Assessment Information Utilisation from Learning Stories in New Zealand Early Childhood Centres

By

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Abstract

This research provides an insight into early childhood teachers' every day, real life experiences for current ECE assessment practices from a bottom up perspective using experienced early childhood teachers as the data source. The research investigated the ways teachers collected data for assessment purposes, the tools they used to document the information, the ways they utilised the assessment data from Learning Stories, and the challenges they were faced with during the process. The study invited participants from different types of centres from different areas of New Zealand. Five highly experienced early childhood teachers participated in the research from kindergartens and privately owned early learning centres. The study, which was grounded in a constructivist-interpretive paradigm, applied a phenomenological approach. The research utilised semi structured interviews as the main data collection method of a phenomenological research.

The findings indicated that assessment information from Learning Stories can be utilised in numerous ways. The study revealed interesting practical ideas of every day assessment practices for the profession. The research highlighted the complexity of the current assessment approach and the sophisticated nature of the Learning Story writing process. Teachers' high level of data literacy skills, thorough understanding of data collection, documentation and data analysis processes were shown as fundamental factors in an effective assessment practice. The documentation and information sharing about children's learning and behaviour difficulties through Learning Stories were identified as a problematic area of assessment information utilisation. Teachers' Learning Story writing competencies and better utilisation of assessment information from Learning Stories for children with special learning needs were suggested to be avenues for further investigation in future research.

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Chapter 1

Introduction

1.1 Justifications and rational of the study

At the core of this thesis is Early Childhood Education (ECE) assessment in New Zealand (NZ). The focus is on assessment practice that makes children's learning visible (Carr, 2001; Carr & Lee, 2019; Dunphy, 2010), and on the utilisation of assessment information which has a powerful effect on children's future learning and development (Cameron, 2014). Assessment is one of the most challenging tasks for teachers at all levels of education (Smith, 2013), including ECE (Carr, 2001; Dunphy, 2010). ECE assessment consists of teachers collecting information about children's play and experiences from multiple sources, documenting this information, considering and reflecting on the obtained information, and utilising the assessment data in the planning of further learning experiences (Alasuutari, Markström, & Vallberg-Roth, 2014; Carr, 2001; Dunphy, 2010; Ministry of Education [MOE], 2004). The early childhood teacher's role is of primary significance in ECE assessment. Teachers' theoretical and professional knowledge, experience, data literacy skills and professional attitude are integral factors in the process of assessment and play critical parts in its quality (Aspden, Baxter, Clendon, & McLaughlin, 2019; Dunphy, 2010; Fraser & McLaughlin, 2016; Smith, 2013; Stuart, Aitken, Gould, & Meade, 2008). Data literacy defines teacher ability to collect and use different type of data, convert data into valuable information, utilise information to make decisions, and evaluate the outcomes (Love, Horn, & An, 2019).

Current ECE assessment in NZ has been determined as formative (Buchanan, 2011; Carr & Lee, 2019; Loggenberg, 2011; MOE, 2017). It is documented in a formal written format mainly utilising a narrative assessment tool, Learning Story (Mitchell, 2008), or in an informal form as a spontaneous response to children's interest during interactions (MOE, 2017). The assessment practice is based on continued informal observations while teachers watch, listen and interact with a group of children or with an individual child. The child is observed in action, in a sociocultural context, and in a familiar learning environment (Buchanan, 2011; Carr, 2001; Carr & Lee, 2019; MOE, 2017). The observed information is documented in a narrative story format which allows teachers to recognise significant leaning

moments of the child's play, to reflect on the learning in those instances, rationalise decisions regarding provisions and communicate the child's recognised learning with others (Carr & Lee, 2012, 2019; Dunphy, 2010; MOE, 2017). Learning Stories also support teachers to develop a complex understanding of the child as a whole person, encourage a deeper engagement in the assessment process, and allow teachers to extend learning by planning for future learning opportunities The innovative nature, the aspirations and potentials of assessment through Learning Stories have achieved a strong recognition within the early childhood sector in NZ (Arndt & Tesar, 2015; Reese, Gunn, Bateman & Carr, 2019; Smith, 2013).

Besides the great benefits of the narrative approach the challenges involving its implementation into practice are also recognised (Arndt & Tesar, 2015; Blaiklock, 2011, 2012; Cameron, 2014; Cameron, McLachlan, & Rawlins, 2016; Loggenberg, 2011; McLachlan, 2011; Zhang, 2015, 2017). Research shows a mismatch between the application of narrative assessment through Learning Stories in theory and in everyday practices in ECE services (Arndt & Tesar, 2015; Cameron et al., 2016; Education Review Office [ERO], 2007; Stuart et al., 2008). Many scholars argue that teachers have difficulties with the current assessment approach in aspects of data collection, documentation and data utilisation (ERO, 2007, 2011; Loggenberg, 2011; McLachlan, 2018; Niles, 2015; Perkins, 2013; Stuart et al., 2008). According to Carr and Lee (2019) there is an outcry from teachers for practical advice and examples of assessment practices, especially for research which is based on teachers' perspectives accentuating what actually works and what do not in practice (Cameron et al., 2016). It is important that teachers' understandings, beliefs and struggles are listened to in order to determine why assessment is carried out the way it is (Cameron et al., 2016). This study aimed to provide an insight of early childhood teachers' every day real life experiences of current ECE assessment practice and highlight its complexity. The study hopes to contribute practical ideas to the profession illuminating significant factors and challenges which may influence the effectiveness of the assessment process in ECE.

1.2 Study outline

The study was grounded in a constructivist-interpretive paradigm and applied a phenomenological approach to look at current ECE assessment practices in NZ from a bottom up perspective using experienced early childhood teachers as data source (Sloan & Bowe, 2014). The constructivist-interpretive paradigm enabled the study to examine the perspective of the teachers, utilise their professional knowledge and experience, explore the phenomena from the interior and develop an insight of everyday ECE assessment practices according to the meaning the participants brought to them (Denzin & Lincoln, 2005; Ritchie, Lewis, McNaughton, & Ormston, 2013). The phenomenological approach aimed to give voice to the participants to determine important characteristics of the phenomena and bring them into light. A bottom up perspective creates a democratic way of conducting the research (Sloan & Bowe, 2014).

