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Planning and Assessment for Two-Year-Olds: A Kindergarten Perspective

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Abstract

The present research study explored kindergarten teachers' perceptions of how planning and assessment is utilised to support the learning and development of two-year-olds in kindergarten. The study was framed within an interpretivist-constructivist paradigm and used a case study design to investigate and explore teachers' perspectives and understandings of planning and assessment practices with two-year-olds. Descriptive data was gathered through focus group interviews with 17 teachers from three kindergartens. The focus group interview questions were divided into three main areas. The initial questions focused on teachers current experiences with, and perceptions of, two-year-olds in the kindergarten setting. Planning for the learning for two-year-olds, within the context of the New Zealand early childhood curriculum *Te Whāriki*, was then considered; assessment for learning was also explored, including methods of assessment and documentation. Lastly, teachers professional knowledge and how this supported their teaching practice with two-year-olds was examined. Key findings suggest that the teachers were aware of the complexities of teaching two-year-olds and what was needed to support them in their own kindergartens. Teachers engaged with early childhood literature and professional development to support their knowledge and understanding of planning and assessment and how to support the learning of two-year-olds. The majority of the responses highlighted the positive perspectives of the teachers' and their awareness of the characteristics pertinent to two-year-olds. Responsive and reciprocal relationships between teacher, child and parents and whānau underpinned practice with children. Within these relationships, teachers identified that primary caregiving was an important aspect of their practice in supporting the learning for two-year-olds. The findings provided a snapshot of the way in which teachers plan and assess for learning and suggest that planning the environment plays a significant role in the ways in which children's learning and development were supported, as teachers navigate the characteristics of both

older and younger children within the same space. Understanding how these processes can support two-year-olds is important in order for planning and assessment practices to be effectively utilised for decision making and implementation of the early childhood curriculum. The current study provides a valuable contribution in describing what teachers do to support learning for two-year-olds in a kindergarten context.

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Chapter 1: Introduction

1.1 Overview

This qualitative study explored how teachers utilise planning and assessment practices to support the learning and development of two-year-olds in kindergarten. Factors that influence teachers practice and that also support effective practice are explored to give insight into how teachers support learning and development for two-year-olds in a kindergarten context.

The study used a descriptive case study design and drew on the perspectives of 17 teachers from three kindergartens within a large kindergarten association in New Zealand. To set the context for the present study this chapter begins with an outline of my professional background and interest in two-year-olds in kindergarten before providing a brief overview of the political background of kindergarten. The rationale for the study focuses on how planning and assessment practices are used to support the learning for two-year-olds within kindergarten and argues that it is critical that teachers have strong pedagogical knowledge not only of how two-year-olds develop and learn but how they as teachers can support and develop this learning. This rationale leads into a description of the research aims, to explore teachers' beliefs about meeting the needs of two-year-olds in kindergarten, how they plan and assess for two-year-olds and how their professional knowledge informs their practice with two-year-olds. The chapter concludes with key terms being described and defined.

1.2 Researcher Background

My teaching background has been in kindergarten, education and care centres, hospitals and more recently as a tutor for an initial teacher education provider. Throughout my career I have witnessed the move from developmental and summative assessment practice to a socio-cultural approach where formative assessment processes are used to capture children's

learning. When I began my teaching career kindergartens only ever enrolled three and four-year-olds and often kindergartens had long waiting lists. As the political arena of Early Childhood Education (ECE) has changed so too has the demographics of kindergartens with the inclusion of two-year-olds. As a result of these changes I started to question how effectively that we, as teachers, were meeting the learning and developmental needs of two-year-olds. Given the rapid growth of two-year-olds in kindergartens it is timely and valuable to explore the beliefs and practices of teachers who work with them to not only gain a richer understanding of current approaches, but to critically examine their practice while considering the research related to planning and assessment.

1.3 Background to the Study - The Changing Nature of Kindergarten

The reforms of 1987-1990 saw changes not only in the way kindergartens were funded but also a shift in the integration of all early childhood services, as well as initial teacher education (Duncan, 2001). The kindergarten movement has been a fixture of education in New Zealand since the late 1800s and alongside Playcentre, were the major early childhood care and education (ECCE) providers (Manning, 2016). Both of these services received government support administered through what was then the Department of Education.

The Labour government initiated significant education reforms in between 1984-1990. The first change was in 1986 when ECCE came under the umbrella of the Department of Education (they had previously been under the umbrella of the Department of Social Welfare and as such received minimal government support), and a three year integrated early childhood qualification replaced the two year kindergarten specific diploma (May, 2009). In 1987 as part of a project to reform all education sectors, an ECCE working group was established with the outcome being a report, *Education to be More* (Meade, 1988). The

government quickly followed up with the policy response, the *Before Five Report*, which sought to provide a basic structure for administration of early childhood education in New Zealand that is still in place today (Manning, 2016). This policy was based on two factors, community involvement and professional expertise (Wells, 1999). This meant significant changes to kindergarten in the way that they were funded as well as the way in which they were able to access professional learning and support. Increased funding to other early childhood services also meant increasing pressure on kindergartens to maintain their roll numbers.

Both reports supported the view that early childhood services of high quality benefited the whole of society and accepted the need for government intervention to ensure standards, equity and diversity (May, 2009). Part of this was to include a recommend funding increase additional subsidies for children under two, and improved minimum regulations for buildings, staffing ratios and qualifications (Meade & Dalli, 1992). However when the National Party was returned to power in 1990, economic difficulties meant that policies on early childhood education once again came under the spotlight. The hard won gains of the flagship kindergarten movement were halted with the introduction of bulk funding thus ending centralised payment of teachers' salaries (Dalli, 1994). This meant that regional kindergarten associations had to cut costs, rolls increased and ultimately this led to kindergartens being removed from the State Sector Act in 1996. Between 1996 and 2008 large numbers of kindergartens diversified, increasing their hours and moving away from the traditional sessional structure. The policy '20 hours free ECE' was introduced in 2007 for children aged three to four as a way for the government to increase participation rates in ECE.

1.3.1 Present day 2008-2017

During this period the national government removed the word ‘free’ from the ‘20 hours free’ policy. This meant that the funding would cover only up to 80% qualified staff (May, 2009). However, kindergarten organisations were determined to protect the employment of their 100% qualified teachers, and this meant that they faced financial shortfalls. Different governments and policies have affected funding rates, minimum standards and qualifications which are important factors when considering the emerging place of two-year-olds in a New Zealand kindergarten context.

The fiscal difficulties faced by kindergartens is evident in the sector statistics. Latest figures (Education Counts, 2018) show education and care services continue to dominate the early childhood sector with continual growth evident from 2000-2018 with licensed providers of ECCE making up the largest share of ECCE enrolments with 57% of all enrolments in 2018. In contrast kindergartens have 14% (Education Counts, 2018). June 2009 to December 2018 saw a small growth of 1.9% for kindergarten but a massive 29.7% growth in education and care centres. This disparity in growth was also noted in the number of new services for kindergarten being only 52 over an 18 year period (2000-2018) compared to 2,011 new services for the same period for education and care services. In 2018 the total number of kindergartens was 654 with the total number of care and education centres being 2,584 (Education Counts, 2018). Not only are there significantly more education and care centres, the number of possible enrolments for each service are also potentially higher than for kindergarten. Kindergartens, in light of reduced waiting lists and increased demand for services for younger children, have responded by increasing enrolments of two-year-olds in order to maintain their viability in a competitive market.

Enrolments of two-year-olds has increased by 302% with only 734 being enrolled across ECCE services in 2000 and nearly 3000 being enrolled in 2018 (Education Counts, 2019). Sixteen percent of two-year-olds currently enrolled in kindergartens throughout New Zealand, attend kindergartens in the association where this current study was undertaken.

More competition in the ECE sector has meant that kindergarten services have needed to diversify which has meant the increasing enrolment of two-year-olds. This change over time has seen the demise of the ‘traditional’ sessional model of kindergarten with the implication that children are now starting kindergarten services earlier and attending for longer periods of time. Two-year-olds are now a fixture in many kindergartens in New Zealand, but current research would suggest that planning and assessment practices are not meeting the needs of this particular age group (ERO, 2007, 2015). A report undertaken by Stuart, Aitken and Gould and Meade (2008) highlighted the lack of visible analysis of learning in assessment and that there was a noted lack of planning for next steps in children’s learning. Therefore it is critical that kindergartens who cater for two-year-olds provide care and learning opportunities that are responsive to the unique needs of this age group. Because of the critical need to effectively support two-year-olds in kindergarten, the present study focused on teachers understanding of planning and assessment practices within the kindergarten context.

1.4 Two-Years-Olds and *Te Whāriki*

Te Whāriki, the New Zealand Early Childhood Curriculum (Ministry of Education [MoE], 2017), identifies that there are three distinct, though overlapping age groups currently served in New Zealand early childhood setting; infants (birth – 18 months), toddlers (one to three years) and young children (two and a half years to school entry). *Te Whāriki* notes that these age groups have distinctive characteristics that require targeted responses from teachers, in

order to effectively support learning and development, as well as well-being and social-emotional competence. *Te Whāriki* also acknowledges the overlap in age groups, suggesting that the predominant characteristic of a two-year-old as being neither infant nor older child but needing to move between the two as they develop their own independent identity (Li, Nyland, Margetts, & Guan, 2017). The topic of planning and assessment is of interest to teachers given some of the issues teachers face in balancing the needs of two-year-olds with the needs of older children in the wider kindergarten setting.

Te Whāriki is the legislated national framework that outlines the curriculum that is to be used in all licensed New Zealand early childhood services. *Te Whāriki's* aspiration is that all children are “competent and confident learners and communicators, healthy in mind, body and spirit, secure in their sense of belonging and in the knowledge that they make a valued contribution to society” (MoE, 2017, p. 2). *Te Whāriki* positions toddlerhood as a distinctive period within the development of the child and views the toddler as one who not only has caregiving needs, but also that of a learner with their own set of preferences and interests. *Te Whāriki* describes toddlerhood as a time where children’s capabilities fluctuate from day to day and that there is wide variation in how children learn and develop the capacity to acquire new knowledge and skills at this age. A curriculum for these early years needs to be flexible to meet these ever-changing needs supported by familiar adults who *know* the child and are sensitive to their needs (Cheeseman, Sumison & Press, 2015; Duncan, Dalli & Lawrence, 2007; MoE, 2017).

1.5 Rationale

Te Whāriki relies on the teacher to drive or ‘weave’ curriculum in relation to the context of their service, community and environment (Alvestad, Duncan & Berge, 2009). As *Te Whāriki* is not a prescriptive document, how to enact the curriculum content relies on the professional knowledge and skill of teachers to be able to interpret and plan a quality programme (Alvestad et al., 2009). *Te Whāriki* outlines the expectations and responsibilities of New Zealand early childhood teachers. Such responsibilities include teachers needing pedagogical and content knowledge to create a programme that offers both challenges and consistency for toddlers to ensure that they have the opportunity to build on their strengths and interests. Teachers are also expected to acknowledge toddlers’ rights to have increasing agency through a curriculum that is responsive to their growing and changing capabilities (MoE, 2017) with Carr and Davis (2004) describing how teachers need to know both the child and curriculum well requiring the teacher “to be open to multiple possibilities and pathways for learning.” (p. 5).

Dahlberg, Moss and Pence (2013) support the viewpoint that the young child is an active, competent individual ready to learn and it is adults that need to be reminded that they are co-constructors in learning. For teachers, this means ensuring that children have one to one responsive interaction with a familiar teacher, partnership between parents/whānau and other adults caring for the child, and individual programmes in a predictable and calm environment. Literature supports a comprehensive understanding of child development and learning, moving from summative age-and-stage-based theories, which can position children as still ‘becoming’, progressing towards obtaining a skill or disposition, to seeing them as already competent and capable learners (Duncan et al., 2006). A shift in perspective was

heralded in the recent revision to *Te Whāriki*, where the aspiration statement was changed to note that all children ‘*are*’ competent and capable, rather than ‘*becoming*’.

The two-year-old is a social being who has significant capabilities. Duncan, Dalli and Lawrence (2007) noted that teachers in their study were observed as viewing two-year-olds through a deficit discourse lens of what they could and could not do, potentially impacting on learning opportunities and outcomes. This was also noted by American researchers Thomason and La Paro (2012), who discuss in their work that teachers were providing a high level of positive responses to children’s needs, but a lower level of support for children’s cognitive development including supporting language or engaging children in use of higher level thinking.

Assessment for learning is a process where information about children is used to further support their learning and also provides opportunities for teachers to adjust their teaching strategies accordingly. It helps to recognise and build on children’s strengths as well as a tool for involving parents’ and whānau in their child’s learning. Assessment, teaching and learning are linked as each area informs the other as assessment becomes formative based on how the information is used, not how it is collected.

Assessment for learning is identified as a key aspect of early childhood practice that contributes to quality learning outcomes for children (ERO, 2010). One purpose of assessment in early childhood is to inform planning and teachers responses to children. As noted by Niles (2016), assessment can be used meaningfully when, “teachers assess children’s significant learning experiences and develop possible future learning experiences with children, parents, families/whānau and other teachers” (p. 5). A key purpose of

assessment is the gathering of information to make informed instructional decisions, guiding how teachers plan, the integration of learning with curriculum guidelines, as well as making valued learning visible and raising learning outcomes for children (Snow & Van Hemel, 2008; Zhang, 2015).

As noted in *Te Whāriki*, toddlers' working theories about the world change rapidly. They may communicate in ways that are different from those of their older peers and noticing, recognising, and responding to such learning relies on sensitive observations, understanding the nature of learning for young children, and knowing the child and the curriculum well (Carr & Davis, 2004). It also requires teachers to be open to multiple possibilities and pathways for learning. Some key features of assessments for and with toddlers have emerged from the early childhood exemplars, *Kei Tua o te Pae* (Carr, Lee, & Jones, 2004/2007/2009). They are:

- reciprocal and responsive relationships with people, places, and things;
- involving families and whānau in assessment;
- families and whānau becoming members of the early childhood learning community.

1.6 Research Aims

Given the limited research around two-year-olds in kindergarten in New Zealand and given the critical role of the teacher in supporting two-year-olds, it is important to discover more about teachers' perspectives and the pedagogical practices that teachers use in the context of planning and assessment. Therefore, the aims of this study were to:

- Identify teachers' beliefs and perspectives about meeting the needs of two-year-olds in kindergarten

- Identify the ways in which teachers support learning for two-year-olds through planning and assessment
- Identify how teachers' professional knowledge informs and supports their practice with two-year-olds

1.7 Introduction to Key Terms

This section defines or describes key terms that are used throughout this study.

Te Whāriki. New Zealand's early childhood curriculum is guided by the principles of whakamana/empowerment, kotahitanga/holistic development, whānautangata/family and community and ngā hononga/relationships. This curriculum is a woven framework of strands, goals, learning outcomes and evidence of learning and development based on children's interactions with people, places and things.

Te Whāriki was revised in 2017 and is referenced as *Te Whāriki* in this study. The 1996 edition of *Te Whāriki* is referenced as *Te Whāriki* (MoE, 1996) to show which document is being referred to.

Kindergarten. Three state owned kindergartens participated in the study and are referred to collectively and individually as kindergartens. Kindergarten is an early childhood model in New Zealand that is state funded and traditionally caters for two to five-year-olds, grounded in local communities. In the cases where other early education services are referred to in the literature, the term used by the author/s of the reviewed literature is used; for example, education and care services, childcare centres, or Playcentre.

Toddler In this study the term toddler is used to refer to a child aged two to three years. As there is limited literature that distinctly discusses two-year-olds, literature that encompassed ‘toddlerhood’, which may encompass children slightly older or younger than age two, was also used.

Tuakana Teina

This term describes a teaching and learning approach drawn from Te Ao Māori. It refers to the relationship between an older person (tuakana) and a younger person (teina) and encompasses relational learning, such as:

- **Peer to Peer** – teina teaches teina, tuakana teaches tuakana.
- **Younger to Older** – the teina has some skills in an area that the tuakana does not and is able to teach the tuakana.
- **Older to Younger** – the tuakana has the knowledge and content to pass on to the teina.
- **Able to Less Able** – the learner may not be as able in an area, and someone more skilled can teach what is required.

1.8 Organisation of the Thesis

The thesis is presented across five chapters with the present chapter introducing the researcher and the research context. Chapter two discusses and reviews the literature that sets the scene for the research topic. The literature is reviewed first in relation to the existing research available on two-year-olds in kindergarten, then the characteristics of two-year-olds and why they need a targeted approach is discussed. This is followed by neuro-scientific understandings leading into why a primary caregiving approach is important for the learning and development of two-year-olds. From there literature relevant to planning and assessment

for two-year-olds is examined including the role of the teacher. Lastly a set of research questions is proposed.

A qualitative case study design is outlined in Chapter Three including details of the theoretical framework, research design, case study, participants and setting, data collection, field notes, and analysis. Ethical considerations are also explained.

Chapter Four discusses the findings of the study which includes a description of the participating kindergartens. Teacher perspectives about the needs of two-year-olds are discussed as well as changes that were made by the teachers to support two-year-olds. Lastly, planning and assessment practices and professional learning and development are explored.

In Chapter Five, the results are discussed and critically examined in relation to the research literature with the intention of explaining the results and relating them to effective professional practice and how that might be achieved. Factors that support knowledge of child development are discussed, along with teachers' knowledge of child development, the importance of tuakana teina relationships and empowering environments for two-year-olds. How teachers plan within a socio-cultural approach and the importance of professional learning and development is highlighted. Finally the limitations and delimitations are of this study are discussed with wider implications for practice, policy and research being identified. Chapter Five finishes with an overall conclusion of the research study.

