Box 968

NORTH SYDNEY, NSW 2059

Ph.: 02 9739 2519

Fax: 02 9739 2870

Email: res.ethics@acu.edu.au

Any complaint or concern will be treated in confidence and fully investigated. You

will be informed of the outcome.

I want to participate! How do I sign up?

If you are interested in being a participant in this research, please contact the researcher

via email or telephone. You will be asked to sign both copies of the consent forms and

return one copy back to the researcher via email attachment to

katherine.bussey@acu.edu.au.

Yours sincerely,

Katherine Bussey

Appendix B - Consent Forms for Participants

CONSENT FORM for Participants

Copy for Researcher to Keep

TITLE OF PROJECT: University-Based Infant and Toddler Specialists in Early

Childhood Teacher Education in Australia and New Zealand

PRINCIPAL INVESTIGATOR (or SUPERVISOR): Associate Professor Joce Nuttall

STUDENT RESEARCHER: Katherine Bussey

I (the participant) have read and understood the information provided in the Letter to Participants. Any questions I have asked have

been answered to my satisfaction. I agree to be audio taped while participating in an

individual interview and a focus conversation. I understand the individual interview

will take up to 90 minutes and the focus conversation up to two hours. I realise that I

can withdraw my consent at any time up until the stage of data analysis without adverse

consequences.

I understand my confidentiality will be protected by removing all individual names on

transcripts and on the data analysis. Furthermore, the paper will report aggregated data

only.

I agree that research data collected for the study may be published or may be provided

to other researchers in a form that does not identify me in any way.

NAME OF PARTICIPANT:
SIGNATURE DATE
SIGNATURE OF PRINCIPAL INVESTIGATOR (or SUPERVISOR):
DATE: 02.04.14 SIGNATURE OF STUDENT RESEARCHER:
CONSENT FORM for Participants Copy for Participant to Keep
TITLE OF PROJECT: University-Based Infant and Toddler Specialists in Early

 $PRINCIPAL\ INVESTIGATOR\ (or\ SUPERVISOR):\ Associate\ Professor\ Joce\ Nuttall$

Childhood Teacher Education in Australia and New Zealand

STUDENT RESEARCHER: Katherine Bussey

NAME OF PARTICIPANT:

SIGNATURE DATE

.....

I understand my confidentiality will be protected by removing all individual names on transcripts and on the data analysis. Furthermore, the paper will report aggregated data only.

I agree that research data collected for the study may be published or may be provided to other researchers in a form that does not identify me in any way.

SIGNATURE OF PRINCIPAL INVESTIGATOR (or SUPERVISOR):

Kenney

DATE: 02.04.14

SIGNATURE OF STUDENT RESEARCHER:

DATE: 31.03.14.

Appendix C - ACU HREC Ethics Approval Certificate



Human Research Ethics Committee

Approval Form

Principal Investigator/Supervisor: A/Prof Jocelyn Nuttall

Co-Investigators: Dr Linda Henderson

Student Researcher: Katherine Bussey

Ethics approval has been granted for the following project:

University-Based Infant and Toddler Specialists in Early Childhood Teacher Education in Australia and New Zealand

This is to certify that the above application has been reviewed by the Australian Catholic University Human Research Ethics Committee (ACU HREC). The application has been approved for the period given above.

Researchers are responsible for ensuring that all conditions of approval are adhered to, that they seek prior approval for any modifications and that they notify the HREC of any incidents or unexpected issues impacting on participants that arise in the course of

their research. Researchers are also responsible for ensuring that they adhere to the

requirements of the National Statement on Ethical Conduct in Human Research, the

Australian Code for the Responsible Conduct of Research and the University's Code

of Conduct.

Any queries relating to this application should be directed to the Research Ethics

Manager (resethics.manager@acu.edu.au).

Signed: Same Date: 8/05/2017.....