The study invited participants from different types of centres from different areas of NZ. Five highly experienced early childhood teachers indicated their willingness to participate from kindergartens and privately owned early learning centres. The teachers all held senior leadership roles and had extensive knowledge and experience in curriculum planning and assessment practices. The study used semi structured interviews to investigate the different aspects of everyday assessment practices including the ways teachers collected data for assessment purposes, the tools they used to document the information, the ways they utilised the assessment data from the documents, and the challenges they were faced with during the process.

1.3 My personal interest in the study

It was my personal interest and fascination about data that drove me into my research journey. Learning how to collect large amounts of data, learning ways to manage it and make sense of it were my primary reasons for starting my postgraduate studies. As an early childhood teacher, I found this interest very useful during my 15 years plus of professional practice. I could thoroughly utilise my skills in my assessment practice while I managed information about children's learning. Interestingly though, it was not until I enrolled in one of my papers during my postgraduate study - Using Evidence to Improve Practice- that I changed the way I looked at assessment information that teachers documented in Learning Stories and started seeing it as data. Some could say that it was obvious already since we

know from Wiliam (2011) that assessment is generated data for specific purposes within a specific system. For me the information I collected about children felt more like important things to know about the child than actual assessment data. Maybe the currently used narrative story format made me think this way. However, during my course readings about general assessment data management practices for different education sectors; I started to realise that in ECE we actually follow the same practice, but I believe in a more sophisticated manner. Smith (2013) tells us that assessment is one of the most challenging tasks teachers face in all levels of education. Yes, I agree, however while I was reflecting on the similarities and differences between our current narrative assessment approach in ECE and the other sectors' data collection and analysing processes, interesting questions started to be raised for me. Do other educational professionals realise what a complex process an ECE teacher needs to go through to generate her/his own assessment data and document it? Assessment data in NZ ECE is not generated by preformulated tests (MOE, 2017). The data relates to the actions of children and needs to be noticed and recognised first by a teacher, then documented in a narrative format (MOE, 2004). This process can create a number of challenges for practitioners (Dunphy, 2010). Challenges in this form of assessment include the subjective nature of the approach (Blaiklock, 2008), following a credit based model (Cameron et al., 2016), assessing children's learning through learning dispositions (Claxton & Carr, 2004), just to mention a few. Are the professionals from other sectors aware what underlying professional skills and understanding the teachers need to possess to be able to obtain the right data, write about it, and make sense of it? Our sector fights so hard to be recognised as part of the teaching profession. It is important to raise awareness about complex assessment practices which require ECE teachers' to have high levels of professional knowledge and competencies (Carr, 2001; Carr & Lee, 2019; Claxton & Carr, 2004; Dunphy, 2010; Smith, 2013).

One of my assignments within the Using Evidence to Improve Practice paper led me to come up with more questions. The assignment required me to analyse data relevant to my field according to certain criteria of my choice. I could have used parent questionnaires, or attendance sheets, but my lecturer gave me the challenge to use assessment data from Learning Stories and see what valuable information I could extract from them. I chose to analyse one 4 year-old-child's 3 portfolio books from my centre. These contained a collection of the child's assessment information accumulated during her 3 years in the preschool. The data collection and analysis process required extensive time. I had to read through every story

(40 of them) several times to extract the information. This assignment gave me a great opportunity to develop my skills in managing large amount of qualitative data and learn different ways to analyse it. At the end I was truly surprised how much valuable information the child's Learning Stories contained. This finding made me ask my next question: What do we (teachers, centres) do with all the valuable assessment information we document in Learning Stories? How do we utilise it? Teachers put tremendous effort and spend extensive amounts of time writing Learning Stories (Blaiklock, 2011). The main purpose of Learning Stories, and the one which all centres utilise them for, is information sharing with parents and whānau (MOE, 2017). However, my small research for the assignment showed that Learning Stories contained valuable information about different aspects of the assessment process, as well as teachers' competencies and the centre programme. For example, the analysis of the stories gave me a clear picture of how much child and parent voice or Te reo Māori were used in the stories, information about the frequency of the stories, and teachers' contributions, which learning disposition or strand of Te Whāriki were assessed, which were not. I could see that the information in the stories had the potential to be utilised for teacher appraisal purposes, decision making for professional development for individual teachers or for the whole centre, planning for individual children's learning or whole centre self-reviews. It made me ask further questions: In what way do teachers and centres utilise this valuable assessment information from Learning stories? What interesting practices do teachers use which could be shared to benefit other centres' assessment practices? These questions inspired me to do my investigation, talk to experienced early childhood teachers, use their professional knowledge and experience to develop an insight of current assessment information utilisation practices in NZ ECE.

1.4 Aims and research questions of the study

The research was designed to meet several purposes. Firstly, the study endeavoured to gain an insight of the everyday, real life assessment practices that teachers used for assessment data collection, documentation and utilisation. Secondly, the study aimed to find effective practical ideas and methods so that these can be shared with the profession to further enhance teachers' assessment processes, especially, to help beginning teachers to better understand the ECE assessment process in NZ and overcome the complex challenges the current assessment approach possesses.

Thirdly, the study aimed to identify areas that teachers found problematic, with the anticipation that the information would aid training and professional development providers. Finally, the study's intention was to help illuminate and raise awareness of the complexities of the current assessment approach in ECE and highlight the great effort and the extensive professional knowledge and skills early childhood teachers need and utilise in their assessment practices.
To achieve these aims the following research questions were posed:

1) In what ways do teachers collect and document information for assessment purposes?

2) In what ways, and for what purposes do teachers utilise assessment information in their practice?

3) What underlying aspects and challenges play an important part in the utilisation of assessment information in teachers' assessment practices?

1.5 Overview of chapters

Chapter 1 introduces the study, justifies its purposes, gives an insight of the researcher's personal interest in the study and outlines the research questions.

Chapter 2 provides a literature review. Different curriculum and assessment approaches in international literature, and definitions of the purposes of assessment are reviewed. The chapter also provides an overview of the current NZ ECE assessment approach and describes the dominantly used narrative assessment tool, Learning Stories, in detail. The literature review highlights the benefits of the current narrative assessment approach and explains its close alignment with the national ECE curriculum, Te Whāriki. Critique of the effectiveness and dominant status of Learning Stories in NZ is also outlined highlighting concerns about teachers' lack of understanding and practical knowledge in using this assessment format which may undermine the benefits and effectiveness of the narrative approach (Stuart et al., 2008).