Chapter Two: Literature Review

This chapter examines the literature focused on the learning needs of two-year-olds, along with planning and assessment, with the aim of better understanding the ways teachers plan for and assess the learning of two-year-olds in kindergarten settings. In doing so, the argument is made that two-year-olds have unique characteristics and developmental needs that must be considered in the processes of teaching and learning. Given the increasing number of two-year-olds in kindergarten settings, there is a need to develop an understanding of the ways in which kindergarten teachers utilise planning and assessment to support positive learning and development for two-year-olds. The literature review will explore the following topics; the experiences of two-year-olds in kindergarten, the unique characteristics of two-year-olds (toddlers), emerging understandings of toddlers through neuroscience research, and the nature of planning and assessment for two-year-olds.

2.1 Existing Research

Little research has been undertaken within the New Zealand context focused on two-year-olds in kindergarten. The most relevant and recent study was a ‘Teaching Learning and Research Initiative Project’ (TLRI) titled *Under Three Year-Olds in Kindergarten: Children’s Experiences and Teachers’ Practices* (Duncan, Dalli, Becker, Butcher, Foster, Hayes.... Walker, 2006). The project aimed to explore the wider understandings of having under three-year-olds in kindergarten from teachers’ perspectives and also what this meant for learning and development for two-year-olds. It described the changing nature of kindergarten with the nationwide trend of increased numbers of two-year-olds attending kindergarten. The central focus for this project was, “Exploring these notions of being two – [and] what this means for children, teachers and parents” (Duncan et al., 2006, p. 30). The study’s starting point was a critique of previous literature of child based-theories which

suggested that two-year-olds were either thought of as ‘lacking’, or in the process of ‘becoming’ with development divided into distinct categories such as physical, intellectual, language, emotional and social (Duncan et al., 2006). The authors also noted in the rationale behind the study was that concerns about the abilities of two-year-olds, or ages and stages of development, underpinned and informed teaching with two-year-olds. A nationwide questionnaire was sent to 32 kindergarten associations in New Zealand and alongside this sat the original project idea of four case studies undertaken in kindergartens located in Dunedin and Wellington. The report also discusses the changing of policies that led to younger children being enrolled and what this meant for two-year-olds and the ability of kindergartens to meet quality outcomes for this age group (Duncan et al., 2006).

In total 18 children from six kindergartens participated in the study. Two phases of the study were undertaken over two years with the overall intent being to compare experiences of the children and to observe any changes in practice or perceptions by the teachers. The methods used for the research were complex and varied. Narrative field notes including verbal dialogue, digital photos, and video recording were used as tools to gain information about the children’s experiences in kindergarten. The focus of these were joint attention and verbal interactions. Alongside this were interviews with the parents of the children who were asked about their past, present and future aspirations for their child. The teachers were also involved in the research by way of a reflective practice journal and participating in interviews with the researchers.

The findings of this report acknowledged the challenges for teachers in having two-year-olds in kindergarten, with the kindergarten teachers acknowledging that they could be better meeting the needs of the two-year-olds in their services. Teachers described two

constraints that affected their work and which they felt needed to be improved. Firstly, the teachers felt that although they were all qualified and registered, their initial teacher education did not sufficiently prepare them for working with under three-year-olds. Secondly, they felt that their teaching of two-year-olds was constrained by the equipment within the physical environment; namely that it was too big and was geared towards older and larger children. Large group sizes, in some kindergartens 45 children with only three teachers, also meant that teachers felt like they didn't have enough time, or adults, to support the recognised specific needs of the two-year-olds attending.

A finding that was not unexpected was that the expectations of the teachers shaped the experiences of the children. For example, if a teacher thought a child was too young or too little to attempt something, then they weren't given the opportunity to try. But if the expectation was that the child was expected to be part of a routine or task, then they would (Duncan et al., 2006). An interesting finding was that the previous experience that the child had had with the kindergarten, for example, an older sibling had attended, impacted on their ability to transition successfully into the kindergarten programme. Duncan et al., also felt that this variable, rather than age, had more impact on a successful kindergarten experience.

A consensus amongst the literature is that relationships with children, knowledge of child development pertinent to two-year-olds, and professional knowledge of assessment for learning all contribute to supporting learning and development of two-year-olds in early childhood education (Dalli, 2014; Podmore, 1994; Sims, Alexander, Nislin, Pedey, Tausere-Tiko & Sajaniemi, 2018). This literature will be discussed and explored further in this chapter with comparisons made to supporting the specific needs of two-year-olds.

2.2 The Characteristics of Two-Year-Olds – Why they Need a Targeted Approach

Toddlerhood is a unique period in a child's life with its own developmental characteristics and needs (Stonehouse, 1988). Authors, such as Yelland (2010), have sometimes described the two to three year age group as being the 'black hole' of early childhood whereby most early childhood literature tends to focus on under two-year-olds or on three to five-year-olds. As a result, there is a scarcity of research and literature focused specifically on the two-three year old age group. The New Zealand early childhood curriculum, *Te Whāriki*, defines the toddler age group in the general category of age one to three years. While this classification acknowledges the widespread variation in child development at this age, it also acknowledges that two-year-olds have unique characteristics and that teaching and learning approaches must attend to the specific, characteristics, needs and qualities of this age group.

During this stage of development two-year-olds experience changes in their physical abilities, their language is beginning to take on more meaning, and their social and emotional competencies are beginning to emerge. *Te Whāriki* supports and acknowledges the rapid growth in development that toddlers experience and the importance of toddlers having the opportunity to engage in "...rich and rewarding experiences with people, places and things" (MoE, 2017, p. 14). More recently the importance of the early years has re-positioned toddlers beyond notions of children who are just waiting to learn to that of learners from birth (Cheeseman, Sumsion, & Press, 2015). *Te Whāriki* affirms the belief that young children are competent and capable and, that with the support of sensitive adults, are capable of incredible feats. Such positioning attempts to counter deficit orientations in which children are only seen to be at the beginning stages of skill development or viewed as a child who is yet to learn (Duncan, Dalli, & Lawrence, 2007). Such a deficit lens positions two-year-olds more

prominently in regard to what they cannot yet do, rather than their exciting competencies and strengths as learners.

Te Whāriki's underpinning socio-cultural approach to learning and assessment has had a strong influence in moving teachers away from this deficit way of thinking, supported by the acceptance of neuroscience research and the understanding it brings to child development. In their work Shonkoff and Levitt (2010) discuss that there is compelling evidence for science-based investment in the development of young children which they describe widely as the interactions “... among genes, early experiences and environmental influences that shape the architecture and function of the developing brain” (p. 689). Acknowledging the value of research initiatives that align biology, cognitive science, and child development Shonkoff's (2010) study explored the following:

[knowing] that genes provide the initial blueprint for building brain architecture, environmental influences affect how the neural circuitry actually gets wired, and reciprocal interactions among genetic predispositions and early experiences affect the extent to which the foundations of learning, behaviour, and both physical and mental health will be strong or weak (p. 357).

The following sections outline existing research in the area of two-year-olds in kindergarten, as well as some of the specific characteristics and competencies of two-year-olds regarding their physical maturation, language development and social-emotional competence and how such characteristics set the scene for targeted teaching approaches. The impact of recent neuroscience research will also be explored alongside the importance of secure attachments for this age group.

2.2.1 Physical development

During the toddler period, babies make great strides towards becoming physically more independent and this mastery of gross motor skills means that they are no longer as reliant on adults to get about the place (Raikes & Edwards, 2009). Learning outcomes within *Te Whāriki* state that toddlers need to be given the opportunity to move confidently with opportunities to challenge themselves physically. This goal of having confidence and control over their bodies is noted in the strand of exploration where the importance of planning for children's physical development is discussed (MoE, 2017). Toddlers need opportunities for play in open spaces that support their interest in mobility, and the discovery and joy of being able to move around freely and independently suits the toddler's intrinsic need to be developing an awareness of themselves as separate identities. Primarily, toddlers explore their environment with their bodies and through this whole-body exploration and interaction with their environment, toddlers are building a perception of themselves and their place in the world (Giske, Ugelstad, Meland, Kaltvdt, Eikeland, Tønnessen & Reikeras, 2018). Physical growth is linked to other learning areas such as the development of fine and gross motor skills, development of spatial awareness, and being able to express themselves - especially through imaginative and exploratory play. It is while learning, integrating and refining these physicality's that noted differences can be seen between two-year-olds and their older three and four year old counterparts in kindergarten. For example, a two-year-old is at the beginning stage of skills development such as running, jumping and managing emotions whereas, a three or four year old would have much more sophisticated approaches to problem solving and managing themselves in a physical environment (Levine & Munsch, 2014).

Children consolidate their already acquired skills through their play and with new interactions with others comes the ability to accommodate, or alter, their pre-existing knowledge or ideas.

Stonehouse (1988) describes this as toddlers not only thinking with their heads but also that they do a lot of their ‘thinking’ with their hands and feet as well. That is, they learn through their physical, self-initiated experiences as they investigate the world around them.

2.2.2 Physical environments for two-year-olds

Child safety is an important issue in early childhood services and is an area that many procedural policies are focused on. As outlined in the New Zealand Early Childhood Regulations, “services are to take all reasonable steps to promote the good health and safety of children enrolled in the service” (Education (Early Childhood Services) Regulations, 2008, 46 (1, a), p. 30). *Te Whāriki* also supports safety under the goal of wellbeing, stating that safe, stable and responsive environments support the development of self-worth, identity, confidence and enjoyment. Empowering very young children to have influence over their environment requires teachers to provide opportunities to construct, de-construct, move, and transform their learning spaces (White & Mika, 2013). Children will, over time, develop knowledge about how to keep themselves safe from harm and develop knowledge about how to take risks with clear direction being given to teachers that the environment should be challenging but not hazardous and that healthy risk-taking play should be planned for (MoE, 2017). Sandseter (2007) suggests that safety needs to be balanced with children’s rights to a physically stimulating and challenging environment. The space available in the outdoor environment should allow children to engage in more active physical play and provides an ideal context for children to express themselves, explore, move, and learn about their bodies’ capabilities through open-ended and dynamic experiences with risk-taking as an integral part of children’s play (Little & Sweller, 2015).

It is through this exploratory and risky play that two-year-olds can become familiar with their environment, its possibilities and boundaries. Sandseter's study, *Categorising Risky Play*, defines risky play as "attempting something never done before; feeling on the borderline of being out of control often because of height or speed; and overcoming fear" (2007, p. 238). This qualitative study involved observations of 38 children in two Norwegian pre-schools with an equal mix of boys and girls aged between three to five years. From this study six categories of risky play were discussed – play involving great heights; play involving great speed; play with dangerous tools; play near dangerous elements; rough and tumble play; and, play where children can 'disappear or get lost'. The two biggest areas of risk taking that the children sought enjoyment from were climbing and jumping. Risk-taking in play, such as that described by Sandseter, allows children to test their limits, try new skills and activities, and learn about their bodies and their capabilities. In doing so, they acquire and eventually master a wide range of fundamental motor skills.

This wanting to acquire and test physical skills can present challenges for teachers of two-year-olds in terms of knowing how to safely support this type of play whilst balancing the emerging physical development of two-year-olds alongside their older counterparts in kindergarten. Cevher-Kalburan's 2015 study into teachers' understandings of risky play noted that adult decisions and attitudes about risky play can inherently affect the experiences that young children can receive in the outdoors. Most decisions about risks were taken by adults and Cevher-Kalburan noted that adults' perceptions about risk taking impacted on the amount and type of risk taking opportunities that were available to children.

Environments need to support and accommodate a wide range of developmental levels, interests and risk tolerance, as was supported by Kleppe's (2018) study into risky play for one

to three-year-olds. This study noted that young children had an intrinsic propensity to want to take risks and that risky play for this age group could either be limited or enhanced by the environment and equipment available. In this study a group of one to three-year-old's were observed over a period of nine days, with the researchers specifically noting times when children were engaged in pre-determined definitions of risky play. Contextual information was also gathered which included information about adult intervention or involvement, social interactions and a tentative risk category such as height and speed were added to each observed incident. A notable outcome from this study was the need for teachers to understand each child's level of risk aversion and risk tolerance. This differing level of risk tolerance provides a challenge for teachers and early childhood services to not only meet the needs of individual abilities in each child, but also being able to provide environments that are stimulating, challenging and safe for mixed age groupings.

2.2.3 Language development

Language acquisition dramatically increases during the period of toddlerhood as children become more interested in oral language as a way to have their needs met and through being able to communicate with those around them. The largest influence on language development is children learning through their play, by asking questions, interacting with others, having opportunity to develop their own working theories and through the purposeful use of resources (MoE, 2017). Through communication children are able to take increasing responsibility for their own learning as they begin to share their interests and find out what they want to know. In their work, Levine and Munsch (2014) discuss this as progression of children moving from using basic vocal utterances and gestures, to communicating needs and wants, and to then using first words that they associate with objects, people and places. This gestural mimicking of toddlers, which is often observed as moving their bodies to express

their thinking, is seen as a precursor to communication by speech. Teachers and other adults have the ability to facilitate and enrich this vital stage of development through intimate emotional and communicative support (Trevvarthen, Barr, Dunlop, Gjersoe, Marwick, & Stephen, 2003).

Te Whāriki highlights the importance of language predominantly through the two strands of communication and exploration where language is described as growing and developing in meaningful contexts, especially when children have a need to know, and a reason to communicate. However, a certain level of frustration can also be seen in parallel to the toddler acquisition of the beginning stages of language. Child development literature (Doherty & Hughes, 2014; Raikes & Edwards, 2009) suggests that the toddler age group can feel frustrated with their messages being misunderstood or mis-interpreted. The Education Review Office report, *Infants and Toddlers, Competent and Confident Communicators and Explorers* (2015) noted that due to the developing stage of their language skills, toddlers still often expressed their feelings through behaviour and therefore need the time to practise new language. This stance is also supported by Levine and Munsch's (2014) work on how children at the age of two-three years begin to combine words into phrases, but still have limitations in the ability to communicate with others.

2.2.4 Social and emotional development

Social and emotional competence in young children begins in earnest at this age as toddlers begin to take an interest in other children, developing the first steps in reciprocal and responsive relationships (MoE, 2017). As children are still very much in an egocentric phase at this age, most of their time is spent developing their own sense of self and defining themselves as individuals and are just learning to empathise with other children or share

equipment (Doherty & Hughes, 2014). Two-year-olds are wanting to make their own decisions and choices and are increasingly motivated to do things for themselves that in the past would have required adult assistance or input. Toddlers discover that they have freedom and a sense of choice and work hard at trying to persuade others of their point of view (Shonkoff & Phillips, 2000).

Regulating and expressing emotions is perhaps the most commonly identified characteristic for the toddler age group (National Scientific Council on the Developing Child, 2010). Fluctuations in levels of maturity can be seen in the emotional regulation of toddlers, as children in this age group can experience a myriad of emotions in a very short space of time. However, the learning that is occurring during these times is immense and experiencing these emotions is contributing to the growth of new skills and competencies (Shonkoff & Phillips, 2000). While children are learning from a wide range of experienced emotions, they are also learning how to regulate these emotions and integrate them into the fabric of societal interactions and expectations.

Notably, for children in this age group, the biggest developmental shift is the emerging sense of self. The literature (Levine & Munsch, 2014; Smith 1998; Stonehouse, 1988) suggests that establishing themselves as separate human beings is one of the big tasks of childhood. Toddlers are working hard at wanting to be separate and independent, but still want the closeness with, and emotional support from their primary adults (ERO, 2015). Part of wanting to establish themselves as individual identities means that there may be resistance to instruction and guidance from adults (Raikes & Edwards, 2009). The overwhelming need from two-year-olds to have a sense of independence and control in their world is an area that appears to cause the most frustration for both children and adults alike (Li, Nyland, Margetts

& Guan, 2017). Sometimes this need for control can be interpreted as the child being defiant, stubborn, obstinate or wilful (Keefer, 2005). However, positive relationships with primary attachment figures allows the child to develop their independence with a sense of security from consistent support and care.

When considering the early interactions between two-year-olds, parents, whānau and teachers, indications from neuroscience suggest that these positive relationships are integral for brain development (Rockel, 2002). Neuro-scientific understandings support social structures as a key influence on cognitive development and social-emotional competence, with importance being placed on the child being able to form secure attachments rather than having to form multiple relationships with new adults all at once (Rockel, 2002; Dalli, 2014).

2.3 Neuro-Scientific Understandings

Over the past two decades there have been significant advances made in regard to neuroscientific inquiry into human brain function, which have had implications for infant and toddler practice (Dalli, 2014). Non-invasive techniques for measuring brain activity in children from birth have extended knowledge about toddlers' competencies with neurobiological research showing that the brain is not a separate cognitive organ but is actually socially wired and is strongly influenced by environmental conditions (Kuhl, 2011; Shonkoff & Phillips, 2000).

The World Health Organisation's 2004 review into the importance of social interactions such as those between a caregiver and young child, described the infant's brain as being both 'experience expectant', and 'experience dependent' with "infants' neurological anatomy and physiological development depending on meaningful forms of sensory and motor stimulation

from responsive caregivers” (Richter, 2004, p. 18). Kolb and Gibb (2013) propose that the child is experience dependant because the neural connections that are established depend entirely on the quality of the environmental input. Dalli’s (2014) work also supports the importance of positive early experiences on brain development noting that brain development relies on supportive social and emotional experiences from nurturing relationship with caregivers:

There is agreement that early experiences interact with genes to ‘shape the architecture of the developing brain’ and that the most powerful catalyst for learning is ‘the serve-and-return nature of the children’s engagement in relationships with their parents and other caregivers in their family or community’ (Dalli, 2014, p. 2).

The brain becomes increasingly complex as children grow and responsive education and care is one set of conditions that provide for the optimum support of two-year-olds and their learning (Dalli, White, Rockel, Duhn, Buchanan, Davidson, Ganly, ... & Wang, 2011b). As these interactions and attachment-based relationships are important for children’s growth, development and overall well-being, consideration should be given to the importance of a calm, welcoming, secure environment where a sense of warmth provided by a key person is evident (Shirvanian & Michaels, 2017). A primary caregiving approach, or key teacher placement, can support this social and emotional development.