(Research Ethics Manager, Australian Catholic University, Tel: 02 9739 2646)

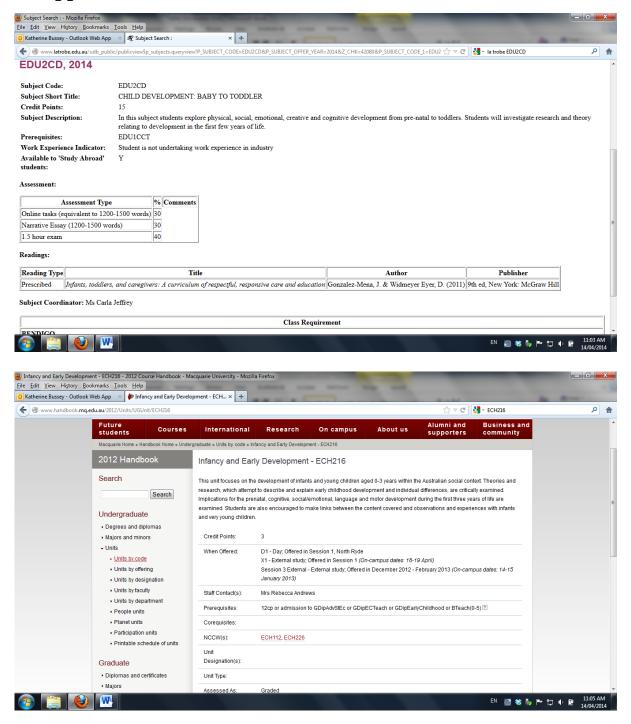
Appendix D - List of Infant and Toddler Units

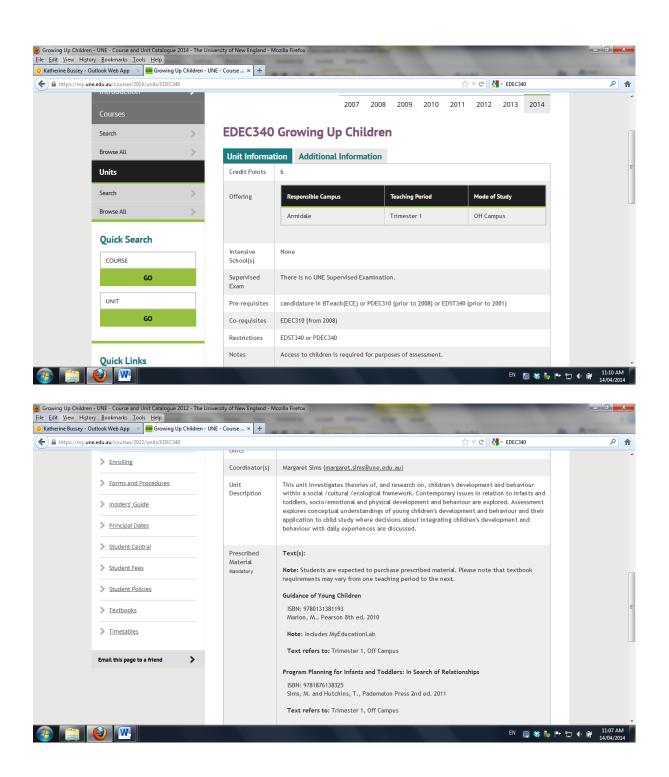
University	Unit I&T?	Year	Points	Code	Clicks	ECE/P
AUT	Curriculum	1 st	15	295127	7 List of	ECE
	I I&T	2 nd	15	296261	Papers	
	Special	opt	Total			
	Topic I&T		360			
	option					
Massey	Not offered	GD	0	Did have	Have Grad	0
	past 2013				dip I & T	
UOA	I/T	2 nd	15	EDCURRIC	6 PDF	ECE BEd
	Pedagogies	&	360	210	booklet	
		PG				
UOC	Rethinking	1 st	15	TECE106-	11 Search I	ECE
	I&Ts	2 nd	360	14YC2	after	
		sem			searching	
					ECE	
UOO	People	2nd	18	EDCR202	8 Program	ECE
	Under		360		Requirements	Tchg
	Three					
UOW	No	0	0	0	0	0
VU	Working w	1 st	15	EPSY 111	5 List of	ECE
	I, T & F	&	360		courses	
		PG				