Chapter 3 describes the methodology used in the study and gives an overview of the data analysis process and ethical practices that were followed during the investigation.

In Chapter 4 the findings are presented. The phenomenological approach enabled the study to empower the participants to voice their opinions and beliefs about their practical experiences in assessment.

Chapter 5 provides a discussion of the findings. Concluding this chapter, the recommendations for the improvement of teachers' assessment practices in relation to these issues are outlined.

Chapter 2

Literature Review

2.1 An international outlook

2.1.1 Assessment and curriculum approaches

Assessment of young children's learning and progress is a critical part of a high quality early childhood programme (Carr, 2001; Dunphy, 2010; Loggenberg, 2011; Marbina, Church & Tayler, 2010). The decisions early childhood teachers make, based on their assessment data, have a powerful impact on children's development and future learning (Cameron, 2014; Smith, 2013). The assessment process supports multiple purposes, is theoretically complex, can be challenging (Arndt & Tesar, 2015; Bell & Cowie, 2001; Blaiklock, 2010a, 2010b; Carr, 2001; Niles, 2015; Pyle & DeLuca, 2017; Zhang, 2015), since, according to Smith (2013), assessment is one of the most challenging tasks teachers face in all levels of education.

In a broad context, assessment means to analyse or evaluate information, to give a review, to estimate or rate something or someone (Alasuutari et al., 2014). Wiliam (2011) sees assessment as generated data for specific purposes within a specific system. In ECE assessment data, as evidence of learning, is based on what children say, do, draw or write (Marbina et al., 2010), and is analysed with the purpose of bestowing a rich picture of the characteristics of young children's learning, acting and thinking (Bowman, Donovan & Burns, 2001), and of making a range of children's learning visible (Dunphy, 2010). Drummond (2011) defines assessment as "the ways in which, in our everyday practice, we observe children's learning, strive to understand it, and then put our understanding to good use" (p.12).

In international literature two ECE curriculum and assessment approaches can be differentiated (Alasuutari et al., 2014). They are the social pedagogical approach, otherwise known as the Nordic tradition, and the infant school approach or Anglo-Saxon tradition. These approaches characterise children's learning differently. In the social pedagogical approach, the curriculum and assessment are more comprehensive, less specific, centring on the whole child and on education that both encompass care and education. This approach

seeks to broaden the outlook for well-being and holistic development. It defines children's learning in terms of goals. Teachers, parents and children set broad developmental goals which are later evaluated using multiple assessment tools (Alasuutari et al., 2014; Bennett, 2010; OECD, 2012). The infant school model takes a more academic approach. It makes use of a teacher initiated curriculum with cognitive goals for school preparation, includes more specific details and tends to measure individual children in regards of their academic knowledge and school readiness (Alasuutari et al., 2014; Bennett, 2010; OECD, 2012). The OECD (2012) '*Starting Strong III*' report suggests that the integration of the two curriculum approaches, where the cognitive and social development are viewed as complementary and of equal importance can contribute to high-quality ECE practices. The child's self-confidence, independence, creativity and dispositions towards learning can be fostered through the social pedagogical approach. The child's general, early literacy, and numeracy knowledge can be improved through the infant school model (Alasuutari et al., 2014; Marbina et al., 2010; OECD, 2012; Perkins, 2013).

Literature shows that there is an important connection between curriculum and assessment (Alasuutari et al., 2014; Dunphy, 2010; OECD, 2012). On one hand the curriculum provides learning outcomes for teachers to assess against and guides the assessment process (McLachlan, 2018). On the other hand the assessment methods can impede, depress, reinforce or invigorate the curriculum (Lee, Carr, Soutar, & Mitchell, 2013; Smith, 2013). An important feature of an effective assessment design is that the teachers' understanding of the child's learning is utilised to enhance the curriculum they offer (Drummond, 2011). According to Wiliam (2011), just recording assessment information and passing it to a third party isn't considered effective assessment. The generated information must lead to action to achieve the desired improved performance (Wiliam, 2011).

2.1.2 The purposes of assessment

Educational scholars suggest that assessment serves multiple purposes in education as is shown relevant for ECE in international literature (Alasuutari et al., 2014; Archer, 2017; Brassard & Boehm, 2007; Dichtelmiller, 2004; Marbina et al., 2010; Ntuli, Nyarambi, & Traore 2014; Wiliam, 2014) and in national literature (Bell & Cowie, 2001; Blaiklock, 2010a, 2012; MOE, 2017; Zhang, 2015). Archer (2017) and Bell and Cowie (2001) outline three purposes of assessment in education.

One purpose of assessment is tracking progress or improvement and endorsing achievement of certain skills and knowledge. This purpose often addressed as summative assessment or assessment of learning (Archer, 2017; Bell & Cowie, 2001; Buchanan, 2011). Summative assessment relates to an evaluation process to determine what children have learnt at the end of an activity, instruction or project. It is retrospective, looks backwards; it measures learning and skills that has been achieved in line with pre-specified criteria (Alasuutari et al., 2014; Brassard & Boehm, 2007; Buchanan, 2011; Loggenberg, 2011; McLachlan, 2018). The assessment data is used to authenticate progress and to aid the transition process of a child to a different institute, from an early childhood centre to another or to school (Archer, 2017). According to Alasuutari et al. (2014) different summative assessment tools are part of current international ECE practices. The table below gives a short summary of some examples:

Table 1: Summative assessment tools

Assessment tools	**Description**
Social Emotional Training (SET)	The programme is based on developmental psychology and defines goals about children's skills to recognise, name and handle their basic feelings. The outcomes are documented in SET-books or portfolios. The programme also involves parents as partners so that the defined goals can be reinforced both at home and at the centre. Developed in Sweden by Birgitta Kimber and Carina Petré (2009). Used in Sweden.
Second Step	Second Step is a life skills programme for ECE and schools. It contains three main areas: empathy training; impulse control and problem solving; and self-control. Assessment documentation is carried out through the forms of logbooks, evaluations and information letters. Developed in the USA. Used in USA, Canada, Denmark, England, Finland, Germany, Greenland, Guatemala, Venezuela, El Salvador, Kurdistan, Iraq, Iceland, Japan, Lithuania, Norway, Slovakia, and Sweden.
START ('Life Skills for the Youngest')	START is similar to Second Step but targets children aged 1– 3. START addresses three main areas. The first focuses on the child's ability to recognise and name six basic emotions: sadness, joy, fear, anger, amazement/surprise and distaste/disgust. The second area is labelled connection and affinity, and the third area contains understanding and training of some basic interaction skills, such as waiting and taking turns. Developed in Sweden. Used in Sweden, Norway, and Denmark.
TRAS (Standardised observational material)	TRAS is a standardised observational material for assessing children's language skills. It is based on developmental psychology and linguistics. TRAS builds on the theory of the age-dependency of children's skills. The material includes three main areas: interaction and attention; pronunciation, word production and sentence structure; and language comprehension and awareness. Developed in Norway by speech therapists, psychologists, special education teachers, linguists and preschool teachers. Used in Norway, Sweden, and Denmark.

Relationships Development Scheme (RUS)	RUS is built around four areas: (1) Relationship to teachers; (2) Safe in the environment; (3) Relation to children; and (4) Term the world (children's linguistic development). The teacher documents these areas in a logbook. Used in Sweden.
Step sheets	Step sheets assess different fields of knowledge and include about 200 objects of knowledge relating to language, mathematics, science and motor skills. Used in Sweden.
Strengths Cards	The cards have adjectives printed on them – 'energetic', 'determined', 'independent', 'adaptable' – that can be perceived either positively or negatively. The cards can serve as a tool to engage parents in conferences and for teachers to distance themselves and leave the categorisation to the parents. Used in Sweden.

Adapted from Alasuutari et al. (2014).

A second purpose of assessment is to support learning. Assessment to support learning relates to the interaction between assessment and learning that is forward looking (Archer, 2017). This purpose often referred to as formative assessment or assessment for learning (Bell & Cowie, 2001; Buchanan, 2011; Niles, 2015). Formative assessment is grounded in the belief that every child can improve (Alasuutari et al., 2014). Formative as a word means recognising the significance of an earlier experience which made a difference, had importance for us, and enhanced our understanding of the way forward (Carr & Lee, 2019). An assessment becomes a formative assessment when teachers utilise the information they gained from the assessment process, to give feedback to students and feed back into the teaching process (Bell & Cowie, 2001; Buchanan, 2011; Carr & Lee, 2019; Dunphy, 2010; Marbina et al., 2010; MOE, 2017; Smith, 2013; Wiliam, 2011, 2014). Taking action to improve learning is an essential part of the rationale of formative assessment (Bell & Cowie, 2001).

According to Bell and Cowie (2001) there are two types of formative assessment: planned and interactive. MOE (2017) refers to these two types as formal and informal assessment. In formal assessment the teacher prepares, plans the assessment and may document it in a written format. During informal assessment the teacher interacts with the child as part of the teaching process, noticing, recognising and responding to the child's learning needs and using the information to develop a picture of the child's progress. Formative assessment involves both teachers and children reviewing and reflecting on assessment information (Carr, 2001). Children are encouraged to take part in the assessment process, set goals to themselves, and revisit their assessment information. Formative assessment also requires teachers to utilise the assessment information by giving feedback to students with the aim of guiding them to

perceive their next steps and helping to achieve them (Alasuutari et al., 2014; Bell & Cowie, 2001; Carr, 2001; Wiliam, 2014). In ECE pedagogical documentation, Learning Stories, portfolios and Individual Developmental Plans can be associated with formative assessment (Alasuutari et al., 2014). The table below describes these assessment tools:

Table 2: Formative assessment tools

Assessment tool	Description
Pedagogical documentation	Pedagogical documentation is mostly associated with the early childhood institutions of Reggio Emilia. In pedagogical documentation, learning is seen as an interconnected aspect with the surrounding environment and other people rather than an individual and independent activity. The primary focus of this documentation tool is forming a basis for reflection among teachers. A documentation can only be regarded as pedagogical if someone reflects upon the collected information. The information then be used to modify teaching and learning activities and to adapt the teaching work to meet the needs. Pedagogical documentation is also considered as a social construction where teachers, who are the co-builders, choose what is worth documenting, describe the event then interpret it to understand what is happening (Alasuutari et al., 2014).
Learning Story	A Learning story is a form of pedagogical documentation. The story or narrative approach is "a mode of thought and a vehicle for meaning making" (Dunphy, 2010, p.51). It is founded on a sociocultural perspective. It looks at learning and knowledge as a relationship between the individual child and the environment that the child interacts with. It is used to understand facets of learning and teaching, and to communicate it to others. The narrative approach allows teachers, parents and children to co-construct learner identities (Carr & Lee, 2012). The documented learning is not end in itself but must be reflected upon and shared with others (Dunphy, 2010).
Portfolios	Portfolios are well-known and widely used documentation tools (OECD, 2012); a purposeful collection of assessment information of a child's learning and progress (Dunphy, 2010). The emphasis is on student and parent participation (Alasuutari et al., 2014). Portfolios are effective ways to share information with parents and whānau, engage them in their child's learning journey and encourage them to contribute to the process (MOE, 2017). Their use also boosts children participation and empowers children to take responsibility for, influence, and become metacognitively aware of their own learning. Portfolios may contain different types of assessment documentations and children's own work (Alasuutari et al., 2014). Portfolios emphasise analysis of learning, development and continuity of learning and a community of voices (Stuart et al., 2008).
IDP - Individual Development Plan	IDP can be seen as 'a curriculum at an individual level' (Alasuutari et al., 2014, p. 34). IDPs are plans designed for individual children to help achieve goals mainly determined necessary by their educators. The process relies on observations and developmental psychological assessments on children. Research shows that IDPs have limited parent involvement and are not effective in achieving their aims (Alasuutari et al., 2014)

IEP - Individual Educational Plan; Individual Educational Programme	IEPs are similar to IDP but usually refer to a practice of special education when a special need child provided with a specialised educational plan and programme (Alasuutari et al., 2014).