2.4 Primary Caregiving

Primary caregiving supports children to form secure attachments away from their parental figures and supports toddlers developing need for autonomy. Early child-adult attachment can significantly impact upon a child’s socio-emotional and cognitive development and establishing an attachment-based education and care model can contribute to the overall

development of the young child (Shirvanian & Michaels, 2017). *Te Whāriki* confirms the need for attachment-oriented practices in stating that toddlers need to have, “...intimate, responsive and trusting relationships with at least one other person in order to thrive and learn” (MoE, 2017, p. 7). Caregiver behaviour that provides sensitivity and responsiveness to toddlers has been identified as key features that are related to development and learning in toddlers (Allen & Kelly, 2015).

Here in New Zealand Dalli (2014) has advocated for the use of a key person or primary caregiver system as being a particularly important structure that can support positive and authentic teacher-child relationships. Dalli advocates for a primary caregiving structure to be implemented and understood by the whole teaching team meaning that children receive individualised care within their group setting. It also allows a teacher to follow the lead of the child and with this continuity of care, children can become confident in their relationships with others and in their abilities as learners (Elfer & Dearnley, 2007; ERO, 2015).

Sims, Alexander, Nislin, Pedey, Tausere-Tiko and Sajaniemi’s (2018) research also supports the use of a primary caregiving approach, pointing to the importance of secure attachments for supporting the learning of two-year-olds. Their study involved 1405 participants from five different countries who were connected to early childhood education either as a teacher, a tertiary provider or early childhood policy maker. They found that the element most consistently mentioned when discussing care for infants and toddlers, was the emotional-relationship dimension. ERO (2015) suggests that “to thrive and learn, an infant must have an intimate, responsive and trusting relationship with at least one other person” (p. 7). While infants can develop close attachments with several people, *Te Whāriki* suggests this

attachment is not possible with many people and provides some key curriculum requirements for infants and toddlers. These are:

- one-to-one responsive interactions
- a familiar teacher who has primary responsibility for each child and is attuned to their needs
- higher staff ratio than for older children
- individual programmes in a predictable and calm environment
- partnership between parents and other adults caring for young children

This supports a primary caregiving approach which is an integral element of the cycle of being able to develop a sense of self and forming strong attachments with teachers (Shirvanian & Michaels, 2017).

To explore the impact a key teacher or primary caregiving system had on supporting learning Kryzer, Kovan, Phillips, Domagall and Gunnar (2007) studied 56 toddlers, with an age range of 16–36 months, and 56 pre-schoolers ranging in age from 42-54 months, who were being cared for in a mixed age group setting. They reported that toddlers received less supportive care and were found to be less socially integrated in a mixed age group setting. These findings suggest that toddlers were more reliant on adult support to be able to be successful in these mixed age group settings. Of note was that the teachers indicated they were concerned with how to meet the needs of two-year-olds within a mixed aged setting when they felt that toddlers needed much more one on one time with an adult due to their age and developmental needs. Overall Kryzer et al., found that the caregiving-relational behaviours of teachers impacted on child functioning but was more noticeable in the toddler age group than with older children, as toddlers appeared to rely more heavily on interactions and caregiver support at this stage of their development. Such findings raise issues in relation to structural

features such as adult: child ratios and the availability of a primary caregiver for two-year-olds in early childhood services. Raikes and Edwards (2009), in support of primary caregiver provision, note that lower ratios of adults to children impacts not only on the day to day care of two-year-olds, but also on their learning outcomes. Dalli et al.'s (2011b) report, *Quality Early Childhood Education for Under-Two-year-olds; What should it look like?* to the Ministry of Education also noted the importance of structural features, such as consideration given to ratios, which support a primary caregiving approach, as noted in the following quote:

the ratio of teachers to children; you've just got to have enough people for the children, otherwise it becomes a minding business [where] you've just got a bunch of little kids in a room, that you're just trying to keep happy and occupied. But if you've got enough people, then you can do a good job, a thorough job, of putting into [contributing to] each child's life. (Dalli et al., 2011b, p. 8)

Toddlerhood is a critical period for children's learning and development, and, if well supported by nurturing and consistent caregiving and teaching practice, children are more likely to experience success as lifelong learners (ERO, 2015). Given the importance of understanding how primary caregiving can impact on the child, it is important that curriculum planning and assessment for two-year-olds supports their learning alongside appropriate nurturing care to enable their capacities to flourish. The following sections discuss the importance of curriculum planning for learning and assessment for learning for the two year old age group, in light of the characteristics that have been highlighted above.

2.5 Early Childhood Curriculum and Two-Year-Olds

The curriculum should guide what teachers assess, and what teachers choose to pay attention to within teaching and learning. *Te Whāriki* affirms toddlers' rights to high quality care and to

be taken seriously as active and competent members of society. Cowie and Carr (2004) note the dynamic interaction that exists between curriculum, assessment, teaching and learning. Planning and assessment in early childhood is symbiotic and one cannot occur without the other (Carr, 2001). Curriculum planning and assessment for learning begins with a basis of shared inquiry between teachers, parents and whānau (Carr, 2001; MoE, 2017) and *Te Whāriki* makes it clear that teachers must provide opportunities for two-year-olds to learn across all five strands of the curriculum – wellbeing, belonging, contribution, communication and exploration.

Te Whāriki broadly describes areas of curriculum planning that need to be considered when planning for future learning for children as being:

- Beliefs about young children and how they develop
- What is known about the children in their service
- What are the aspirations for this child
- What does the child need to learn to meet these aspirations
- What do we need to know as teachers to support this learning
- What kind of environment is needed to support this learning

These provocations should provide a starting point for working out what is important learning for the child which leads into planning for learning that is consistent with and includes all of the principles of *Te Whāriki*. The curriculum’s framework of principles, strands, goals and learning outcomes allows each individual service to “...weave a local curriculum that reflects its own distinct character and values” (MoE, 2017, p. 7). This concept of ‘weaving’ is noted in Carr’s (1998) early work on socio-cultural assessment, with one of her key ideas for assessment being that each early childhood service could choose their own planning procedures to best meet the unique needs of their service.

Similar to Carr, Hill (2001) discusses planning processes as teachers setting aside their own agendas in order to respond appropriately to children's interests and the learning directions that children are wanting to take. Hill talks of reconceptualising the term 'planning' to instead focusing on making connections about how to strengthen children's learning capacities. She believes that using the terms 'researching' and 'investigating' rather than 'planning' will ensure robust planning for learning. Planning that is informed from knowledge of the child is a powerful tool that, when used consistently and objectively, has the ability to influence learning and teaching pedagogy (Alvestad, Duncan & Berge, 2009; Nuttall, 2013; Snow & Van Hemel, 2008; Tarr, 2006).

Therefore recording of assessment information should occur in the knowledge that this information can contribute to future learning. Teachers' knowledge of children should come from the assessment process, both formal and informal as well as through discussion and interactions with parents and whānau. Niles (2016) describes this meaningful assessment practice as teachers assessing "...children's significant learning experiences and development [in] possible future learning experiences with children, parents, families/whānau and other teachers" (p. 5).

2.6 Assessment for Learning

Fraser and McLaughlin (2016) define assessment as "the process of gathering evidence about children's learning, summarising, analysing it then using the knowledge gained from this process to further children's learning" (p. 8). Key features of quality assessment are that there should be a clarity of purpose for assessment, use multiple methods, be credible and trustworthy, promote equity and contribute to a strong body of documentation about that child's learning (Fraser & McLaughlin, 2016). Assessment for learning, or formative

assessment, is considered to be any assessment that helps a child to learn and is described by Carr (2009, p. 24) as “about making connections over time”. This implies that assessment for learning, or formative assessment, includes possible lines of direction that intrinsically connects planning and assessment information.

A key purpose of assessment is the gathering of information to make informed instructional decisions. As defined by Snow and Van Hemel (2008), assessment can be used to inform how teachers plan, as well as identify instructional supports to support children’s future development. Through careful planning, teachers can reflect their curriculum priorities, make valued learning visible, and enact the mandated curriculum, *Te Whāriki*. ERO (2007) states that all early learning services licensed by the Ministry of Education are required to carry out assessment with approaches that reflect the principles and strands of *Te Whāriki*, as well as be reflective of current theory, research and practices in early childhood education. It is these assessment for learning processes that lend themselves to understanding the instructional strategies and relationships that facilitate learning.

Assessment shapes and reflects valued learning, curriculum and teaching in early childhood settings with an important goal being to strengthen children’s identity as learners, as well as their motivation for future learning (Dalli & Meade, 2016). Formative assessment, which is closely linked to ‘Assessment for Learning’, is described by Carr and Lee (2012), as children having the opportunity to develop a sense of a learner identity; where child agency is supported so that the child has authentic input into their learning; teachers recognising and acknowledging learning over time and lastly, ensuring connections with whānau and the child’s community outside of the centre. Assessment of children’s learning and development, as discussed in *Te Whāriki*, indicates that informal and formal assessment both have a place

in the formative assessment approach. Informal assessment is described as assessment that, “occurs in the moment as kaiako [teacher] listen to, observe, participate with and respond to children who are engaged in everyday experiences and events” (p. 63). Formal assessment includes teachers written observations of children’s learning and engagement with the curriculum and, as noted in *Te Whāriki*, teachers may also gather other formal evidence of learning through photos, videos and examples of children’s work. Gathering this information over time helps teachers to track children’s progress with their interests, capabilities and provides pathways for future learning (MoE, 2017).

2.6.1 A socio-cultural perspective of learning and assessment

Children learn within social contexts and observers of children’s learning need to recognise and understand that learning is a social practice constructed within an early childhood setting (Schultz, 2015). Sociocultural theories have significantly influenced *Te Whāriki* and its content, including assessment for learning (Fraser & McLaughlin, 2016). The socio-cultural lens on assessment evident within the curriculum requires teachers to observe children over time as they interact with people, places and things, thus providing a greater understanding of the child and the context within which the child operates (Hedges, 2014). Teachers acknowledge the children’s social and cultural situation as they plan and assess their learning, which implies knowledge of the child, curriculum and cultural contexts (Fleer & Robbins, 2004).

Assessment should be collaborative with open dialogue between the child’s early childhood environment, their home and the wider community. The importance of these interwoven relationships is highlighted as one of the key themes from the Education Review Office reports (2007, 2013) into priorities for children’s learning. Through a socio-cultural and

collaborative approach to assessment whānau have the opportunity to see and contribute to what is valued in their early childhood setting.

A study undertaken by Dalli, Rockel, Duhn, Craw and Doyle (2011a) with 12 infant and toddler services in Auckland and Wellington helps to provide some insight into the complexities of planning and assessment for two-year-olds. Qualitative case study methods, including video recordings of each child, and an analysis of learning stories over two years were used to investigate teaching and learning through the experiences of small groups of three to four children. Teachers and researchers met to discuss the excerpts from each child's video with the focus on identifying learning for the child and also how teachers understood, enacted and articulated their infant-toddler pedagogy (Dalli et al., 2011a). Researchers also met with the parents of the children involved in the study to explore their perception about their child's experiences within the early childhood centre. The findings illustrated that the teachers valued and recognised the importance of really knowing the child and their family which was evident when one teacher said that "knowing the history also meant getting to know the child's context (family/whānau, friends, siblings) and understanding the child in that context" (Dalli et al., 2011a, p. 7). Also highlighted in this study was the importance of using multiple methods in assessment. For example, including the use of videoing as an assessment tool was found to be useful by the teachers not only to fully observe the child's learning but also in offering opportunities for teachers to critique their own teaching practice with toddlers.

2.6.2 Narrative assessment for learning

Due to the socio-cultural nature of *Te Whāriki*, narrative assessment has become the preferred and predominant method of assessment in early childhood education in New Zealand (Carr,

Cowie & Davis, 2015). A survey undertaken by the New Zealand Education Council for Research in 2008 discovered that 94% of teachers in early childhood were using learning stories as their primary method of assessment for learning (Mitchell, 2008).

The learning story framework is credit based and socio-cultural in nature, consistent with the principles and strands of *Te Whāriki* (Carr, 2001; Keesing-Styles & Hedges, 2007; Carr & Podmore, 2009). Te One (2003) describes how learning stories, as a type of formative assessment, are different to other assessment methods in that they position teachers as active participants in the learning process. This construction of knowledge between the teacher and child includes the multiple perspectives of the child's learning community and requires teachers to be knowledgeable about the pedagogy of learning stories, and how best to use the information that is gathered (Fraser & McLaughlin, 2016, Niles, 2016).

A project to support assessment practice in early childhood was the development of *Kei Tua o te Pae*, a series of exemplars developed by the Ministry of Education (2004- 2009) as a guide for narrative assessment practice for teachers. *Kei Tua o te Pae* positioned assessment inside the curriculum by recognising assessment as an on-going, interactive process.

According to *Kei Tua o te Pae*, assessment for learning is described as teachers noticing what children are doing, recognising the learning within what they 'notice' and then 'responding' to a selection of the recognised learning (MoE, 2004). Similar to Te One (2003), *Kei Tua o te Pae* also emphasised the belief that assessments "do not merely describe learning, they also construct and foster it" (MoE, 2004, p. 3), and highlights the role documentation has in enhancing learning and making valued learning visible to children, parents, whānau and other audiences in early childhood.

Although the intent of *Kei Tua o te Pae* was to move from a developmental, or summative approach to assessment, literature (Stuart, Aitken, Gould & Meade, 2006) would suggest that the narrative form of assessment is not fully understood or utilised as intended by early childhood teachers. Their report, '*Evaluation of the Implementation of Kei Tua o te Pae Assessment for Learning*' discovered that although early childhood services made assessment documentation visible, only 24% of the actual assessments emphasised children's learning, with only moderate levels of written evidence of the child being an active participant in the assessment process. Further, the documentation of parent engagement and parent voice was low and community links were not strongly evident in individual assessment items.

Although narratives are the predominant assessment method in New Zealand early childhood services, the literature reveals some emerging critiques of how this approach is used, mainly that learning stories often show a summative view of children's learning rather than highlighting future learning pathways (Blaiklock, 2010; Nuttall, 2013; Zhang, 2015).

Teachers understanding of formative assessment should be used to guide the assessment of children's learning and Blaiklock (2008, 2010, 2013) and Perkins (2013) both question the worth of learning stories as a main assessment method. They feel that teachers lack of current knowledge of formative assessment and the understanding of what to assess and how to assess, invalidates the usefulness of learning stories.

2.7 The Role of the Teacher in Planning and Assessment

The primary responsibility of any teacher is to facilitate learning and provide an environment and culture that is conducive to learning (MoE, 2017). In order to do this literature (Denee, 2018) suggests that teachers need to not only have access to relevant professional learning and development (PLD) opportunities, but also that professional learning is most effective

when the context is relevant to the teacher and when professional learning is sustained over time. Dennee's study examined PLD from the perceptions of ECE teachers and the findings revealed that professional learning is a critical factor that impacts on pedagogical improvement.

The role of the teacher in planning and assessment is pivotal, and as such, teachers need professional knowledge and skills in order to effectively implement planning and assessment practices for children (Arndt & Tesar, 2015; Cameron, 2018). It is expected that teachers will set curriculum priorities based on *Te Whāriki*, in consultation with their community of culture and in understanding of valued priorities for learners. (MoE, 2017). The report, '*Priorities for Children's Learning in Early Childhood Services*' identified the main role of the teacher as being able to understand and implement the national curriculum, its framework and the intent of the document (ERO, 2013). Effective planning and assessment begins with responsive and reciprocal relationships between the teacher and child, their whānau and wider community and it is from these relationships that rich and meaningful assessment can occur (Cooper, Hedges & Dixon, 2014).

Alongside the importance of relational features, it is essential that teachers have the professional and pedagogical knowledge to support the specific needs of children of different age-groups. The characteristics of two-year-olds, as identified earlier in this review, affirm the need for specific and targeted approaches that respond to the unique developmental and relational needs of this age group. Lawrence and Gallagher's (2015) study with the Pen Green team supports the importance of teachers having pedagogical knowledge, with this being used as a tool for supporting and understanding children's learning. Specific strategies that then inform planning and assessment practices, along with further identification where

children may need opportunities for growth and skill development, is also required (Lawrence & Gallagher, 2015). Of note, ERO's (2007) report found that teachers engagement in professional development impacted on their planning and assessment practices, as well as on their understanding. The findings of these studies suggest that teacher knowledge of planning and assessment is indeed critical. ERO (2007) also highlighted self-review of teaching and assessment practice were also indicators that resulted in positive change in programmes, the environment and interactions with between teachers, parents and whānau. Therefore, teachers in early childhood need a wide range of capabilities including knowledge about child development as well as the theoretical underpinnings of the early childhood curriculum. Early childhood teachers also need to be skilled in making children's learning visible through their assessment practices, while developing relationships with children, parents and whānau to inform the assessment process, whilst being committed to their own ongoing professional development and knowledge (MoE, 2017).

2.8 Summary and Research Questions

As two-year-olds are now part of the kindergarten landscape it is timely to critically examine how planning and assessment practices can support the learning and development of this age group. The present review of existing research literature has explored the unique characteristics and development of two-year-olds, alongside the need for targeted planning and assessment practices that supports the learning for children of this age.

Strong pedagogical knowledge of assessment for learning is vital to help ensure that teachers are equipped with the skills and knowledge needed to effectively assess, plan for and implement learning opportunities for two-year-olds. The literature also confirms the critical role teachers play in developing respectful and reciprocal relationships not only with the

child, but with all those involved in the child's learning. Furthermore, it is important to understand factors that influence teachers pedagogical knowledge of planning and assessment, and especially how this professional knowledge of teachers contributes to and supports the learning of two-year-olds in a kindergarten setting.