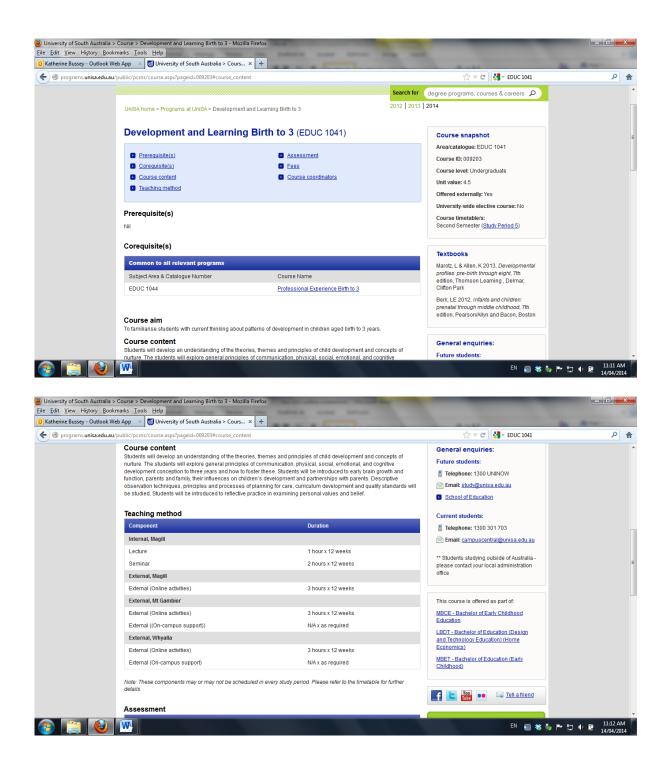
University	Unit I&T?	Year	Points	Code	Clicks	ECE/P
ACU	2015 option	?	10 320	0	N/A	ECE
Canberra	No	0	0	0	7	ECE/P
Central	No	0	0	0	5	ECE
Queensland						
Charles	No	0	0	0	4	BTLEC
Darwin						
Charles	No	0	0	0	4	ECE
Sturt						
Curtin	No	0	0	0	9	ECE
Deakin	No	0	0	0	4	ECE
Edith	No	0	0	0	5	ECE
Cowan						
Federation	No	0	0	0	8 Program	ECE
					Structure	
Flinders	No	0	0	0	4	ECE/BA
Griffith	No	0	0	0	7	P w ECE
						specialisation
James Cook	No	0	0	0	4	BEd ECE
	Says focus on					
	K+					
La Trobe	Child	2nd	15	EDU2C	6	BEd ECE
	Development			D		
	: Baby To					
	Toddler					
Macquarie	Infancy &	2nd	12	ECH21	4	BEd ECE-12
	Early			6		
	Development					
	Psych					
	& PG					
	ECED832					
Monash	No	0	0	0	7	ECE & ECE/P
Murdoch	No	0	0	0	3	ECE-8