A third purpose of assessment is assessment for accountability. In this purpose its functions include holding people accountable for undertaking high quality assessment practices; providing evidence to families as customers and outside agencies that learning is being promoted; and driving changes in practices and policies (Archer, 2017; Bell & Cowie, 2001; Buchanan, 2011). Archer (2017) argues that each of the three basic purposes of assessment serves a critical part in a high-quality education system and must be in balance with each other. The over-emphasis, under-emphasis or absence of assessment for any of these basic purposes may negatively affect the overall quality of education.

Educational literature strongly argues that quality ECE assessment is important (Alasuutari et al., 2014; Blaiklock, 2010b, 2012; Brassard & Boehm, 2007; Carr, 2001; Dichtelmiller, 2004; Fraser & McLaughlin, 2016; Loggenberg, 2011; Marbina et al., 2010; MOE, 2017; Ntuli et al., 2014; A. Smith, 2013; Wiliam, 2014; Zhang, 2015). Assessment provides teachers, parents and families with essential information about a child's development and growth, furthers families' understanding of their children's development and provides a basis for communicating with parents. Assessment supports children's learning, and helps teachers make decisions about children's progress and behaviour. Assessment also provides information on the quality of teachers' performance, lead curriculum planning and decision making, and can be used to evaluate the effectiveness of the centre programme (Alasuutari et al., 2014; Bell & Cowie, 2001; Brassard & Boehm, 2007; Marbina et al., 2010; Wiliam, 2011, 2014). According to Downs and Strand (2006) one of the most important roles of assessment is accurately identifying children in need of specialised educational services and early intervention. This role is critical in ensuring children's access to support services, which may tremendously impact their abilities and development throughout their school journey and later in life.

Many scholars argue that the several purposes of assessment call for multiple data sources, a range of assessment tools, and a carefully planned systematic approach (Alasuutari et al., 2014; Blaiklock, 2010a, 2011, 2012, 2013b; Brassard & Boehm, 2007; McLachlan, 2018; Snow & Van Hemel, 2008; Zhang, 2015). Brassard and Boehm (2007) and Alasuutari, et al.

(2014) both argue that there is no reason to imagine that only one assessment approach can fulfil all the purposes. Snow and Van Hemel (2008) agree stating that "different purposes require different types of assessments" (p.2). Brassard and Boehm (2007) highlight that "the method of assessment used with young children is not as important as the accuracy and appropriateness of the technique in relation to what is being assessed" (p. 24). The authors argue that the methods of a thorough preschool assessment need to be systematically carried out and carefully planned. Snow and Van Hemel (2008) call for collaboration between varying expertise such as medical, educational, family support services and early childhood professionals to create a more rigorous systematic assessment approach in ECE. These ideas align with Alasuutari et al. (2014) who question if the generally well-known formative or summative forms are enough. According to these authors transformative assessment, which includes social-cultural, psychological, neuroscience, post-humanist and goal-result-quality (market economy) approaches, may be more applicable when considering assessment in ECE.

In summary, this section of the literature review has established that assessment plays a significant role in quality ECE practices. Assessment in ECE focuses on the child as a learner. The process has a strong connection to ECE curriculum. There are two different curriculum and assessment approaches evident in international literature, the social pedagogical Nordic approach and the infant school or Anglo-Saxon academic approach. The merger of these two curriculum and assessment approaches is considered to contribute to higher quality education in ECE services. The utilisation of assessment information to achieve improved performance was highlighted as key aspect of effective assessment. Three basic purposes of assessment were described in the review in this chapter: tracking children's progress, supporting children's learning, and holding people accountable for the quality of their practices. All three purposes were considered equally important and were found to contribute to high-quality practice. The roles of assessment were outlined highlighting the identification of children's special learning needs as one of the most important roles. The strong opinion on the use of multiple assessment tools and methods to meet with the different purposes of assessment in ECE was supported by many scholars. The idea of a collaborative approach with medical, educational and family service professionals to achieve pertinent assessment in ECE was raised by a group of authors.

2.2 Current ECE assessment approach in New Zealand

ECE assessment practices in NZ are guided by, and align with the principles, strands and learning outcomes of the national ECE curriculum, Te Whāriki (Arndt & Tesar, 2015; Carr, 2001; MOE, 2017). Te Whāriki outlines a sociocultural model of learning that weaves together complex patterns of children's linked experiences and thinking rather than stressing the acquisition of specific knowledge and skills (ERO, 2011; McLachlan, 2011; OECD, 2012). Through this model children's relationship with their peers, their teachers, their physical surrounding, and their families and community are seen as interwoven parts of their development and lives (Arndt & Tesar, 2015).

The main emphasis in Te Whāriki is on children's engagement in learning (Blaiklock, 2010b; 2013b; Carr, 2001; MOE, 2017). The curriculum aims to promote children to develop an overall enthusiasm for learning and to become a "competent and confident learner" (MOE, 2017, p.6). Te Whāriki characterises the main purpose of assessment as making valued learning visible and using assessment information for informing families, whānau, children, teachers and support agencies about children's learning and development over time (MOE, 2017). Te Whāriki comprises learning as working theories and learning dispositions (Carr & Lee, 2012). Lee et al. (2013) determine a learner as a child having a positive view of the self and being interested, getting involved, persisting with difficulty, communicating a point of view and being part of a community with responsibilities and rights. Carr (2001) describes dispositions in a range of ways, such as "situated learning strategies plus motivation—participation repertoires from which a learner recognises, selects, edits, responds to, resists, searches for and constructs learning opportunities" (p. 47) and as "being ready, willing and able to participate in various ways" (p. 21). Dispositions are also perceived as the child's thought in actions and her/his aptitude to respond in a certain way such as being friendly, kind, and curious. A learning disposition is about the willingness to be part in a learning experience (Carr & Lee, 2019; Karlsdóttir & Garðarsdóttir, 2010).