To date, there is limited research-based literature exploring how teachers are utilising planning and assessment to inform future learning for two-year-olds in New Zealand kindergarten environments. This paucity provides further impetus for the present study which, through utilising a case-study approach, gives insight into the existing beliefs and practices of kindergarten teachers. This study aims to explore how the planning and assessment practices used by teachers support learning for two-year-olds within three New Zealand kindergarten settings by addressing the following research questions:

- What are teachers beliefs about meeting the needs of two-year-olds in kindergartens?
- How do kindergarten teachers plan for and assess two-year-olds learning?
- How does teachers professional knowledge inform their practice with two-year-olds?

Chapter Three: Methodology

3.1 Introduction

The present research used an exploratory qualitative case study research design to explore how teachers in three kindergartens used planning and assessment practices to support learning for two-year-olds. The chapter begins by identifying and discussing the interpretivist-constructivist paradigm underpinning the study, followed by a discussion of case study methodology. The chapter outlines procedures for participant recruitment and data collection methods which included semi-structured focus group interviews, supported by the inclusion of planning and assessment artefacts. Methods described also include the use of a research journal by the researcher to capture background information and support researcher reflection. As will be discussed, consideration was given to the selection of research sites, with an outline of the reasons including a brief description of the kindergartens selected and basic information relating to the participants. Procedures for thematic data analysis are defined and discussed and lastly, the ethical considerations are outlined and explained.

3.2 Theoretical Framework

The present study used a qualitative approach in order to capture the rich, detailed experiences of kindergarten teachers related to planning and assessment practices for two-year-olds. Creswell and Guetterman (2019) position a qualitative approach as relying heavily on human perception and understanding. A qualitative research design allows for rich data to be collected from a range of sources and is “concerned with the features, attributes and characteristics of phenomenon that can be interpreted thematically” (Scott & Usher, 2011, p. 39).

The current study has been framed within an interpretivist-constructivist paradigm as it seeks to interpret and understand the participants' views of the phenomenon being studied.

Constructivism, one of several interpretivist paradigms, is described by Williamson (2006) as an approach originating from social constructionists and is concerned with the ways in which people construct their worlds, placing emphasis on people socially constructing and developing meanings for their activities together. This paradigm focuses heavily on how individuals interpret their own experiences, both the participants and the researcher, to support their own individual world viewpoints (Mutch, 2013; Stake, 2006).

An interpretive-constructivist paradigm is a good fit for social contexts such as educational settings, as the research deals with multiple realities and seeks to preserve the integrity of the situation under investigation (Cohen, Manion, & Morrison, 1993). This study, positioned within the interpretive-constructivist approach, investigates participants' views and opinions, where the researcher is wanting to know how participants interpret their teaching practice within their own collective kindergarten settings.

3.3 Exploratory Research Design

This qualitative research study is exploratory in nature, meaning that it intends to explore the research questions and does not intend to offer final and conclusive solutions to existing problems (Creswell & Guetterman, 2019). This type of research is usually conducted to study a problem that has not been clearly defined yet and helps us to get a better understanding of the phenomenon being studied. A qualitative research design was useful for this study as it supported the gathering of rich data with a small, strategically targeted number of research participants across multiple sites through the use of case study design. The use of a qualitative research design also allowed insight into participants' existing beliefs and

practices around planning and assessment for two-year-olds. The multi-site exploratory case study approach used in this study provided the opportunity to gather in-depth data about the processes and practices being used at individual sites, as well as to show contrasts and similarities across settings. This is explored further in the following sections.

3.4 Case Study

According to Yin (2014, p. 3), "the distinctive need for case studies arises out of the desire to understand complex social phenomena". A case study methodology allows the researcher to study and retain the meaningful characteristics of the real-life phenomena and aims to understand the case in depth, in its natural setting, with recognition given to the complexity of the phenomenon, relationships and experiences (Denscombe, 2010; Yin, 2014). For this study, a case study methodology allowed for opportunities to gain insight into the complexities of planning and assessment practices within the selected kindergarten settings.

The present study was conducted in three kindergartens with the intent that the inclusion of multiple case sites would offer a richer understanding of planning and assessment practices for two-year-olds in a kindergarten environment. Stake (2010) supports this stance, acknowledging that investigating the differences and similarities between contexts can provide valuable insight and knowledge about how a phenomenon occurs in different settings.

As a research strategy, the exploratory aspects of a case study methodology fit well because the flexibility created within the case study framework enabled the researcher to ensure processes created adequate connections with participants. The researcher was able to

collaboratively construct a meaningful reality of how teachers use planning and assessment practice for two-year-olds within the context of a kindergarten.

Although a case study design offers many advantages as a methodological approach and as a research strategy, there is often criticism that a case study approach lacks generalisability to the wider population (Yin, 2014). However, as this is a descriptive study, the emphasis is on understanding the processes as they occur within the studied contexts. Descriptive research, as defined by Atmowardoyo (2018) is a research method used to describe the existing phenomena as accurately as possible with the researcher collecting the data through the use of research instruments such as interviews and observations. Therefore, using a case study approach for this study allowed for rich descriptions of the phenomenon being studied, rather than being concerned with being able to generalise the findings.

3.5 Participants and Setting

This study was conducted in three kindergartens to allow rich descriptive data to be collected from multiple sites, offering the opportunity to see the way in which different teaching teams engaged in planning and assessment for two-year-olds. It was proposed that conducting the study with three teaching teams would result in a more dynamic understanding of the complexities of the utilisation of planning and assessment practices (Stake, 2006).

A total of 17 qualified, registered and certificated teachers from three kindergartens participated in the research. Kindergarten services in New Zealand are unique in that all teachers are required to be qualified, registered and certified. The decision to involve three kindergartens in the study was carefully considered as a way of enhancing the rigour of the research through gaining multiple perspectives in the same context, but across different

settings. Salkind (2010) notes that different cases are similar to multiple experiments in which the researcher selects similar situations to verify results.

The criteria for the selection of kindergartens included two main factors. First was that the case sites currently had two-year-olds attending. The second factor for selection was purposefully selecting kindergartens who were deemed by the overseeing organisation to have robust planning and assessment practices. The decision to select high quality settings was made to support the identification of quality practices for two-year-olds, rather than offering a critique of poor practice. This was deemed to be appropriate not only from an ethical viewpoint but also to sustain the integrity of teaching teams and professional relationships. The decision of kindergarten selection was designated to the Manager of Innovation and Collaboration (MIC), an organisational leader within the regional kindergarten association selected due to the location of the researcher. The MIC was deemed to be the most appropriate person to make the selection due to their knowledge of the kindergartens and teachers' professional practice. Consistent with purposive sampling, the three kindergartens were identified by the governing association as being well placed to support children's learning. The following is a brief description of the participating kindergartens.

Kindergarten A has a full-day license and had slightly longer hours than most kindergartens, operating 8.30 – 4.00pm. A distinct feature of this kindergarten was that it had a small number of children aged under two, which would suggest that it was more like an education and care service. However, it was still classified as a kindergarten by the governing association. The teaching team consisted of a mix of full time and part time staff and is

licensed for 40 children (eight under two), with 47 children on the roll at the time the study was undertaken.

Kindergartens B and C are considered to be more like a traditional kindergarten model where they only cater for children aged two to five years. Both kindergarten B and kindergarten C have a mix of full and part time teachers. Most children in these two kindergartens attend a full day, 8.30am - 2.30pm, but there is also the option for children to attend a morning session only from 8.30am – 12.30pm.

The majority of the teachers that participated in the focus group interviews were considered to be experienced, having taught between five and 30 years, and length of employment with the association ranged from six months to 19 years.

3.6 Participant Recruitment

To access participants for the study, consultation was entered into with a kindergarten association's Manager of Innovation and Collaboration (MIC). The MIC holds responsibility for individual kindergartens and teaching teams and was therefore an appropriate person to make decisions about kindergarten selection for inclusion in the study. Following preliminary verbal discussions, the MIC was emailed an information letter outlining the purpose of the study. Consent forms were also emailed, requesting permission to approach the kindergartens as selected by the MIC on behalf of the Kindergarten Association (Appendices one and two). The head teachers of the selected kindergartens were then approached by the researcher via a phone call inviting them to be a part of the study. Permission was also requested to do an orientation visit to the kindergartens to explain the study and to obtain consent from the wider teaching team. Letters of invitation and consent forms were emailed to the head teacher of

each kindergarten and were collected from participants at each orientation visit when the team agreed to participate, with a follow up email being sent to organise dates and times convenient to the teaching teams to participate in a focus group interview (Appendices three and four).

Initially a list of four kindergartens was provided to the researcher by the MIC. From this list only two kindergartens responded positively, one declined and there was no response from the fourth kindergarten. Therefore, the MIC was re-approached for further kindergarten options which resulted in the third kindergarten being selected. All kindergartens that were selected participated willingly and consensually.

3.7 Data Collection

Data were collected in March 2019 from a total of 17 teachers across the three kindergartens using focus group interviews with the support of artefacts as a prompt for discussion. The remainder of section outlines the rationale for using these methods along with the procedures for the present study.

The following working definition of the focus group interview underpinned this piece of research: “The purpose of conducting a focus group is to better understand how people feel or think about an issue, idea, product or service. Focus groups are used to gather opinions” (Krueger & Casey, 2015, p. 2). In this study, focus group interviews allowed for interactive, in-depth discussions to be conducted with a small group of people from the target population, on issues important to the particular study (Khan & Manderson, 1992). A focus group interview seemed an appropriate fit also given the team-based nature of teaching in kindergarten services, and the collective approach to planning and assessment.

Krueger and Casey (2015) describe a focus group as a small, and diverse group of people whose reactions are studied through guided or open discussions. Focus group participants are asked questions in an interactive setting and are encouraged to discuss thoughts freely, with these open and free discussions typically generating ideas that can provide a wealth of information on perceptions and feelings that individuals have about a certain topic. Therefore, as discussed by Krueger and Casey, the use of focus group interviews was an ideal tool to explore the beliefs, perceptions, ideas and thinking around planning and assessment for two-year-olds with data being solicited through the asking of open ended questions. Participants were also invited to bring planning and assessment artefacts to support their answers during the focus group interviews and artefacts.

Focus group interviews also have the intention, as discussed by McLachlan (2005), of being enlightening for both participants and the researcher. In order for participants in this study to feel listened to, respected and at ease in their surroundings, consideration was given to carrying out the interviews in the teachers' own teaching environments, with questions carefully designed to build rapport with participants to help them feel comfortable with the process. This is in line with Krueger and Casey's (2015) work on how to elicit a true representation of beliefs and thoughts from participants in focus group interviews.

To ensure that the conversations remained focused and productive, guidelines and ground rules were established by the researcher as part of an interview protocol and were shared and discussed with participants at the beginning of each interview. The interview protocol that was developed (Appendix five) listed topics, questions and associated probes which was guided by the literature review, the researcher's professional knowledge and experience on the topic, as well as input and discussion from supervisors. Cassell and Symon (2004)

acknowledge that input from differing professional sources helps ensure a comprehensive development of questions and succinct focus on the topic.

Pre-determined, open ended questions were used, along with probing questions, to delve deeper in the questioning process when needed. Feedback was sought from The Massey University Early Years Research Lab on the interview questions and a pilot interview was held with another teaching team who were not part of the study. This allowed for refinements to be made to questions and to the interview delivery as well as identifying and resolving any potential problems or issues. In the pilot interview two of the transition questions were removed to allow for more time for participants to be able to answer the questions on planning and assessment. Minor adjustments were made to some of the wording of the questions after feedback from the Early Years Research Lab¹.

The final focus group format and interview questions are shown in Appendix five. As part of the protocol participants were invited to bring anonymised planning and assessment artefacts, such as learning stories, to the interview as a potential prompt and as a means of adding depth to their answers by way of explanation and evidence of practice. The intention of asking teachers to bring artefacts was purely as an elicitation tool for teachers to use and these were not used as part of the direct analysis of results. The focus group discussions, which were approximately 45-60 minutes in length, were audio recorded and then transcribed by an external contractor. Once transcribed, transcriptions were then given to the participants for review and approval where they signed a transcript release authority (Appendix six).

¹ The Early Years Research Lab at Massey University is a group of post-graduate students who meet regularly under the guidance of Dr Tara McLaughlin, Senior Lecturer at the Institute of Education.

The researcher also took notes during the interview to capture the tone, body language, non-verbal behaviour, group dynamics, speed of speech and other environmental nuances to help build an overall picture of the participants and the kindergarten settings. These notes were used as part of the reflective process with the research supervisors and were used when describing each kindergarten setting within the results chapter.

3.8 Field Notes as a Reflective Tool

To guard against, and lessen any potential insider bias, the researcher engaged in self-reflection throughout the process to increase trustworthiness. This self-reflection took the form of robust, critical conversations with supervisors and through the use of descriptive and reflective field notes. Ortlipp (2008) describes the use of field notes as a form of self-reflection and as a way of being transparent, through acknowledging experiences, opinions, thoughts, and feelings as part of the research process. The impact of critical self-reflection as a method to increase trustworthiness is important as the aim is to consciously acknowledge values and beliefs, rather than attempting to control them through other methods (Ortlipp, 2008).

Field notes are widely recommended in qualitative research as a means of documenting contextual information and are intended to be read by the researcher as evidence to produce meaning and an understanding of the culture, social situation, or phenomenon being studied (Phillippi & Lauderdale, 2008; Schwandt, 2015). With this in mind, the function of the field notes used in this piece of research were as a reflective tool and not as a data collection method, with the primary function being to describe the other factors about the focus group interviews that may not have been covered in the direct interview questions. These included variables such as if there were any members of the teaching team absent at the time of the

interview, any disruptions that may have affected the flow of conversation, body language, and descriptions of the physical environment. Field notes in this instance also offered the opportunity for the researcher to reflect on and identify any bias to help preserve the rigour of the research as well as to provide a context from which to inform data analysis (Schwandt, 2015).

3.9 Analysis

Qualitative semi-structured focus group interviews were the main method used to collect data in this study, with the purpose being to describe the participants' perspectives on planning and assessment for two-year-olds within their individual kindergarten settings. The method of analysis chosen for this study was a qualitative approach of thematic analysis. Braun and Clarke (2006) discuss thematic analysis as being the most widely used qualitative approach to analysing interviews. They describe this method as being used for "identifying, analysing, and reporting patterns (themes) within the data" (2006, p.79). An important consideration for this study was identifying themes in the interview data collected, with the main requirement to be consistent throughout the process. While determining themes it was also important to consider similarities and differences between the cases to draw out the wider implications of the study, and to understand the topic within the contexts that it was investigating (Cassell & Symon, 2004).

Thematic analysis is described by Mutch (2013) as establishing categories directly from the data obtained, through analysing the data and looking for codes and themes. These codes were developed inductively (Thomas, 2006) allowing for frequent, dominant and significant themes to emerge from the raw data. In his work, Thomas describes an inductive approach as a systematic set of procedures for analysing qualitative data that can produce reliable and

valid findings. These procedures are described as condensing raw text data into a brief, summary format then establishing clear links between the research objectives and the summary findings obtained from the raw data. From this a model or theory about the underlying structure of experiences or processes that are evident in the text data, is developed (Thomas, 2006).

Familiarisation with the data in the present study involved reading and re-reading the data in order to become immersed and intimately familiar with its content. After re-reading the data, codes were developed and attached to statements that appeared to be relevant to the literature and research questions (Krueger & Casey, 2015). Further examination of the data allowed for codes to be grouped tighter and which saw the emergence of themes developing. This thematic analysis was then justified by the literature. Mutch (2013) supports this approach as a way of eliciting and linking patterns of belief, people and settings together.

Although the teachers used planning and assessment artefacts as part of the focus group discussion, these were not used as part of the data analysis.

3.10 Ethical Considerations

Prior to conducting the research, a low risk ethics application for this study was approved by Massey University Human Ethics Committee in December 2018, notification number 4000020189 (Appendix seven). Through the ethics application there were several areas that were noted, and potential issues mitigated. Key ethical issues included participant anonymity, insider knowledge, and the use of artefacts.

Issues of confidentiality were addressed to ensure that the anonymity of both the organisation and participants were protected. There was potential that the identity of the Kindergarten Association overseeing the operation of the three kindergarten settings included in this study could become known as a result of certain details being included in dissemination. The researcher therefore worked to ensure that the information and data presented in the research were anonymised and did not include any identifying features or specific information such that it would make the organisation or the participants identifiable in any way.

No identifiable data was included in the final of summary of findings. Participants were made aware, through the introductory letter and consent forms, that any hardcopy data was stored in a locked cabinet with only the researcher having access and that electronic information was stored on a password protected computer.

Each participating teacher and kindergarten were assigned a unique identifying code that was known only to the researcher. Presentation of findings were written so as to ensure no identifiable features of kindergartens or participants were included.

Informed consent for participation was gained by providing a detailed information sheet about the study and a separate consent form to the Chief Executive Officer and Manager of Innovation and Collaboration of the Kindergarten Association. Once permission was received from the Association, consent was gained from Head Teachers and Teachers who had individually agreed to participate in the study.

Although as a researcher I did not have any direct links with the teachers being interviewed, there was an awareness of potential researcher bias due to insider knowledge. My being the

sole researcher collecting the data, as well as being employed within the Kindergarten Association at the time of data collection, meant acknowledgement was given to the potential for the risk of bias and researcher subjectivity influencing the study. These factors were minimised through self-awareness and discussion with my supervisors during all phases of the research. Punch and Oancea (2014) recognise that all researchers have a viewpoint on their chosen topic and that as long as the viewpoint is acknowledged, discussed and an awareness of kept at the forefront, then the understanding of the research can be maximised while the subjectivity can be minimised. Working closely with participants in their professional setting meant that I needed to be aware of my own behaviours and their possible influence and effect on others (Cassell & Symon, 2004). With this in mind I used a journal to keep field notes and after each interview notes were fleshed out and detail added such as any impact, through my knowledge or thought processes, that I may have had on the situation. The notes were used as a reminder of the environment and situation of each interview and were not intended for analysis. Particular care was taken to consider over-familiarity with the research contexts and participants, possible lack of impartiality and potential for invested interest in certain findings. As the researcher I was not in a position of power within the Association and had no direct involvement with participants prior to undertaking the research.