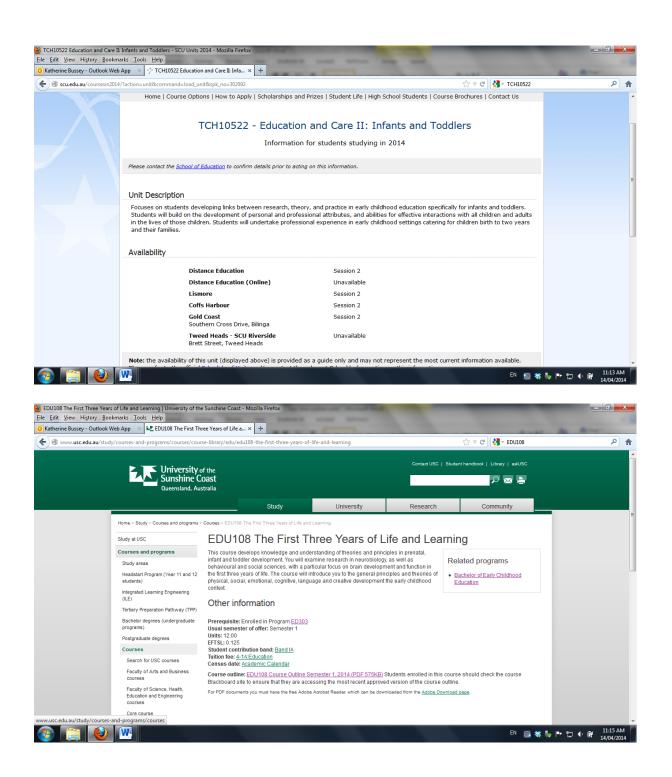
Newcastle	No	0	0	0	5	P/ECS
New	Growing Up	?	6	EDEC3	5	BTchg ECE
England	Children			40		
Notre Dame	No	0	0	0	7	BECC
QUT	No	0	0	0	7	BEd ECE
South	Development	1st	4.5	EDUC	4	BEd ECE
Australia	and Learning			1041		
	Birth to 3					
Southern	Edu & Care	?	12	TCH10	3	BEd ECE
Cross	II: I & T			522		
Southern	No	0	0	0	5	BEd ECE
Queensland						
Sunshine	1 st 3 yrs of life	1st	12	EDU10	5	BEd ECE
Coast	& learning					
Swinburne	No	0	0	0	3	BEd ECE
Sydney	Caregiving	1st	6	EDEC3	6	BEd ECE Social
	for I & T			002		Work
Tasmania	No	0	0	0	6	BEd ECE
Victoria	No	0	0	0	5	BEd ECE/P
Wollongong	B-3 Years:	3 rd	6	EYDC3	6	BEd Early Years
2 papers	Physical Care	3 rd	6	01	6	
	& Dvpmt.			EYLL3		
	B-3 Yrs			02		
	Dvlpg					
	Language					
	Interactions					

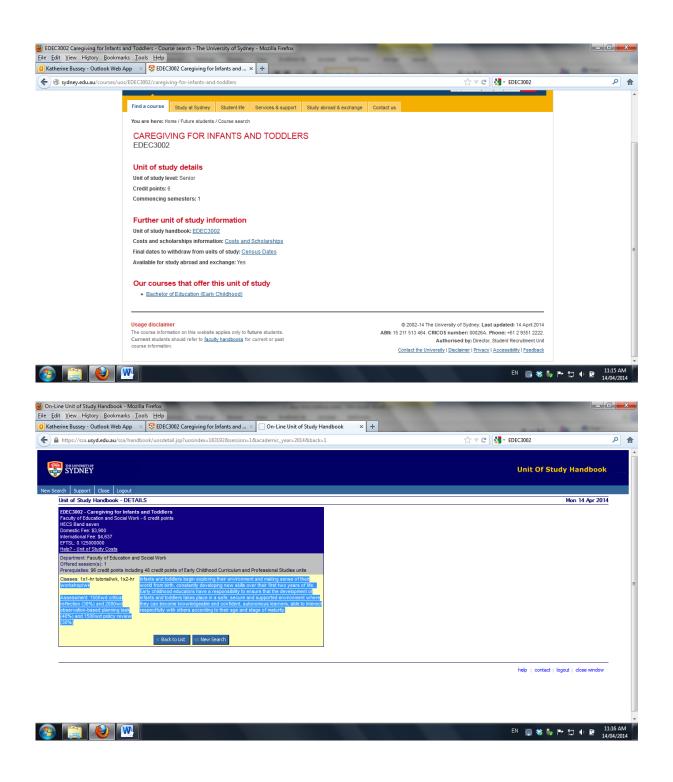
Appendix E - Screenshots of Infant and Toddler Units