New Zealand ECE assessment practices are consistent with Te Whāriki's principles which inform teachers how to approach assessment for young children (MOE, 2017). The Whakamana (Empowerment) principle calls for credit based assessment (Carr & Lee, 2012), "a mana-enhancing process for children, parents and whānau" (MOE, 2017, p. 64) and exacts teachers to increase children's competency in assessing their own progress. The Kotahitanga (Holistic Development) principle requires teachers to know the child well, develop deep

understanding of the whole child considering his "tinana, hinengaro, wairua and whatumanawa"(body, mind, spirit and emotions) and "recognise and respond to the full breadth of each child's learning" (MOE, 2017, p. 64). The Whānau Tangata (Family and Community) principle calls for seeing parents as experts of their child and including their funds of knowledge (Clarkin-Phillips, 2012), expectations and aspirations in the assessment. Ngā Hononga (Relationships) principle indicates the inclusion of multiple perspectives of agents who know the child well in the interpretation of what has been observed (MOE, 2017).

Due to Te Whāriki's holistic focus on children's learning, being and becoming, the NZ ECE assessment approach moved away from the concept of objective recordings of a child's development (Arndt & Tesar, 2015). Carr, May and Podmodore (1998) argued that assessment using developmentally based observations of children were not appropriate in the context of Te Whāriki. The authors advocated for a narrative assessment framework called Learning Stories for assessment to be consistent with the holistic, sociocultural nature of Te Whāriki (Niles, 2015). Learning Stories have gained a widespread support from the NZ Ministry of Education and ERO, and significant funding was allocated providing professional development and resources for the implementation of this process (Blaiklock, 2010a; Buchanan, 2011; Cameron, 2014; Cameron et al., 2016; Loggenberg, 2011; Niles, 2015). In a Learning Story (explained in more detail in the following section) the experiences and the voice of the child are constructed into a joint story by their teachers or parents (Arndt & Tesar, 2015). According to Smith (2007) the Te Whāriki curriculum framework sees children as active and confident learners who challenge, choose and plan, and the related assessment format, Learning Story, views children as active participants of their own learning and assessment.

The current NZ ECE assessment practice has been determined as formative and implemented in formal written format through Learning Stories or in informal form as a spontaneous response to children's interest during interaction with children (MOE, 2017). The assessment practice is based on continued observations while teachers watch, listen and interact with a group of children or with an individual child. The child is observed in action, in the learning environment, in a sociocultural context (Buchanan, 2011; Carr, 2001; Carr & Lee, 2019; MOE, 2017). The new revised Te Whāriki (MOE, 2017) requires a move away from the assessment approach of using "minute by minute" observations (MOE, 1996, p.26), which was outlined in the previous curriculum (McLachlan, 2018). While observation is still a valid

assessment data gathering tool, the revised Te Whāriki (MOE, 2017) requires teachers to use a wider range of data gathering strategies and utilise both planned, formal, and spontaneous, informal assessment to ensure children's progress in each developmental area is assessed (McLachlan, 2018). Children's learning dispositions are in the centre of the assessment process and supported through assessment (Mitchell, 2008). The gathered assessment information is analysed and utilised to identify changes in children's learning dispositions; to recognise how their identities as learners transfer to different and new situations and to make decisions on how to best meet children's needs (Arndt & Tesar, 2015; Carr, 2001; Carr & Lee, 2012, 2019; Mitchell, 2008; MOE, 2017).

In summary, this section has revealed that the contemporary NZ ECE curriculum and assessment practices show a close connection to the social pedagogical or Nordic traditional model focusing on formative assessment methods to achieve assessment for learning purposes endorsing a narrative assessment tool called Learning story. The current assessment practices in NZ ECE align with the national ECE curriculum framework Te Whāriki. The main purpose of assessment is determined as making children's learning visible and sharing information with parents, teachers and support agencies. Children's learning is seen through the development of learning dispositions rather than acquired specific knowledge and skills.

Learning Stories

A Learning Story is a particular form of pedagogical documentation (Zhang, 2017), a narrative form of structured and documented observations written to the child and family, with the focus on the child's learning dispositions (Blaiklock, 2013a; Lee et al., 2013). Learning Stories are embedded in a sociocultural context where children's relationships with other individuals and with their environment are valued. The sociocultural mindset looks at learning within these interactions (Niles, 2015). Through its collaborative approach Learning Stories acknowledge the importance of family and parent involvement and provide a social space for all to contribute to assessment and curriculum (Buchanan, 2011; Karlsdóttir & Garðarsdóttir, 2010; Lee et al., 2013; Niles, 2015). The narrative approach enables teachers, parents and children to construct learner identities and recreate selfhood as expressions of their culture (Carr & Lee, 2012; Lee et al., 2013).

The key elements of a Learning Story are:

- A narrative description which gives an outline on the significant learning event
- The analysis of the learning event which shows what new information we have gained about the child, what learning has happened
- Future possible learning opportunities
- A connection to previous stories to review progress (Carr & Lee, 2019; Lee et al., 2013).

Carr (2001) describes the process of Learning Story writing as the four D's: describing, discussing, documenting and deciding. The description part concentrates on children's competencies and strengths. The discussing step shows children's, teachers' and parents' reflections on the descriptions. The documenting part links the learning dispositions to the learning experiences in the story, then teachers, parents and children can decide on the next step. Kei Tua o te Pae (MOE, 2004, 2007, 2009), a series of booklets which were published by the Ministry of Education with the aim to guide and develop teachers' assessment practices, recommends the Notice, Recognise, and Respond sequence in the assessment process (Niles, 2015). The booklets explain that teachers notice numerous events while they work with children but will recognise some of them as learning and will respond to them (MOE, 2004). Notice, recognise and respond are the steps that grant a Learning Story to develop from a story to a Learning Story (Cameron, 2014; Carr & Lee, 2019). Using Drummond's definition and placing it in a NZ ECE context, assessment reflects " [the] ways in which, in our everyday practice, we [children, families, teachers, and others] observe children's learning [notice], strive to understand it [recognise], and then put our understanding to good use [respond]" (MOE, 2004, book 1, p. 6).