The use of planning and assessment artefacts to elicit discussion during the interviews was also another ethical issue, as it involved materials related to children. Although children were not participants in the study, there was an awareness of the importance of privacy and respect for such materials. To mitigate possible concerns, all artefacts were anonymised by participants before being used as a discussion tool.

3.11 Summary

This chapter has outlined the key theoretical and design features of this study. A qualitative approach was used which comprised of a case study design sitting within an interpretive-constructivist paradigm. The semi-structured focus group interviews examined the participants planning and assessment practices in relation to two-year-old children. The interviews explored different aspects of the research questions in order to obtain rich, descriptive data, with participants being given the opportunity to use planning and assessment artefacts to support and guide their answers during the interview process. Participants were purposefully selected from a kindergarten association through a consented process. Ethical considerations for this study were carefully considered and approval was obtained from MUHEC before data collection occurred. Data was analysed using a thematic content analysis approach to examine ideas and themes that emerged from the interviews. The following chapter outlines key findings from the study.

Chapter Four: Results

4.1 Introduction

This chapter reports findings from the study and is structured around the research questions.

The first section provides a brief vignette of each of the three settings, the teacher participants, and descriptions of notable features of each participating kindergarten. The findings outlined in sections two, three, and four describe key themes from within the data. Section two explores teachers understandings about the needs of two-year-olds. Section three explores teachers planning and assessment practices, while section four explores professional knowledge and how this informs teachers practice with two-year-olds. In presenting the results pseudonyms have been used for each setting with direct quotes from the teachers presented in italics.

4.2 Three Kindergarten Settings

Three kindergartens participated in the research. Consistent with purposive sampling the three kindergartens had been identified by the governing association to be well placed to support children's learning and all three settings had two-year-olds attending at the time the interviews took place.

4.2.1 Kindergarten A

This kindergarten is the only early childhood service in its small community and is a purpose-built centre located on the grounds of the local primary school. This kindergarten caters for a small number of children under the age of two, as well as children aged from two to five. This kindergarten has six qualified registered teachers, two of whom work part time. The kindergarten holds a full day license (operating between 8.30am – 4.00pm) for 40 children (including up to 8 aged under two), with 47 children currently on the roll. Their latest ERO

review have categorised the setting as ‘very well placed’ with ratios of 1:8, which exceeds the minimum ratio as required by the Ministry of Education. Parents and whānau have the option of attending for a full day, or a four-hour morning only session.

There was only one teacher who before starting at this kindergarten had taught in a traditional kindergarten setting of two to five year olds. As one teacher commented: *“We’re quite an unusual group actually because most of us come from mixed age models whether it’s in a different kindergarten association or, early learning centres.”* At the beginning of the focus group interviews, teachers were asked general questions about if, and when, they noticed the shift in the age group to include two-year-olds attending their kindergarten, and how that change was perceived and managed. A response from a teacher in kindergarten A noted that *“We’ve always had two-year-olds in our centre”*. Another teacher from the same kindergarten explained how she found the perceptions of other kindergarten teachers about two-year-olds very different to her own, *“I didn’t get a degree to change nappies is probably the biggest response that I’ve heard.”* Teachers in this kindergarten then went on to describe how their past and present teaching experiences had always included working with two-year-olds:

“And actually when we still have discussions with people now, [about two-year-olds] they go, yes that’s great – but. There’s always a ‘but’ at the end of it and we do accept that there’s huge challenges, but the benefits far outweigh that. And actually it’s about adapting your own practice and pedagogical understandings of different age groups.”

Kindergarten A has established strong ties to the community, both from being located close to the primary school, as well as being able to provide local families with early childhood

education that previously they had to travel some distance for. A notable feature of this early learning environment and programme is the value placed on relationships, in particular a sense of belonging with the school as being part of their learning community. This shared relationship was described as strongly valued by the teachers. Regular visits between the settings provides strong foundations to support transition to school and offer highly valued opportunities for ako, mixed aged and reciprocal learning. Their programme encapsulates this strong sense of community and belonging, not only with the local school but in general with the community. Kanohi-ki-te-kanohi, face-to-face relationships, are viewed as extremely valuable and teachers ensure this happens daily in order to respond to and support, the learning and needs of the children.

The learning environment is well planned for, with flexible routines to meet the varying needs of the different age groups, and with interchangeable spaces that can be used by the teachers to meet the needs of the children, such as sleeping arrangements. The head teacher explained how the environment is planned so that younger children can explore independently and move through the thoughtfully created inside and outside spaces. The younger children meet up with their older peers regularly, creating plenty of opportunities for ako - shared learning.

This team collaboratively plan for learning for children at regular fortnightly planning meetings where all teachers are involved. This kindergarten uses the Māori concepts of whānaungatanga, manaakitanga, ako, kaitiakitanga and kotahitanga as core values and interlink them with *Te Whāriki* as part of their planning and assessment practice.

4.2.2 Kindergarten B

Being one of the older kindergartens within a well-established kindergarten association, this kindergarten has evolved from a traditional sessional kindergarten model to now operating under a school day license with the option for parents and whānau to send their children for morning sessions or a full six-hour day. The kindergarten is licensed for 40 children, with 67 currently on the roll. This centre was described in their last ERO review as being ‘very well placed’, with a teacher/child ratio of 1:10 and therefore meeting the minimum requirements as set by the Ministry of Education.

The teachers are reflective on their practice and are generally welcoming about how they view two-year-olds within a kindergarten setting: “*When I think of the two-year-olds in our kindergarten it makes me smile. And I feel quite joyful...*”. The teachers in kindergarten B also felt that the general perception amongst teachers about having two-year-olds in kindergarten was viewed as a negative: “*...teachers finding a lot of excuses as to why we shouldn’t have them [two-year-olds] from what I’ve gathered there’s a lot of but, but, but.*” Their programme is based on exploration, inquiry and creativity, with nature-based education being seen as essential to the learning and development of their tamariki.

This kindergarten has a well-planned environment with carefully thought out spaces to provide for both older and younger children, such as outdoor equipment that has been purposefully set up to meet differing levels of ages and abilities. Inside, quiet spaces have been provided to ensure that the younger learners have a space that they can go to for uninterrupted ‘quiet’ time. The inside environment is set up in a traditional way with set spaces for art, dramatic play, music, science, literacy and tactile experiences.

Over the past five years teachers have noticed a significant increase in the number of two-year-olds attending the kindergarten. One of the challenges that this kindergarten faces is that although they are a six teacher team, only two of the teachers work full time. This has meant they have had to develop some robust communication methods so that there is consistency amongst the team.

Three of the six teachers had come from education and care models where they had experience of working with children from zero to five years. The head teacher shared that having two-year-olds with older children had meant that as a team they had to challenge their pedagogy and current ways of being, which had led to a comprehensive internal review to consider how to best meet the needs of a younger age group. From this review they have established several structural practices that they have found better meet the needs and supports the learning of their younger tamariki. This included not having fixed structural teaching roles such as inside or outside teacher. Instead, the teachers move freely within each space and with clear communication amongst the teaching team, spaces remain well supervised by teachers at all times.

Not only did the team look at structural changes within the programme, they also have a different method of planning and assessment compared to the other participating kindergartens. They used a ‘Trissessment Method’ where they observed and videoed children at play, then shared this documentation with the rest of the teaching team and whānau before writing any narrative form of learning assessment. As one teacher noted, “*videoing is such a powerful tool, and in particular with two-year-olds*”.

4.2.3 Kindergarten C

This newly renovated kindergarten in the heart of a culturally diverse community is also one of the older, more established kindergartens within the association. The head teacher had been working with this established team of teachers (two full time and one part time) for six months. The kindergarten is licensed for 30 children and at the time of the interviews had 40 children enrolled. They offer their community either a morning session of four hours or a full day session which is six hours. This centre was described in their last ERO review as being ‘well placed’, with a ratio of 1:10 and thereby meeting the minimum requirements as set by the Ministry of Education. This kindergarten also used to operate on the traditional sessional model, with the enrolment of three to five year olds only.

The teaching team were reflective and expressed their thoughts about the impact that having two-year-olds enter their service had had, not only for them as teachers but also for the older children. This team were at the beginning stages of welcoming two-year-olds into the setting and discussed how they thought kindergartens were becoming more like a childcare model:

“And I think a lot of teachers have chosen to work in kindergarten, and they have moved away from the pre-school model of working with, two-year-olds and it’s separate. Separately and, you know it – it’s perceived as a different model. But it’s becoming the same model.”

With the exception of the head teacher, the other teachers had only ever worked in kindergarten services but saw the increasing numbers of two-year-olds starting kindergarten as a positive. Although it wasn’t their own opinion, the teachers felt that two-year-olds were generally seen by other kindergarten teachers to be “a hindrance” and acknowledged the impact that teachers attitudes could have on teaching two-year-olds: “And sometimes that can

be the biggest thing to shift is – is teachers' attitudes. Yeah. Once you shift teachers' attitudes then, obviously the perception changes [about two-year-olds]."

The physical indoor environment is open and airy with a variety of inviting learning spaces which include a mat area for construction type play and music, playdough, art area, puzzles and science and literacy opportunities. The outside area has lots of room for children to be challenged, to explore and to develop their physical skills, with a variety of moveable equipment that allows children to set their own challenges. Green grass, barked areas, gardens, areas to experience physical challenges such as climbing trees, and equipment specially designed to support children's physical growth and development are features. The centre promotes the use of real resources such as saws, hammers, nails, gardening equipment, spades and shovels. The environment is set up both inside and outside with resources that are available to all age groups. There appears to be no differentiated approach to planning the environment, other than teachers being mindful of supporting the younger tamariki with some of the more challenging equipment.

Kindergarten C uses individual education plans to document the interests and progress towards goals for each child. This information is shared at fortnightly planning meetings and forms the basis for narrative documentation of learning.

While each kindergarten had a different story to tell about their two-year-olds, there were several themes that emerged from the focus group interviews pertinent to all of the kindergartens. These included positive perspectives of teaching two-year-olds, changes faced by the teachers, planning and professional knowledge, and shared understanding of, and

consistency with, pedagogical practice. The following sections discuss the major findings from the interviews.

4.3 Teacher Perspectives About the Needs of Two-Year-Olds in Kindergarten

The teachers discussed an awareness about their own practice with two-year-olds, weaving in characteristic descriptors as well as highlighting developmental differences between two-year-olds and older kindergarten children. The teachers identified two-year-olds as being capable and competent learners, a perspective that enabled them to respond to their two-year-olds with knowledge and understanding. These key themes are further described in the following subsections.

4.3.1 Teachers were aware of developmental differences and characteristics of two-year-olds

The focus group discussions offered insight into how the teachers not only perceived two-year-olds but also their awareness of the developmental stages and general characteristics of this age group. The teachers expressed knowledge about developmental aspects of a two-year-old and how learning and development for this age group could be similar but different to older children, such as:

“So creativity for a two year old might be splashing some paint on a piece of paper. Whereas it will be more complex for the four to fives. But we’re looking at the same thing. We’ll look at it and it will be expressed in different ways.”

Teachers also used words such as, ‘*competent*’, ‘*persistent*’, and ‘*independent*’ in their descriptions of two-year-olds. It was acknowledged that each child developed at their own pace, with individual traits and abilities that needed to be planned for. The majority of the teachers in this study recognising that they had to revisit their knowledge of the development

of two-year-olds with one teacher commenting, “*just to remind us about developmentally how children learn best at that age.*”

Teachers noted that a strong characteristic of children in this age group was their sense of ‘*determination*’ and saw this as typical and anticipated behaviour for two-year-olds. This was reflected in teachers actively working to support children’s sense of agency, with one teacher describing this as:

” *...their sense of agency, like you know, them wanting to do things for themselves and really clearly telling you that you actually can’t – you know they don’t want you to help them and that they really want to do it themselves.*”

Teachers in Kindergarten A identified two-year-olds as being competent and capable with this perspective enabling teachers to respond to two-year-olds with curiosity and understanding, with clear strategies to support their learning. This was apparent where one of the teachers described their two-year-olds as, “*being very capable within the environment.*”

4.3.2 Teachers valued the advantages of tuakana teina relationships

A predominant theme that emerged was the view of teachers who recognised and supported the concept of tuakana teina where children who may be older or who have different skills, knowledge or experiences support and teach their younger or less able peers and saw this as a positive for the learning and development not only of two-year-olds, but also for other children in the kindergarten. Teachers positively identified that the impact of having two-year-olds in their kindergartens was the reciprocity between the age groups. All three focus groups discussed the concept of tuakana teina and the importance they placed on such interactions in their educational settings. In this sense, the two-year-olds relationship with their older peers were considered part of their learning journey and the focus groups all noted

that having two-year-olds enrolled alongside older children supported the learning across both age groups, making statements such as *“The tuakana teina, and you know role modelling to each other and, practising some social competency around empathy and, guardianship towards each other, looking out for each other.”*

Teachers also identified that through supporting the concept of tuakana teina, it helped to strengthen not only a sense of belonging within the group, but also supported learning and development, *“It was an opportunity for older children to support and model for the younger children.”*

Tuakana teina was evident in the way in which two-year-olds were seen as part of the community in all of the participating kindergartens. This was an important aspect that was cultivated for the tamariki and it was important to these teachers that children saw themselves as competent, confident learners within a learning community that supported them and their whānau. As kindergarten A described:

“We’re a community, our children see themselves as community members and I feel like that starts right from the moment they come through these doors. They learn alongside their community members throughout early childhood into primary and beyond, so we see huge benefits to that.”

Teachers commented that they felt that the children’s social competency and empathy skills increased as they developed a sense of whānaungatanga (connection or relationship) through shared experiences and that working together provided the children with a sense of belonging.

Teachers also discussed that siblings of older children settled more easily as they (the teachers) had already strong established relationships with the older child and their whānau: *“...ones that had siblings here, so they were already familiar with the environment. And the children were familiar with the environment so that made them settle into our environment easier.”*

4.4 Changes to Support Two-Year-Olds

While identifying the positive ways in which two-year-olds were viewed, teachers also talked about the challenges of working with two-year-olds. Specifically, ratios, pedagogical understandings, and environmental challenges relating to safety were frequently mentioned throughout the interviews, with these findings now outlined.

4.4.1 Teachers were concerned about having the staff and resources to support two-year-olds

In each of the kindergartens teachers were concerned about how to manage the needs of two-year-olds within the current teacher to child ratios. For example, Kindergarten C noted that toileting routines effectively meant that at times there remained only two teachers to work with up to 29 children. They said that this meant teachers spent more time supervising, rather than teaching one to one with the younger children; *“Yep. Two teachers yeah so if you only one child with you in the nappy area it’s like 21-29, out here with two teachers.”* Teachers felt that such circumstances were detrimental to the learning needs of the entire kindergarten group.

Ratios also impacted on structural aspects such as staff rosters in Kindergarten A and allocation of roles in all of the kindergartens. The teachers identified that prior to having two-

year-olds in kindergarten they had allocated roles such as an inside, outside and support teachers with the latter normally managing care routines. Two of the three kindergartens had structured their day so that teachers had no fixed role in order to meet the needs of their two-year-olds, commenting that,

“We also see a lot of challenges with two-year-olds as well because, you have to cater your day for a lot of different needs. And under this model because we’re full day, we have a lot of changes in staffing because we cover our own lunch breaks, non-contact. We have two of us in .8 [part-time] roles as well, so we have different teachers cover for us two days a week. So there’s huge challenges within that so really it relies a lot on careful planning and can easily fall over with lack of communication.”

Care routines were identified as one of the bigger barriers to effectively supporting two-year-olds. The teachers focused positively on the challenges and from the interviews it emerged that they actively sought solutions to challenges that having younger children with greater care needs may pose,

“We as a kindergarten handle everything with a positive outlook. So we never let any negativity about the big shift - and it is a big shift for kindergarten traditionally to have two-year-olds. So, we handled it like we did everything else, with a positive spin. Like how we can make this work for us in this place - right now.”

One teacher expressed how she felt that relationships with the children were compromised in order to specifically meet the care needs of two-year-olds:

“Since we’ve had a lot of two-year-olds we’ve had about a third of the roll on the list. Toileting list. We are busy. If there are too many nappies, you just go like bang bang bang. And, it’s not a good thing with us”.

Kindergarten A had similar concerns and found that their care routine of offering their younger children sleep time also affected their ratios and the time taken away from effectively teaching children: *“We’ve got that additional [challenge], trying just – to get them to sleep”*.

4.4.2 Primary caregiving to support learning and development

Primary caregiving in the context of an early childhood centre means a child is allocated a special teacher or caregiver. It is a label applied to a practice in early childhood centres where a teacher assumes primary responsibility for the child’s needs including care routines and getting to know the child’s family to ensure the best learning and development for the child. Primary caregiving was explained by several of the teachers to be useful in building trusting relationships, *“because they know they come in and they’re gonna be with that same person, they’re gonna help them settle in”*. Teachers in two of the kindergartens found that a primary caregiving system, or a key teacher approach, was beneficial to learning and development of the two-year-olds. Structural changes to the day were embraced so that teachers could more effectively meet the needs of the two-year-olds: *“Mainly also changing... the roster so they always had that key person”*. The teachers in kindergartens A and B felt that a primary caregiving approach helped children to not only settle into the kindergarten more quickly but that it also strengthened communication within the team. Teachers made a point of sharing important and relevant information about each of the children with the impetus being that this communication was the catalyst for conversations about children’s learning and future planning for that learning.