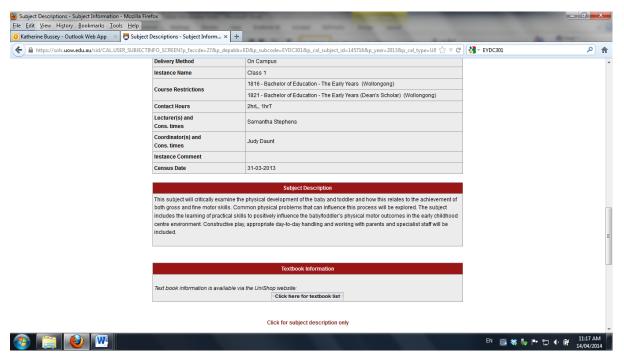










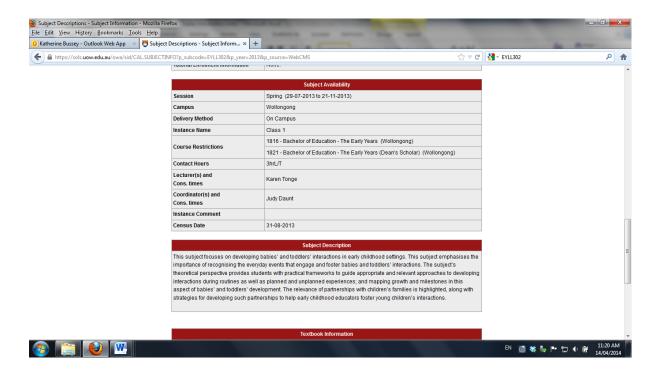


Wollongong EYDC301

Birth to 3 Years: Physical Care and Development

And

EYLL302 Birth to 3 Years: Developing Language Interactions



Appendix F - Interview Questions

- 1. Thinking about your career history, how did you come to be in your present role?
 - (take me back to when you entered the early childhood field).
- 2. What is your current role in the University?
 - (title, what does the role involve? What do you actually do?)
- 3. Tell me about the early childhood programs here at the University.

 (staffing how it is organised, infant and toddler content, program design, structure, number of years, postgraduate education).
- 4. Where does infant and toddler teacher education sit in all this?

 (You're known for your expertise in infant and toddler education, how did that come about? How is your infant and toddler expertise mobilised within your university's ECTE courses? Where does research fit around this?)
- 5. Can you please share with me now about the three essential things for your work that I asked you to bring with you?
- 6. It seems to me that you are doing very complex and sophisticated work. What motivates you in your work?
 (keeps you going, drives you)
- 7. When you think about the current policy environment, what comes to mind? (How does it all fit?)
- 8. What would you like to be able to say about graduates who are going on to work with very young children?
 - (What are the take home messages, key concepts, resources, die in the ditch concepts?)
- 9. Is there anything you think I should really be paying attention to in this study? Is there anything else that you want to tell me or ask me?

Appendix G - Focus Conversation Introduction and Questions

Welcome everyone, I appreciate you making time to be here. If we could perhaps go around and introduce ourselves, our role, and the University that we work at. You have now been interviewed individually in Australia and New Zealand, and what I would like to do today is to feedback some of the analysis from those individual interviews. I would like to get your reflections on that analysis and second to invite you to contribute further insights to the study.

- 1. What are the challenges facing infant and toddler early childhood education?
- 2. Hold those issues in your mind, I'd like you to jump now to teacher education and the preparation of early childhood teachers. What are the three key messages that you would like to communicate about this?
- 3. I'd now like to share with you the three main themes that I shared from your Australian individual interviews with our colleagues across the ditch and then I would like to show the themes and corresponding quotes from the New Zealand individual interviews. What strikes you as being familiar, what strikes you as being unfamiliar?
- 4. I'm interested in the changes that you have experienced in your time in Higher Education. Can you talk about these changes and how you have navigated them?
- 5. If the four of us put our collective brains together, what are our hopes, and our dreams for infant and toddler teacher education?