Learning Story writing is quite a complex process (Carr & Lee, 2012, 2019). Learning Stories are written by the child's teachers who have conceivably built a strong positive reciprocal relationship with the child and developed a holistic picture of them. Parents are also encouraged to actively take part in the assessment process by writing stories or contributing with their insight. The process of Learning Story writing begins with information gathering from multiple sources, through quality interactions and discussions with other members of the learning community - children, parents, family/whānau and other teachers (Carr, 2001; Niles, 2015). According to Mitchell's (2008) report of a national survey, most teachers/educators use six or more methods to gather data about children's learning. The most

common methods were “photographs/digital photographs (96 percent), Learning Stories (94 percent), conversations with children (93 percent), examples of children’s work (90 percent), consultation with parents (87 percent), discussion with teachers/educators (86 percent), and informal observations (84 percent)” (Mitchell, 2008, p. 12). Carr and Lee (2019) emphasise that enhancing and widening learning is the main purpose of assessment not just taking a photograph or describing an event. The quality of Learning Stories depends on the relationship between learners and teachers and the shared reciprocal evaluation of learning (Arndt & Tesar, 2015).

The evaluation or analysis part is the important next step in the Learning Story writing. This step creates connection between the observed event and the learning; this transforms the story into a Learning Story (Carr & Lee, 2019). The analysis outlines the nature, character and quality of the learning episode. It details important features of the child’s learning and makes it public for a range of audiences including children, practitioners, parents, whānau and community agencies (Carr, 2001). Children’s learning episodes are discussed through learning dispositions, and descibed as achievements through a credit based model. Taking an interest, being involved, persisting with difficulties, expressing ideas and feelings and taking responsibilities are key elements of the learning analysis. According to Carr (2001) “a credit focus is appropriate for formative assessment” (p107). The next section of the Learning Story writing process is planning, often addressed as ‘Opportunities and Possibilities’. This part allows the involvement of children in the assessment process by encouraging them to set their own goals and empowering them to become self-directed learners (Carr & Lee, 2019). According to Lee et al. (2013), it is important to leave the planning part open to allow receptivity to children’s learning. Children’s learning is complex, and we do not always know what the next step is. Teachers can be responsive to children’s goals by collaborating with children and allowing them to develop their potential.

Learning Stories, as formative assessment, assess on two levels. On one level the individual stories record and assess significant learning moments. On the other level, a collection of Learning Stories encompasses a bigger picture vision of the child and make children’s growth and development of learning dispositions and competencies visible. Carr and Lee (2019) compare one Learning Story to a mosaic piece which is part of a big narrative made up from numerous stories. The individual stories can be fitted into the mosaic frame in different ways, for different children with different contexts. This process requires teachers to revisit

previous stories with children, other teachers and parents, and make connections among the previous learning experiences (Carr & Lee, 2019; Lee et al., 2013). Carr and Lee (2012) emphasise that a story in a portfolio on its own is not enough. The stories must be linked together, and the obtained assessment information must lead to an action to support and extend children's learning.

The validity of the assessment through Learning Stories depends on how well the child's learning was determined by a teacher and how well decisions were made to support the learning. Carr and Lee (2012) argue that the teachers' professional judgement controls to what extent the collected information supports a specific interpretation and decision making. Carr and Lee (2019) highlight the importance of thoughtfully interpreting the individual child's experiences. According to the authors, strengthening teachers' competencies in assessment practices is a crucial factor in making interpretations and meaningful actions valid (Carr, & Lee, 2012). Arndt and Tesar's (2015) notion clearly outlines the essence of assessment through Learning Stories when they write: "Learning Stories embrace the complexities of the unseen elements in learning and that they engage with the depth and interpretation of learning through opportunities to extend and deepen engagements and to develop ever more complex understandings, through revisiting previous and planning for future learning" (p.80).

Learning Stories are collected in portfolios over a period of time (Karlsdóttir & Garðarsdóttir, 2010). Portfolios may include Learning Stories, annotated photographs, kaiako (teacher) observations, children's art, and recordings or transcripts of oral language. Portfolios are available and easily accessible for children and parents (MOE, 2017). Carr and Lee (2019) see both the paper and electronic portfolio format as important valuable forms of collecting children's Learning Stories. However, these authors strongly disagree with using fixed, narrow, and pro-formal interpretation in e-portfolios which they believe withholds teachers' voice from the stories. Both paper based and e-portfolios have their own benefits. Paper based folios are more accessible for children and provide more opportunities for revision and involvement in self-assessment. E-portfolios are more for adults, they can cross boundaries, and reach extended family members. They provide fast and easy communication with parents and whānau and encourage parental involvement in the assessment process (Carr & Lee, 2019).

In summary, literature in this section outlined that the narrative story format, the sociocultural context and collaborative approach make Learning Stories ideal for assessing children's learning in the context of Te Whāriki's holistic sociocultural focus. Learning Stories' formative nature was explained and the involvement of different agents such as children, parent/whānau and teachers in the assessment process was highlighted. A complex writing process was revealed and the purpose of each part of a Learning Story was explained. Teachers' professional knowledge and understanding in the writing process were shown as key factors in achieving validity in assessment through Learning Stories. The importance of utilising the assessment information from multiple stories through linking stories together to show children's progress of their learning dispositions was emphasised.

2.3 Issues with current assessment practices

Te Whāriki and the Learning Story framework has been highly recognised and regarded within the ECE community for over 20 years (Carr & Lee, 2012; Carter, 2010). However it has also been critiqued on many aspects by scholars who are not all convinced of the effectiveness of the current curriculum and assessment system (Blaiklock, 2013a, 2013b; Buchanan, 2011; Cameron, 2014; Cameron et al., 2016; Loggenberg, 2011; McLachlan, 2018; Perkins, 2013; Zhang, 2017). Critiqued areas discussed in following sections include the dominant status and effectiveness of Learning Stories and teachers' lack of confidence and competence in the current assessment approach. Factors that may contribute to these issues are also reviewed.