4.4.3 Teachers needed to adapt their pedagogy to respond to the needs of two-year-olds

The teachers recognised that their pedagogical practice was challenged with two-year-olds enrolled in their kindergartens. The teachers discussed the ways in which they recognised change needed to be affected in order to meet the needs of their two-year-olds, *“It’s about adapting your own practice and pedagogical understandings of different age groups.”*

Teachers identified some ways in which their practice has changed in response to increasing numbers of two-year-olds as the traditional model of kindergartens had shifted in recent years. There was recognition of moving away from traditional models of kindergarten to encompass new ways of being and as one teacher noted, *“When I trained there was no such thing as toddlers in kindergarten there was just four-year-olds technically.”*

4.4.4 Teachers identified the need to make environmental changes to support two-year-olds

The need to adapt the physical environment and the challenges associated with providing a safe space were frequently mentioned during the interviews with the three kindergartens.

Teachers were aware that two-year-olds needed a balance between being able to navigate the environment themselves with teachers being responsible for ensuring that the environment was safe and suitably set up to meet their needs. Teachers were reflective about how their environs must seem for the younger children, making statements such as: *“...we sometimes have children whose little legs is hard for them to stumble up our sandpit steps or, you know they may get themselves into positions that they can’t get down from and stuff like that.”* One teacher explained that it was important to understand the environment and address safety concerns, noting that, *“There’s also safety issues obviously ‘cause these environments*

weren't built for, two-year-olds they were built for four-year-olds and three-year-olds so, there are safety issues that you have to be aware of".

Challenges relating to the environment and ensuring the safety of two-year-olds was a key finding that emerged from the data. Teachers were wanting to ensure a safe environment for all of their learners, but in particular for two-year-olds, while still meeting the needs of older children and not sacrificing important risk-taking opportunities. It was noted that planning the environment to meet the needs of all of their learners was important and this came from a place of not only concern for the safety of two-year-olds but also planning around how the environment, including resources, could be adapted for use by two-year-olds:

"We've found they can't really reach some of the resources or, they're not appropriate for the two-year-olds, in the way that they're using them, but we have changed our environment to meet the needs of the two-year-olds."

4.5 Planning and Assessment Practice that Supports Learning for Two-Year-Olds

Across the focus group interviews, the teachers offered rich accounts of their observations of learning plus some planning and assessment processes that they used to support the two-year-old learners in their kindergartens. Through the process of thematic analysis the planning and assessment practices of teachers were categorised according to three key themes: planning for learning, two-year-olds as priority learners, and the use of curriculum to guide practice and these findings will now be outlined.

4.5.1 Teachers planning practices focused on noticing the learning

Alongside teachers' knowledge of the development of two-year-olds and their image of the two-year-old as a competent and capable learner, teachers spoke passionately about how they

observed and captured learning, but specific descriptions around actual planning and assessment processes and practices proved more difficult to elicit. Though teachers were invited to bring assessment artefacts in the form of children's learning journals, or profile books to the discussion, they made somewhat limited use of these in the discussion, and tended to provide broader general perspectives of assessment, rather than the more specific detail of practices for two-year-olds that was hoped for in the interview design.

All three focus groups indicated that they planned together as a team and communication was seen as the key driver for successful planning and assessment. These relationships with each other supported their practice through processes of reflection and discussion with each other:

“So we’re having those conversations about learning. It might not be written planning, but we’re having those planning talks all the time about what’s happened in that day; sharing philosophy and vision – “So it’s really important that we have a strong [communication] network here.”

Planning was derived from observation and noticing children's interests. As the teachers discussed their planning practices terms like ‘*noticing*’, *recognising*’ and ‘*observing*’ were used consistently throughout all of the interviews. Within the teachers’ discussions about planning, they articulated their awareness of balancing the needs of all of the children in the kindergarten. They described the process of planning as being based on knowledge of individual children with one teacher explaining, “*Our individual planning for two-year-olds – it doesn’t look any different to any other child*” signifying that they kept the planning processes the same for each child in the kindergarten. Also notably, two-year-olds were not deemed to be planned for in isolation from the rest of the group, as highlighted in the following quote:

“When we’re planning for the two-year-olds, particularly around the environment and some of the safety issues we notice, we’re always double planning for the older children. So, for example, we changed our outdoor box environment because we were feeling it wasn’t working to keep the two-year-olds safe. But we’re also trying to make it so that the four year old’s have somewhere challenging to climb. So the two year old planning is never ever isolated from the rest of the group”.

Some teachers identified that planning was responsive to the stage of the child, with early planning typically focusing on settling aspects for the child, and their well-being and belonging: *“the goal has been around developing a sense of belonging because they’ve only just come in [started]”*. Whereas planning for the older two-year-olds more typically focused on capturing more of the child’s interests:

“Because, a two year old, a twenty four month old child and, a thirty month old child are two, totally different creatures. A lot of our assessment for the 24 month old children is about settling in and their well-being and their sense of belonging. And the 30 month old child is more able to be around following their interests, using the golden thread of what they’ve been learning and who they connect with.”

Teachers’ views of two-year-olds as competent and confident learners meant understanding that although part of their planning was to watch and observe, at times they needed to intervene in order to keep children safe. Statements such as the following quote highlighted this responsibility: *“I think our planning starts with our environment, that it’s an engaging environment that caters for their interests and needs.”* The data revealed that the teachers consistently used similar language and action to describe their planning processes. Planning encompasses planning for the whole child and viewing their day as a whole, not broken into

separate chunks of time, *“planning as well around the flow of our day”, and “then they got rolling kai now so they can eat whenever they want to.”*

4.5.2 Two-year-olds as priority learners

Two-year-olds were seen as ‘priority learners’ who needed to be thought of holistically within the larger group but also required their own set of learning goals due to their age and length of time at the kindergarten. Such views were underlined by quotes such as the following: *“We are always aware of the two-year-olds as they’re one of our priority learners.”* It was recognised that all children were on their own individual learning journeys, and that teachers purposefully planned for this age group,

“One of our areas of priority learners we articulate is two-year-olds so, we’ve always got that - those priority learners in the back of our mind whenever we do planning. So if we’re planning for the group as the whole, then we will look at the priority learners and think well, how does this work for them.

The teachers reported using observational data and collegial conversations about children to inform next steps in planning and teaching, as well as to identify learner strengths and challenges, *“I would say that assessment in early childhood is a credit-based assessment, not deficit. But when you’re thinking about two-year-olds it’s easy to start thinking deficit.”*

Teachers showed clear links between what the child’s interest was, documentation of the learning and future goal setting until they felt that the child had met their goal, *“Through the process as well and followed through until obviously there was success [with the goal].”*

4.5.3 Making curriculum links in planning and assessment

Teachers included their use of *Te Whāriki* when they were discussing aspects of their planning that they felt had been successful with two-year-olds. Teachers predominantly discussed the curriculum goal of Belonging, making statements such as: *“they are all in their own way developing a sense of belonging.”* Not only did teachers feel that it was important that the two-year-olds had a sense of belonging, but an important aspect was that parents and whānau had a strong sense of belonging also: *“...whānau is feeling that they belong in this place”*.

Links were made to the importance of using *Te Whāriki* to guide children’s learning pathways and that the teachers valued the information in *Te Whāriki* that specifically supported the learning of younger children. One teacher discussed the importance of being familiar with *Te Whāriki*, noting:

“Well the thing I’ve added to my practice is familiarising myself with more, that part of Te Whāriki. So when you’re planning for a two-year-old it’s actually really important that part of Te Whāriki to give you some guidance.”

Other teachers described the influence *Te Whāriki* had on their planning by discussing that the learning outcomes provided in the document strongly influenced their planning processes, *“The new Te Whāriki is quite well laid out for the different age groups so we can look at the learning outcomes for the toddlers.”* However, although the teachers highlighted the importance of learning outcomes when considering planning for learning, there was no direct reference to learning outcomes in their discussions about assessment for learning.

4.6 Professional Learning

When asked to describe their factors that had supported their practices in relation to two-year-olds, professional learning and reading were identified as significant. Teachers reported that key aspects of their professional learning were driven from self-interest and inquiry/appraisal goals and professional learning prompted them to think or be reflective about their own perspectives and practices: *“just reflecting, lots of reflection.”* Teachers reported that professional learning that contributed the most to a change in practice and outcomes for two-year-olds included the opportunity to reflect on their own practice and ways of being and having the opportunity to engage in whole team learning.

“It’s really important that we share our knowledge and also put ourselves out there I think. And also that’s quite relevant to two-year-olds isn’t it because if we’re always learning we understand what it’s like to be a learner and how scary it can be as well.”

Professional learning was identified by the teachers as a key area for effective change in practice. Teachers explained how their shifts in practice and on-going learning, particularly about developmental understandings, planning and assessment, supports learning for two-year-olds. As one teacher said, *“Professional development and research is really important to us. If an issue comes up we’ll do some research and share the answers. I think we never accept that we know the answers.”*

4.7 Summary

This chapter has outlined the findings of the present study, addressing the key research questions:

- What are teachers beliefs about meeting the needs of two-year-olds in kindergarten?

- How do kindergarten teachers plan and assess for two-year-olds?
- How does teachers professional knowledge inform their practice with two-year-olds?

In general the participating teachers strongly advocated for ensuring that their teaching environments were inclusive of two-year-olds, as well as affirming the place of two-year-olds attending kindergarten. Teachers saw two-year-olds through a positive lens and were knowledgeable about the characteristics and developmental needs of this age group.

Concerns around environment and the safety of two-year-olds influenced teachers planning and assessment practice, as did their knowledge of child development. Additionally, teachers' practices were influenced by their relationships with the two-year-olds as well as their collegial relationships and relationships with parents and whānau.

Learning for two-year-olds was supported by the teachers' professional knowledge of the early childhood curriculum and their on-going commitment to professional learning that in turn supported their own work as teachers. The following chapter discusses the significance of these findings in relation to the current literature related to two-year-olds in a New Zealand kindergarten setting.

Chapter Five: Discussion

The aim of this research was to explore how kindergarten teachers utilise planning and assessment practices to support the learning of two-year-olds in New Zealand kindergarten settings. This chapter provides an analysis of the findings, highlighting both significance and implications in light of the existing literature. Findings from this study provide important insights into how planning and assessment practices can support two-year-olds in kindergartens; how teachers' beliefs and child development knowledge support the needs of two-year-olds; how teachers plan and assess for learning for two-year-olds and the ways in which teachers' professional knowledge informs their teaching practice with two-year-olds. As the participating kindergartens were selected as being services demonstrating positive practices the discussion will highlight the strengths evident in teachers' practices, as well as the challenges experienced, and the ways in which teachers were responding.

This study involved 17 teachers from three different kindergartens who participated in focus groups interviews that explored planning and assessment practices that supported two-year-olds in their individual settings. Thematic analysis was used to capture, analyse and report key themes across the data collected. The chapter begins by discussing the findings that relate to teachers' knowledge of child development and how that guides their teaching practice. The concept of tuakana teina is discussed and following this, environments for two-year-olds and how this supports their learning and development are described. Findings suggest that the safety and protection of two-year-olds was a significant consideration in the way teachers planned and assessed for learning. The chapter then discusses aspects of teachers' practice such as how their levels of responsiveness contributes to learning. The importance of relationships, reflective practice and socio-cultural understandings are also discussed in how these areas support planning and assessment, with a final discussion about the way in which

teachers' professional knowledge informs their practice with two-year-olds. In concluding the chapter, the strengths and limitations of the study are considered along with directions for further research.

5.1 Teachers' Practice is Guided by Knowledge of Child Development

The present study found that teachers' knowledge of child development and positive view of the specific characteristics of this age group appear to underpin how two-year-olds are supported within the kindergarten settings. Child development research (Fleer & Robbins, 2014; Raikes & Edwards, 2009; Stonehouse, 1988) describe the sequence of development that most children progress through. From large to small motor coordination, from simple ideas to complex thinking, from one-word utterances to lengthy sentences, from scribbles to representational drawings, teachers must understand typical patterns of development, with this learning and development being closely observed and planned for with the goal of supporting individual development and learning. Teachers repeatedly affirmed the place of two-year-olds in kindergarten and this was evident in that their pedagogical knowledge of how children learn and understanding key developmental stages supported their approach to planning and assessment. Thus, findings suggest that effective practice is supported when teachers are able to articulate links between children's development and learning and apply their understanding of the unique characteristics of two-year-olds to identify appropriate teaching supports.

Data from this study also suggests that knowledge of child development supported teachers' expectations and practices with this age group with teachers discussing the differences between two-year-olds and older children while also recognising that there were differences between a new two-year-old and a two-year-old that was about to turn three. According to

Levine and Munsch (2014) this developmental knowledge is important because it leads to a greater awareness of the needs of this age group to assist with planning and assessment practices. *Te Whāriki* describes how children of this age need to be supported by adults that understand them and “...have knowledge and understanding of the holistic way in which children learn and develop” (p. 19). Supporting this is White and Redder’s (2019) research that indicates professional knowledge gives teachers opportunities to engage in authentic interactions through understanding the multiple opportunities that exist for two-year-olds.

Alongside the knowledge teachers had about two-year-olds, teachers were also strong advocates for the inclusion of two-year-olds within a kindergarten programme. Although studies such as Duncan et al., (2006) found some resistance to the idea of two-year-olds in kindergarten, the teachers in this study were predominantly positive about the experience. They reported negative positions expressed by other teachers but themselves saw having two-year-olds as a positive and valuable opportunity. The opinion noted by the teachers maybe because of their varied teaching backgrounds and more experience of teaching two-year-olds. The teachers had also sought out ways to further increase their understanding about this age group, which may be significant in shaping their positive views.

One of the positive factors for inclusion identified by the teachers in this study was not only the teachers’ knowledge of the characteristics and development of two-year-olds but also their perception of two-year-olds as competent and confident learners. *Te Whāriki* positions two-year-olds as learners “who want to learn” (p. 19) which is supported by findings from a TLRI project (White & Redder, 2019) with two-year-olds in early childhood settings. It was noted by White and Redder that this age group were extremely capable and competent in their relationships with teachers and peers when given the opportunity to be seen and heard.

As a result of these findings the authors “...challenge teachers to view 2-year-olds as unique personalities and fully contributing members of the preschool learning community” (White & Redder, 2019, p. 2), a position reflected in each of the three kindergartens involved in this study.

Rather than seeing two-year-olds within a deficit orientation, focusing on what they cannot yet do, the teachers in the current study viewed children as already having knowledge and being ready to learn. In particular the opportunity for peer learning and the development of empathy and social connection between children of different ages was highly valued. Such findings affirm Cheeseman, Sumison and Press’s (2015) position and the position of *Te Whāriki* that children are competent and capable learners from birth. As explained in the next section, supporting an inclusive experience for two-year-olds encompassed the aspect of tuakana teina as a natural and integrated way of fostering learning for all children.

5.2 Tuakana Teina Relationships Seen as a Strength of Supporting Mixed Age Grouping in Kindergarten

A unique finding from this study was that the opportunity for tuakana teina relationships, when older children support younger children in their learning, was highly valued by the teachers. They saw rich opportunities when younger children were included in kindergarten, both in relation to the learning and exploration of younger children, and for older children to develop their leadership, empathy and care skills. Teachers actively fostered these peer learning moments and saw them as valuable for all children involved. This is recognised in the literature (Dalli & Lawrence, 2007; Duncan et al., 2006) that peer learning and the concept of tuakana teina is supported and valued in mixed age group settings and was seen as an advantage for the two-year-olds.

Teachers affirmed that the mixed age grouping within the kindergartens enriched learning experiences, with children assuming responsibility for one another and adopting social roles in the group relying on the cooperation of others. Such peer support was embraced and encouraged in the kindergartens as the teachers placed value on these types of relationships and the learning opportunities it offered all children. Such practices are affirmed in White and Redder's (2019) TLRI study where they observed that older children would support younger children to solve problems, especially when there wasn't a teacher directly present, noting that "these teachers found benefits when opportunities were made available for older peers to take on a leadership role with 2-year-olds—as pedagogue, rangatira, or tuakana as well as teina" (p. 14).

5.3 Teachers Seek to Provide Empowering Environments for Two-Year-Olds

The findings emphasised the importance that teachers placed on providing outdoor spaces for two-year-olds that promoted sustained collaborative play that was safe, but also challenging. Teachers placed importance on empowering two-year-olds in the physical environment and saw this as a step towards two-year-olds developing a positive sense of self and independence. Raikes and Edwards' (2009) work supports the intrinsic desire of two-year-olds to be independent as a natural progression in their development. Furthermore *Te Whāriki*'s principle of empowerment positions two-year-olds as having agency to create and act on their own ideas and what interests them.

This developing sense of self and independence was highlighted by teachers references to two-year-olds wanting to make their own choices and increasing motivation to do things for themselves. The desire to challenge themselves physically, socially and cognitively is a key characteristic for this age (Levine & Munsch, 2014; Smith, 1998). Raikes and Edwards

(2009) and *Te Whāriki* affirm that the role of the teacher is to provide environments that support their growing connections with people, places and things, as well as their interests, mobility and independence. The importance of safe-risk-taking (Little & Sweller, 2015; Sandseter, 2007) was a common thread in the participant's comments, with teachers expressing the importance of providing environments that are challenging, but not hazardous. For the teachers in the current study the types of risk-taking behaviour shown by two-year-olds included children wanting to experiment with height (jumping off things), experimenting with speed and dexterity and learning to use equipment such as sandpit and carpentry tools appropriately (Ministry of Education, 2017). Although the teachers in the present study did identify some concerns related to safety for two-year-olds, they also actively described how they planned to provide challenge while mitigating risk. *Te Whāriki* supports not only the importance of planning for children's physical well-being but also acknowledges that safe risk-taking play is an important tool in fostering child development and should also be planned for accordingly.

In this current study teachers acknowledged their need to protect children's physical well-being but also acknowledged that risk-taking and allowing children to extend themselves physically was an important task of child development at this age. Teachers made some reference to the ages and stages of development and spent time actively observing, listening and watching their two-year-olds at play before planning to support them in more risky or challenging play experiences. In accordance with the present study, Sandseter (2007) and White and Mika (2013) also found that teachers' knowledge of how to support safe risk-taking can have significant benefits for children's learning by ensuring safe and supported opportunities for learning in physically and emotionally stimulating and challenging environments. Sandseter suggests that children see risky play as 'exciting' but that adults are

more likely to perceive it as ‘risky’ and potentially harmful. However the teachers in this study recognised the need to balance the two perceptions in order to meet the interests and needs of the children. Therefore the teachers’ attitudes towards learning and their belief that two-year-olds are capable and competent learners meant that two-year-olds were kept safe without restricting their play. These connections between the identified areas of concern around safety and children are supported by Little and Sweller’s (2015) work on the inherent nature of outdoor play as having an element of risk. As with the teachers in this present study, Little and Sweller identified risk taking as an integral part of children’s play and that this not only leads to mastering a wide range of fundamental motor skills, but that the properties of the environment also dictate how children will behave within that environment and use the different elements.

5.4 Teachers Responsiveness Contributes to Supporting Learning for Two-Year-Olds

Findings from this study suggest that teachers in-depth knowledge of how young children learn enabled the teachers to recognise the importance of a primary caregiver, or key teacher approach, and how this approach supports the specific needs of two-year-olds, particularly as they transition into the setting. The allocation of a teacher with a primary care responsibility for each individual child has been recognised in the literature as being a strong precursor for helping children to settle into an early childhood centre and to build secure attachments with a key figure other than their parent. Consistent with the present study, literature suggests that for children to become confident in themselves and as learners, they need to have one to one responsive interaction with a key adult who is available to meet their social and emotional needs (Dalli, et al., 2011a; Karen, 1998; MoE, 1996). *Te Whāriki* describes this as having adults who know and understand toddlers and with sensitive, responsive and expressive caregiving are able to support this age group using appropriate pedagogical approaches.

Dalli et al., (2011b) advocated for primary caregiving approaches as a key strategy to achieve attentive relationships and provide the secure base from which children then felt safe to explore. Primary caregiving reduces the stress for both a child and their parents through offering security and continuity in these key relationships. In this present study the positive implications of having a primary caregiving system or key teacher approach were recognised by the teachers, though heralding a significant shift from traditional kindergarten practice and drawing from more typical infant/toddler pedagogy. This position affirms Dalli's (2014) advocacy that individualised care is an important underpinning structure to support learning. Teachers identified a range of strategies within this approach to support children's learning, in particular the structure of the daily routine. Changes were made so that key teachers could work closely and consistently with the same children to not only build secure, strong relationships, but also so that learning and care were integrated. This meant that the routines and experiences were interrelated and central to the learning and teaching of two-year-olds.

5.5 Relationships Between Teachers, Children, Parents and Whānau are an Important and Valued Aspect of Assessment for Learning

In order for planning and assessment to be most effective teachers need to be aware of not only the developmental stages of child development but also how planning for learning can support learning for children (Doherty & Hughes, 2014; Niles, 2016). The Education Review Office's 2015 review of provisions for infants and toddlers found that teachers of toddlers in a highly responsive curriculum focused on factors beyond behaviour and routines. This included responsive and reciprocal relationships between children and teachers and between older and younger children. Such practices were evident in the present study with teachers affirming how they valued relationships and interactions with the children and whānau and

the importance of understanding parent and whānau aspirations for the child in order to inform the curriculum priorities and daily routines.

Good quality planning and assessment practice, as identified by ERO (2015), incorporates the multiple perspectives of the teacher, child, parents and whānau. Inclusive assessment practice recognises the visibility of the child and parent voice in assessment for learning, with children having access to assessment information as being equally important (ERO, 2007).

The teachers in this study identified ways in which they could capture the parent's voice and sought multiple ways to do this with the teachers identifying that planning for learning was more authentic when multiple methods of capturing learning was used. One of the kindergartens used a model where children were videoed during play and the teachers sought out feedback from other teachers and parents before any documented assessment took place.

Mostly notably was how they discussed using video to capture learning. This enabled them to stand back and observe the interests of the child, which then provided more information from which they could document learning. Teachers discussed how this method also provided more opportunity to engage parents and whānau with one teacher commenting that it tripled the communication from parents and whānau. Also noted by the teachers was that their video observations of the children's work took on a deeper meaning as the teachers could view what had been captured and offered opportunity to include multiple voices before the assessment was written about. This form of capturing the learning came about through recognising that the triangulation of communication between teachers, parents and whānau was becoming ever increasingly more challenging as a large percentage of the teaching team worked part time, and parents had limited time available to engage in conversations with teachers. Mitchell (2006) reiterates that one of the challenges for teachers is balancing a high workload to find one to one time to converse with parents and whānau, yet it is a critical

component in supporting responsive planning and assessment for two-year-olds and seems likely to remain an ongoing tension.

5.6 Teachers Work Collaboratively to Support Two-Year-Olds

The teachers discussed their concerns about having the staff and resources to support two-year-olds due to their particular needs and the additional level of care required for routines such as toileting and sleeping. However, the teachers did not see these additional responsibilities as a barrier to teaching and learning, but more as an opportunity to work collaboratively to reflect on the teaching practices that two-year-olds needed in order to thrive in the kindergarten environment and to identify team responses. These concerns were addressed by reflecting on what could be changed within the routine of the day and identifying how teachers could work together in ways that supported a primary caregiver approach. Literature suggests that where care routines are viewed as rich learning opportunities, and the interactive nature of child–adult interactions are encouraged, this supports the child to be an active participant in their own learning (Cooper, Hedges & Dixon, 2014), but requires teachers to function as a skilful team with flexibility and cohesion, which is challenging in the context of high teacher: child ratios.

Although some participants felt that some of the resources and the traditional layout of the buildings did not best suit the needs of the two-year-olds, through robust observation and reflection the environments and resources were adapted over time to meet the needs of two-year-olds. This insight suggests that one of the critical factors in supporting effective assessment and planning for two-year-olds was the shared team commitment to address additional challenges and changes in positive and proactive ways.

5.7 Teachers Plan and Assess within a Socio-Cultural Approach

Te *Whāriki* affirms the value of the interactions children have with peoples, places and things through their play, with interactions and social behaviour being influenced by participation in ever-widening social ecologies. *Te Whāriki* describes a socio-cultural approach where children's learning and development are seen to be influenced by three interrelated ideas:

- Genetic and developmental factors enable and constrain learning
- Thinking and language derive from social life
- Individual and social action and behaviour are influenced by participation in the child's culture

Lawrence and Gallagher (2015), raise the notion that how children learn within their social and cultural settings is an area that needs to be well understood by teachers to support the learning of young children. The data from this study suggests that involvement from parents and whānau was valued and encouraged by the teachers and was evident in the assessment practice of teachers in this study where they included the parent's viewpoint when possible. All three kindergartens in the study had systems in place to sure that they had opportunities to have daily interactions with parents and whānau. These findings are supported by Mitchell (2006) who indicates the importance of including parents and whānau in assessment in order to share "...understanding and knowledge of children from different viewpoints..." (p. 2) which supports the child's ongoing learning and success. Effective planning and assessment is strongly grounded in family, community and culture, therefore teachers must ensure opportunities where parent's and whānau can contribute to children's learning.

As *Te Whāriki* is strongly guided by socio-cultural perspectives, there is an expectation that the curriculum in each early childhood service will respond to the social and cultural values and beliefs of its community of children, whānau and teachers. Therefore the teachers

determined their own curriculum priorities with emphasis on the learning that was valued by teachers, parents and whānau. The term “culture” was discussed by the teachers as referring to all the values, understandings, and practices associated with all of the contexts children experience. The teachers identified that children’s learning and development is shaped by cultural expectations, with their learning journey influenced by the social and cultural context of the centre. These findings are consistent with understanding the child and their cultural context and aligns with *Te Whāriki* where sociocultural theories are at the heart of the aspiration statement, principles, strands, and learning outcomes.

5.8 More Understanding Still Needed of Planning and Assessment Processes that Support Learning

The data from the present study suggests that the teachers’ practices are woven with a balance of professional values, technical theories, and personal knowledge. Teachers made tentative links throughout the interviews to the principles that guide their planning and assessment processes and practices, with a focus on planning for the environment to manage risk, supporting transition, and supporting learning by fostering tuakana teina. Though the study had hoped to generate some further understanding of specific assessment practices, this detail was not forthcoming. There was limited description of the way in which teachers used assessment information to guide future learning moments and teaching approaches. Cameron (2018) has identified that there are challenges in relation to assessment including how assessment information is used by teachers to inform curriculum and planning. In particular she notes that reasons why assessment is not clearly articulated is that although assessment is a core component of teaching, teachers mainly talk about assessment as it occurs in the moment, rather than being able to articulate formal planning processes (Cameron, 2018).

5.9 Professional Learning and Development Supports Teachers' Assessment Knowledge

When teachers in the current study were asked about professional learning and development (PLD) it was evident from the majority of answers that (PLD) has an important role to play in supporting the learning and work of teachers. It was clear that teachers valued PLD opportunities and sought to further their professional knowledge around two-year-olds and assessment for learning. These results build on Denree's (2018) work which acknowledges that professional learning enhances and challenges professional practice. Strong pedagogical knowledge, as identified by both ERO (2007) and Lawrence and Gallagher (2015), is an essential tool for supporting learning and impacts greatly on planning and assessment practices. ERO's (2007, 2015) reports found that teachers engagement in professional development impacted on their planning and assessment practices, as well as on their understanding.

However the teachers in the current study noted that accessing PLD presented teachers with challenges at times. Most of the teachers accessed their own learning through research documents or attending conferences that they recognised as being important to support their own work and learning. Teachers identified that there was little opportunity to access external PLD, especially to targeted topics such as working with two-year-old children, so they were creative about how they accessed PLD in their own time. The data from the present study contributes to a clearer understanding of how consistent and relevant PLD can contribute to strong practice and pedagogical knowledge. This is supported by Denree (2018) and Thomason and La Paro (2012) whose work highlights the connection between consistent and accessible PLD and shifts in practice.

Teachers were resourceful and self-motivated to adapt their practice when kindergarten rolls started to change and led to the greater inclusion of two-year-olds. Teachers discussed that there were no PLD opportunities to support this change but recognised the need to adapt and change their practice to meet the developmental and curriculum needs of two-year-olds, so they investigated ways in which they could achieve this knowledge. This suggests that to be effective, teachers need access to consistent and targeted PLD with focus on building pedagogical content knowledge (Denree, 2018). This aligns with similar findings in the TLRI report by Duncan et al., (2006) who noted that teachers were keen to participate in provided PLD opportunities to support their pedagogical knowledge of working with under threes.

Several examples from the interviews illustrated the critical part PLD played in shaping and changing professional teaching practice. The teachers all confirmed that PLD focused on the learning and development for two-year-olds was beneficial when all of the team attended the learning or when they were all actively seeking information on the same pathway. Therefore it is important, in order to further support and strengthen teachers' learning, that teachers have accessible and funded professional learning opportunities to continue to learn about current theory, professional practice and research and understand how these relate to the children, families and communities they work with.

5.10 Limitations and Delimitations

The limitations and delimitations need to be considered when interpreting the results of this study. The intention of this small-scale study was to explore and describe the practice of teachers working with two-year-olds in the participating kindergartens only and the results are limited to the teachers and each of the kindergartens that were part of this study.

Case studies have the potential to gather rich, complex and in-depth data through having multiple sources of data collection. A limitation therefore of this study was that there was only one method of data collection, which was through the use of focus group interviews. Therefore, to explore these findings further, other case study methods such as observations of teachers' professional practice could be analysed alongside teachers' self-report.

A second limitation in this study is that teachers were given the option of using artefacts (children's profile books or learning journals) as a tool to illustrate their planning and assessment practices during the interview discussions. These were not viewed or critiqued in any way by the researcher. However, if the information from the profile books had been used as part of the data gathering for the study, this would have offered an additional lens on the assessment and planning practices, as well as the opportunity to consider the alignment between reported and actual practice.

Thirdly, and a limitation that was unexpected, was that one of the kindergartens selected for the study also had a small number of under two-year-olds attending, whereas the other two did not. This may have potentially affected the findings, but the researcher was careful to maintain the study's focal point which was concerned with questioning and discussion relating to two-year-olds only.

A delimitation of this study was the selection of kindergartens to participate in the study. The aim of selection was to include kindergartens who had strong professional practice in relation to working with two-year-olds. The categories for selection included kindergartens that were classified in their ERO reports as 'very well placed' or 'well placed'. Due to the size of the association and the large number of kindergartens who fitted into these categories, not all

kindergartens could participate, and using purposive sampling methods meant that there was never the potential for other kindergartens to be selected, nor was there an option for kindergartens to express their interest.

Another delimitation is that this study explores a topic where little empirical research has been undertaken and not much is known. Although two-year-olds attending kindergarten is not a recent occurrence, there have been few research projects that have investigated how learning is supported within this specific age group. While planning and assessment practices can sometimes be a contentious topic, it is important to keep exploring this area, especially in relation to younger learners.

5.11 Implications for Practice, Policy and Further Research

Emerging themes provide insight into teacher thinking and suggest some implications in relation to how teachers perceive the place of two-year-olds in kindergartens, what they do to support learning, and how their professional knowledge supports learning for two-year-olds in New Zealand kindergarten contexts, the key focus areas established by the aims of the present study.

A promising finding was the positive perspectives teachers had of two-year-olds in their kindergarten settings with the present study identifying and highlighting effective practices that enabled teachers to support two-year-olds within a kindergarten environment. However, it appears some teachers working in kindergartens still struggle with how to effectively support two-year-olds through planning and assessment practices. As identified by Duncan, Dalli and Lawrence (2007) issues such as the structure of the kindergarten; teachers'

professional knowledge; and teacher attitudes towards responding to the specific needs of two-year-olds remain significant.

The findings suggest that teachers' knowledge of child development and positive view of characteristics specific to two-year-olds was an indicator for supportive teaching practice and appear to underpin how two-year-olds are supported in planning and assessment practices within the kindergartens in this study. Teachers described an array of teaching practices that support learning for two-year-olds, with professional practice strongly influenced by teachers' prior experience and pedagogical beliefs. Teachers articulated their planning and assessment practices from a socio-cultural perspective which was evident in the emphasis they placed on relationships in the planning process and the use of narrative approaches supporting their assessment documentation. Many of the factors noted in the present study have been associated with overall quality practices for two-year-olds in existing literature which include reciprocal and responsive relationships, knowledge of two-year-olds and planning approaches that identify specific teaching strategies that support this age group (ERO, 2007, 2015).

The tension between providing challenge for children and maintaining their safety was discussed as a concern when supporting two-year-olds, especially in an environment that may be designed predominantly for older children. To support effective practice teachers may need to continue to move beyond a view of protecting physical safety. Structural factors such as lower ratios as well as a strong understanding of child development and a belief of two-year-olds as competent and confident learners can support teachers' confidence thus allowing for safe risk taking and a range of challenges.

The knowledge, skills, and practices of early childhood educators are important factors in determining and supporting learning outcomes for two-year-olds. Identified in this study was that PLD was an important vehicle for building this knowledge and professional practice but teachers had to be both self-directed and creative in ways that they could access the professional learning in order to achieve this. Therefore, because PLD is essential for changing professional practice, it is important, as argued by Sheridan, Pope-Edwards, Marvin and Knoche (2009), that teachers need to be able to easily source and access relevant PLD that supports pedagogical change.

Teacher learning is a continuous process that begins with initial teacher education and continues in the form of PLD throughout a teaching career (Kunter, Baumert, & Koller, 2007). Ongoing PLD is an important measure to support ongoing pedagogical knowledge. In line with the PLD literature (Denree, 2018; Kunter et al., 2007; Sheridan et al., 2009) collective/group PLD would appear to be of value, so that teams share the same knowledge and expectations, and are able to be consistent in their approach. Findings from this study indicate that professional knowledge of learning and development for two-year-olds was an indicator for supportive teaching practice for two-year-olds in kindergarten. Further research into the way in which PLD can change professional practice and support learning and development for children would be of benefit for the early childhood sector.

Furthermore, investigation into how child, parent and whānau voice is included in assessment and planning processes is of further interest, to discover effective means to capture multiple perspectives, a persistent issue in assessment. Also, it would be useful to explore planning and assessment practices for two-year-olds through Te Ao Māori, or a Māori worldview, and how these approaches can improve learning outcomes for Māori children in kindergarten.

The curriculum strands of Belonging and Well-being were a dominant feature in the interview discussion in the present study. It is however important to note that ERO (2015) acknowledges that teachers need to move beyond the curriculum goals of Belonging and Well-being and ensure that all strands are supported with both breadth and depth, even for young children. Planning to support Exploration, Communication and Contribution are equally important for two-year-olds but may be neglected due to the differing developmental and physical care needs of two-year-olds and teachers' pedagogical understandings on how to effectively plan for learning for this age group. If teachers only focus on Belonging and Well-being this potentially positions the two-year-old as a learner waiting to learn, not as a learner from birth (Cheeseman, Sumison & Press, 2015). In future studies, focus could be applied to how the other strands are articulated and planned for in relation to supporting the learning of two-year-olds.

An analysis of teachers documentation of children's learning could also be a direction for future research. This was not an area explored in the current study as the documentation of children's learning was only used as a tool to elicit discussion on planning and assessment. However, if the information from the profile books had been used as part of the data gathering for the study, it might have further supported understanding of planning and assessment practices and given insight into whether what was written about assessment for learning supported their teaching practice with children.

The findings suggest that teachers in this study advocate for and support two-year-olds effectively within kindergarten settings. However as some of the findings suggest variability in how teachers utilise planning and assessment to support two-year-olds in kindergarten

future research could investigate any disparities between what teachers say that they do versus observed or documented practice.

5.12 Conclusion

This piece of research aimed to explore ways in which teachers in a New Zealand kindergarten context used planning and assessment to support learning for two-year-olds. Based on a qualitative analysis of discussion with seventeen teachers within three focus group interviews it can be concluded that several factors support their planning and assessment practices and need to be considered when working with two-year-olds. Teachers held strong beliefs underpinned by professional knowledge about meeting the needs of two-year-olds. Teachers' developmental knowledge for this age group crept into how teachers viewed planning and assessment for this age group, highlighted in discussions about planning for the environment. Teachers balanced developmental and socio-cultural perspectives in the way in which they observed learning for two-year-olds.

Teachers in this study were working hard at supporting the needs of two-year-olds, particularly from a developmental and caregiving perspective. Many of the identified processes, including acknowledging the abilities and capabilities of two-year-olds, are increasingly recognised as practices that nurture and promote learning and development (ERO, 2015). Relationships with children were valued by the teachers and this appeared to underpin a lot of their professional practice. Teachers prioritised getting to know children and families and were using their knowledge of children to plan future learning pathways.

The teachers engaged in making professional decisions and collaborative planning to help ensure that the learning and development of two-year-olds was supported by empowering

children. Time to communicate with each other was valued by the teachers and during these times engaged in a number of professional, reflective conversations as they collectively negotiated assessment meanings. Teachers need to be intentional in their planning and assessment practices in order for two-year-olds to have rich and meaningful learning experiences. Time is needed for teachers to be able to work collaboratively, discuss, plan and implement strategies to support each child individually. Teachers also need the time to build and create opportunities to communicate with parents and whānau.

While the teachers in this study did highlight some professional practices when working with two-year-olds, and clearly had professional skills in this area, there was still limited information from the discussions that highlighted their processes and practices when it came to planning and assessment for two-year-olds in kindergarten. Given the importance that planning and assessment has on learning and development, there is a need to extend teachers' practices, processes and knowledge to align with the principles of *Te Whāriki* and what the research indicates as best practice.

Teachers' beliefs about two-year-olds and their willingness to support this age group through extending their own knowledge was highlighted in their articulation of accessing PLD. Teachers identified that professional learning and development opportunities were a key driver for change and actively sought answers to their questions on how to support the learning of two-year-olds in their kindergarten environments. Teachers were curious and questioned how they could better support this age group through exploring research and accessing professional learning opportunities to better support their knowledge base and understanding. Adequate funding to ensure quality ratios and equipment were cited as ways to improve learning outcomes. Teachers worked hard on balancing the needs of two-year-

olds with the remainder of the kindergarten group, drawing on collective knowledge and experience.

This study identified teachers' perspectives of, and strategies used, in regard to planning and assessment that support learning for two-year-olds. It is therefore important that teachers are aware of how their perspectives about two-year-olds may influence what learning they notice and support. In order for assessment to be meaningful teachers need to understand the process involved, and the theory behind doing what they do. Research on assessment practices has emphasised that teachers must have a strong understanding of child development, knowledge of different methods of assessment and how to use this information to plan for learning (Dalli, 2014). Teachers in this study were on a journey of exploring the complexities of supporting two-year-olds in kindergarten and sourcing ways to make planning and assessment work within their individual contexts. Teachers play a critical role in understanding planning and assessment and how this supports the learning of two-year-olds. Added to this is the complexities of two-year-olds being in the mix with older children in traditional kindergarten settings. Research, such as the present study is vital to uncovering and describing what teachers do to achieve important outcomes for two-year-olds.

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Appendices

Appendix One: Information Letter to Organisation



Information letter for Organisation

Kia ora

My name is Jennifer McBride and I am currently completing a Master of Education (Early Years) at Massey University. I have been an early childhood educator for many years, and have been part of, and a witness to, the changes that have occurred in kindergarten. One of the major shifts that has occurred is the increasing participation of two-year old's in kindergarten environments. The literature suggests that two-year old's have a unique place in the kindergarten setting and unique characteristics in regards to teaching and learning. This particular area of interest has led to my undertaking of research in relation to planning and assessment methods that promote quality outcomes for two-year old's within kindergarten settings.

My research project will investigate the question 'How do kindergarten teachers utilise planning and assessment practices to support quality outcomes for 2-year old's in New Zealand kindergarten settings?'. The research will use a case-study approach to collect data through; focus group interviews with selected kindergartens; and inviting teachers who participate in the focus group interviews to share planning and assessment artefacts that illustrate current practices for supporting two-year olds.

I am asking your permission to undertake my research within your organisation. If you agree to participate, I would like to ask that you nominate three kindergarten settings that are seen to provide quality practice in relation to assessment and planning for two-year olds. Following permission and identification of suitable settings, I will invite each of these teaching teams to participate in a focus group face to face interview, which should take no longer than one hour. The interview will focus on their beliefs, understandings and practices in relation to planning and assessment for two-year old's in kindergarten.

Each teaching team will also be asked to share artefacts that support/demonstrate planning and assessment within their kindergarten. This anonymised assessment documentation will be discussed during the interview and shared as part of the data collection process. Such documentation may include evidence of planning information, related assessment data and evaluation materials, as they pertain to two-year olds in the setting. In sharing such documentation I would ask teachers that it be anonymised to protect children's and teachers' identities. Focus group interview will happen at a time and place that is mutually convenient and will be audio recorded to enable an accurate record of the discussion. The audio recording will later be transcribed, before being given to the interviewees for checking and approval prior to it being used in the data analysis. Notes may also be taken by the researcher during the interview process. With consent, the researcher will retain the anonymised assessment artefacts for the purpose of illustrating key findings. Assessment artefacts will not be analysed in anyway.

All the data gathered for this study will be kept in a secure and confidential manner. The data and subsequent findings will only be used for the purposes of this Master's research and any publications or presentations which result from it. Confidentiality and anonymity will be

Appendix Two: Organisation Consent Form



How do kindergarten teachers utilise planning and assessment practices to support positive outcomes for 2 year old's in New Zealand kindergarten settings.

Organisation Consent Form

We have read, or have had read to us in our first language, and we understand the Information Sheet attached as Appendix A. We have had the details of the study explained to us, any questions have been answered to our satisfaction, and we understand that we can ask further questions at any time. As an organisation we have been given sufficient time to consider consenting to our teachers being involved in this study. We understand that participation is voluntary and that we may withdraw from the study at any time.

1. We agree/do not agree to the interviews being sound recorded.
2. We agree/do not agree to notes being taken during the interviews.
3. We agree/do not agree to participate in this study under the conditions set out in the Information Sheet.
4. We agree/do not agree that we have an obligation to respect the privacy of the participants of the study.
5. I agree/do not agree that all information provided will be kept confidential to the extent permitted by law, and the names of our organisation and all people in the study will be kept confidential by the researcher.
6. We agree/do not agree to the researcher approaching kindergartens under our umbrella organisation to participate in this study as set out in the conditions in the Information Sheet.

Declaration by Association:

I _____ hereby consent to take part in this study.
(print full name)

Signature: _____ Date: _____

Position held within organisation: _____

Institute of Education
Cnr Alberry Drive & Collinson Road, Private Bag 11222, Palmerston North 4442, New Zealand
T 06 356 8699 www.massey.ac.nz

Appendix Three: Information Letter for Individual Participants



Information letter for Individual Participants

Kia ora

My name is Jennifer McBride and I am currently completing a Master of Education (Early Years) at Massey University. I have been an early childhood educator for many years, and have been part of, and a witness to, the changes that have occurred in kindergarten. One of the major shifts that has occurred is the increasing participation of two-year old's in kindergarten environments. The literature suggests that two-year old's have a unique place in the kindergarten setting and unique characteristics in regards to teaching and learning. This particular area of interest has led to my undertaking of research in relation to planning and assessment methods that promote quality outcomes for two-year old's within kindergarten settings.

My research project will investigate the question 'How do kindergarten teachers utilise planning and assessment practices to support quality outcomes for 2-year old's in New Zealand kindergarten settings?'. The research will use a case-study approach to collect data through; focus group interviews with selected kindergartens; and inviting teachers who participate in the focus group interviews to share planning and assessment artefacts that illustrate current practices for supporting two-year olds.

Your teaching team has been selected to participate in a focus group, face to face interview, which should take no longer than one hour. The interview will focus on your beliefs, understandings and practices in relation to planning and assessment for two-year old's in kindergarten.

As part of this research you are invited to share artefacts that support/demonstrate planning and assessment within your kindergarten. This anonymised assessment documentation will be discussed during the interview and shared as part of the data collection process. Such documentation may include evidence of planning information, related assessment data and evaluation materials, as they pertain to two-year olds in your setting. Any information that is to be shared needs to have any identifying features such as names and photographs, removed in order to protect the identity of children and participants.

The focus group interview will happen at a time and place that is mutually convenient and will be audio recorded to enable an accurate record of the discussion. The audio recording will later be transcribed, before being given to the interviewees for checking and approval prior to it being used in the data analysis. Notes may also be taken by the researcher during the interview process. With consent, the researcher will retain the anonymised assessment artefacts for the purpose of illustrating key findings. Assessment artefacts will not be analysed in anyway.

All the data gathered for this study will be kept in a secure and confidential manner. The data and subsequent findings will only be used for the purposes of this Master's research and any publications or presentations which result from it. Confidentiality and anonymity will be maintained at all times and no identifying characteristics of the interviewees or the

Appendix Four: Participant Consent Form



How do kindergarten teachers utilise planning and assessment practices to support positive outcomes for 2 year old's in New Zealand kindergarten settings.

Participant Consent Form

I have read, or have had read to me in my first language, and understand the Information Sheet attached. I have had the details of the study explained to me, any questions I had have been answered to my satisfaction, and I understand that I may ask further questions at any time. I have been given sufficient time to consider whether to participate in this study and I understand participation is voluntary and that I may withdraw from the study at any time up until data analysis begins.

1. I agree/do not agree to the interview being sound recorded.
2. I agree/do not agree to notes being taken during the interview
3. I understand that I have an obligation to respect the privacy of the other members of the group by not disclosing any personal information that they share during our discussion.
4. I understand that all the information I provide will be kept confidential to the extent permitted by law, and the names of all people in the study will be kept confidential by the researcher.

Note: There are limits on confidentiality as there are no formal sanctions on other group participants from disclosing your involvement, identity or what you say to others in the focus group. There are risks in taking part in focus group research and taking part assumes that you are willing to assume those risks.

5. I agree to participate in the focus group under the conditions set out in the Information Sheet attached.
6. I agree/do not agree for the researcher to retain a copy of the planning/assessment artefacts.

Declaration by Participant:

I _____ hereby consent to take part in this study.
(print full name)

Signature: _____ Date: _____

Institute of Education
Cnr Albany Drive & Collinson Road, Private Bag 11222, Palmerston North 4442, New Zealand
T 06 356 9029 www.massey.ac.nz

Appendix Five: Focus Group Interview Protocol

Assessment and Planning practices of Kindergarten Teachers Focus Group Interview Protocol

Interview Conducted By:	Kindergarten Code:
Date:	Teacher Codes:
Interview recorded by: Audio Handwritten notes	Recording Complete: Yes No
Duration of interview:	

Welcome:

Kia ora welcome.

The interview process should be opened with a welcoming tone and an appreciation shown to the participant's for their participation in the interview.

- *A reminder that today's discussion will be audio recorded and the recording has started*
- *I value your contribution to this research project, and I appreciate you sharing your knowledge, ideas and time with me.*

Inform the participants that the interview is designed to gather their ways of using planning and assessment for two-year-olds in their particular setting.

- *This piece of research is an exploratory study investigating how kindergarten teachers use planning and assessment practices/strategies to support quality learning outcomes for two-year-olds.*
- *Therefore the aim today is to talk about your planning and assessment practices with just 2 year old's in this kindergarten.*

Remind them that any artefacts (i.e. learning stories) /discussed must be anonymised.

- *In my email I gave you the option of using any planning or assessment artefacts such as learning stories at today's discussion. Just a reminder that these need to be anonymised so as not to identify any of the children.*

Inform participants that this interview process is confidential and non-identifiable and to speak openly and honestly about their experiences.

- *This interview/discussion today will be transcribed, and you will each be sent a copy of the transcript. I ask that each of you review and amend the transcript, if necessary and return to me. All data will be stored securely and*

will only be sued solely for the purpose of my research. Your identity will remain confidential throughout the research process.

Ground rules

- *Confidentiality – the discussion we have today must stay within your kindergarten and within the research*
- *Please act with integrity and respect. Dynamic discussions are great but just one person speaking at a time please.*
- *We will finish within the hour, but this means that sometimes I may need to move the conversation forward. Please don't be offended if this occurs.*

Format/Structure of the Focus group Interviews:

Brief introductions so that individual voices are captured to make it easier for transcription.

- *Please could you each take turns at saying your name, the length of time you have been teaching and how long you have been teaching in this kindergarten.*

The rest of the interview is then broken up into areas relating to planning, assessment and professional development.

Transition questions

1. Think back to when you first started noticing the shift in kindergarten towards having two-year-olds enter the service. What was that like for you?
 - Benefits/challenges
 - Emotions
 - What's the first thing that came to mind
 - Thoughts about mixed age groupings
2. What do you enjoy about teaching two-year-olds in kindergarten?
3. What was or is, the hardest or most challenging aspect of working with two-year-olds in a kindergarten?

Interview Questions

1. What do you think is the general perception of teachers about two-year-olds in kindergarten?
 - How are they viewed?
2. How do you see two-year-olds as being different from 3 and 4 year old's?

Planning for learning for two-year-olds

For the next couple of questions we are going to focus on the planning aspect relating to two-year-olds.

1. Tell me about how you plan for, and support, learning for two-year-olds?
 - What guides you in your planning for 2 year old's?

- How might your planning strategies respond or adapt to the specific characteristics of two-year-olds?
 - Is this approach different to your planning for 3 and 4 year old's?
 - Are there any particular resources or tools that you use in your planning?
 - Who is involved in the planning process?
2. Te Whāriki gives us some indicators about learning for children. Can you describe to me how Te Whāriki, influences your planning for two-year-olds learning?
 - In what ways might you consider the goals or learning outcomes of TW in your planning?
 3. Can you tell me about a time when you had a plan for a two year old that was really successful?
 - What happened?
 - How did you use planning to enhance that child's learning experiences?
 - What did you include in the plan (Intentional teaching strategies)?
 - How did you work as a team?

Assessment for learning for two-year-olds

The following questions are specifically based on assessment for learning for two-year-olds in your kindergarten.

Alongside planning for children is assessment of their learning. Te Whāriki defines this as being formative, with an intention to support curriculum planning, and to enhance learning. Te Whāriki also discusses how assessment is used to document children's progress over time.

1. Tell me about how you are assessing and capturing the learning of two-year-olds in your kindergarten.
 - Can you describe the tools or methods you use to gather information about two-year-olds learning (i.e. how the information is documented)? Prompts: Written assessment of children's engagement with the curriculum, Video/audio recordings, Photographs, Examples of children's work
 - Is this practice the same for all age groups in your kindergarten or is it different for two-year-olds?
 - Who is involved?
 - Frequency
2. Can you share an example of a time when assessment information was used to inform planning and develop possible future learning experiences for two-year-olds?
 - What was the critical factor in the success of it?
 - What strategies worked/didn't work?
 - what tools and resources were most useful with these strategies?

Teachers professional knowledge and teaching with two-year-olds

1. Think back to when you first started working with two-year-olds in kindergarten. How do you feel that your professional knowledge and teaching strategies related specifically to this age group have developed?
 - In what ways?
 - Can you give an example of this?
2. Is there any particular professional development you have engaged in to support your knowledge and teaching practice with two-year-olds?
 - Please can you describe
 - Was this self-directed or association guided?
 - What PLD was most helpful?
3. What, if any, areas are there that you feel need further investigation to improve outcomes for two-year-olds in your kindergarten?
 - Is there any professional development or support that you feel would be useful?

Closing question

1. From our discussion today, what is one key thing that you would want to share with other teachers about effective planning and assessment for two-year-olds in kindergarten?

Appendix Six: Authority for the Release of Transcripts



To explore how kindergarten teachers utilise planning and assessment practices to support the learning for two-year-olds in New Zealand kindergarten settings?

AUTHORITY FOR THE RELEASE OF TRANSCRIPTS

I confirm that I have had the opportunity to read and amend the transcript of the interview(s) conducted with me.

I agree that the edited transcript and extracts from this may be used in reports and publications arising from the research.

Signature: _____ **Date:** _____

Full Name - printed _____

Appendix Seven: Ethics Approval



Date: 02 October 2018

Dear Jennifer Underwood

Re: Ethics Notification - 4000020189 - How do kindergarten teachers utilise planning and assessment practices to support quality outcomes for two year olds in New Zealand kindergarten settings?

Thank you for your notification which you have assessed as Low Risk.

Your project has been recorded in our system which is reported in the Annual Report of the Massey University Human Ethics Committee.

The low risk notification for this project is valid for a maximum of three years.

If situations subsequently occur which cause you to reconsider your ethical analysis, please contact a Research Ethics Administrator.

Please note that travel undertaken by students must be approved by the supervisor and the relevant Pro Vice-Chancellor and be in accordance with the Policy and Procedures for Course-Related Student Travel Overseas. In addition, the supervisor must advise the University's Insurance Officer.

A reminder to include the following statement on all public documents:

"This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named in this document are responsible for the ethical conduct of this research."

If you have any concerns about the conduct of this research that you want to raise with someone other than the researcher(s), please contact Professor Craig Johnson, Director - Ethics, telephone 06 3569099 ext 85271, email humanethics@massey.ac.nz."

Please note, if a sponsoring organisation, funding authority or a journal in which you wish to publish requires evidence of committee approval (with an approval number), you will have to complete the application form again, answering "yes" to the publication question to provide more information for one of the University's Human Ethics Committees. You should also note that such an approval can only be provided prior to the commencement of the research.

Yours sincerely

Research Ethics Office, Research and Enterprise
Massey University, Private Bag 11 222, Palmerston North, 4442, New Zealand T 06 350 5573; 06 350 5575 F 06 355 7973
E humanethics@massey.ac.nz W <http://humanethics.massey.ac.nz>