2.3.1 Dominant status and effectiveness of the Learning Story approach

Despite the strengths and benefits of the Learning Story approach many scholars question the dominant status of this assessment tool and its effectiveness in meeting with all the assessment purposes of ECE. Scholars argue that by themselves, Learning Stories are not sufficient (Blaiklock, 2010a, 2010b, 2012; Buchanan, 2011; Cameron, 2014; Cameron et al., 2016; Fraser & McLaughlin, 2016; Loggenberg, 2011; McLachlan, 2018; Perkins, 2013). Blaiklock (2013a) believes that the widespread use of Learning Stories - according to Mitchell (2008) 94% of teachers use Learning Stories as their main assessment tool – do not indicate that Learning Stories are practical and best fit for all purposes. Blaiklock (2010a) and McLachlan (2018) argue that assessment of children's oral language development, which is a fundamental area of learning, is one of the examples illustrating the lack of practicality of the

Learning Story approach. The authors raised their concern about the effectiveness of teachers' assessment practices in documenting changes in individual children's progress with the purpose of seeking assistance if a child's development appears delayed. According to Blaiklock (2010a) the real danger is that children with significant language delay may not be identified and may therefore miss out on the support of effective early intervention. This concern was supported by ERO's (2017) current report on children's oral language development. "ERO found very few services where teachers had a clear and shared understanding of expectations for children's oral language learning and development. This lack of understanding impacted… on planning, assessment and evaluation processes" (p19). Besides children's language development Blaiklock (2013b) also questions the lack of requirements for teachers to assess imperative areas such as social development, physical skills, and mathematical concept knowledge. Not everybody shares this concern. Niles (2015) explains that the Learning Story framework was purposefully designed to avoid determined road maps of how to do assessment and how to write a Learning Story, so teachers and centres could establish their own relevant ways of assessing children's learning. Blaiklock (2013b) believes this practice could contribute to inequality of learning outcomes among different centres and lead to disparities in learning which may be found at school entry.

The idea of the use of additional assessment tools alongside Learning Stories has been raised by many scholars (Blaiklock, 2010a; 2013a; Cameron et al., 2016; Loggenberg, 2011; McLachlan, 2018; Zhang, 2017). Loggenberg (2011) and Zhang (2017) strongly suggest that ECE assessment should not rely on one single assessment tool and should be carried out on a range of ways. Zhang (2015) finds it problematic that teachers are cautious to use different assessment tools, or maybe feel not supported to do so, even though they are well aware of the limitations and shortcomings of the Learning Story approach. Loggenberg (2011) in her research suggests that teachers should be trained in using multiple assessment tools since "not all assessment purposes can be successfully carried out through Learning Stories" (p. 62). Cameron et al. (2016) findings show a wish for wider range and more effective assessment methods for four-year-old children. "A more skills-based assessment with a focus on identifying areas that a child excels in 'and' (a big AND) things they struggle with and may lag behind so they can be given the support they need to improve" (p. 14). As a practical concept McLachlan (2018) suggests the idea of ipsative, or self-referenced assessment. In education, ipsative assessment means that the assessment is referred to children's former performances, resulting in assessment information expressed in terms of their 'personal best'

(Isaacs, Zara, Herbert and Combs, 2013) . This method might involve observing the child in the same task or activity through time. Teachers would take notes of the child's particular skills over a period of time and compare the child's performance against their own previous performance with the purpose of tracking and monitoring change (McLachlan, 2018).

2.3.2 Teachers' lack of confidence and competence

There is a strong concern among scholars about teachers' lack of confidence and competence in the current assessment approach in the NZ ECE sector (Cameron, 2014; Cameron et al., 2016; ERO, 2007, 2011; Loggenberg, 2011; McLachlan, 2011; Perkins, 2013; Stuart et al., 2008). Loggenberg's (2011) study revealed that a significant low percentage of teachers felt confident in identifying children's learning needs and providing feedback to parents and staff. According to ERO (2007) teachers' assessment records often focused on children's participation in activities and described enjoyment rather than children's learning; fifty percent of teachers' Learning Stories contained inadequate evidence of children's learning. Perkins (2013) suggests that problematic areas for teachers include knowing what learning to notice during observations, knowing how to abstract information from photographs, video recording and children's work and how to analyse them. Loggenberg (2011) found that even though portfolios included annotated and unannotated collections of children's works, teachers had limited understanding of how to analyse and use the information to show progress over time. Perkins' (2013) concern is that if teachers are struggling with information gathering about children's learning then the recognising and analysing part of the assessment will not be effective because of the lack of adequate information. Perkins (2013) believes that the great benefits of the narrative approach is undermined by teachers' lack of theoretical understanding of narrative assessment which results in a surface level implementation of the approach. The substandard recognition and analysis of learning in Learning Stories definitely weakens the effectiveness of the narrative assessment approach (Stuart et al., 2008).

Teachers' professional approach and attitude is an important aspect of quality assessment (Cameron et al., 2016; Karlsdóttir & Garðarsdóttir, 2010). Cameron et al.'s (2016) study found that their participants were disappointed by fellow teachers who produce substandard work in Learning Stories which they believed, belittles the profession. Karlsdóttir and Garðarsdóttir's (2010) study on Learning Stories highlights how different teachers' views on children's learning depend on teachers' different approaches towards assessment, on teachers' varying training, background and professional experiences. The study found that

children's documented learning was influenced by who wrote the story, what part of the day the child was observed and during what activity the observation occurred (Karlsdóttir & Garðarsdóttir, 2010).

Documenting children's progress through Learning Stories is an important aspect of the current assessment approach (Carr & Lee, 2019). According to Carr and Lee (2012) Learning Stories carry significant information through space and time, and create substantial chains of learning moments. Teachers should recognise these chains and make the learning progress visible (Carr, & Lee, 2012). Many scholars are concerned that teachers struggle with this practice and have limited understanding of how to show continuity in children's learning and progress in Learning Stories (McLachlan, 2018; Perkins, 2013; Stuart et al., 2008). Stuart et al.'s (2008) report supports this concern stating that most items in the audited children's portfolios were standalone; the portfolios did not have evidence of progress and continuity and did not indicate that the predetermined next steps were followed up or acted upon. Children's interest was linked mainly to centre experiences and links to the home environment were not evident. Showing children's developing working theories in a new, wider context was not evident in children's portfolios (Stuart et al., 2008). Cameron et al.'s (2016) study reveals concerns about the lack of continuity between the ECE and school sectors. Their participants explained: "Teachers have to write Learning Stories in a way that new entrant teachers are able to read between the lines to understand the child as Learning Stories are not deficit based" (p.14). Cameron et al. (2016) suggest that it would be beneficial to have more discussion between the ECE and Primary sector about what information is helpful in enabling new entrant teachers to support children as they transition to school.

2.4 Factors that may contribute to the issues with the current assessment approach

Scholars refer to various factors within assessment practices in ECE which may contribute to teachers' struggles with the current assessment approach. The lack of understanding of learning dispositions which are the underlying pillars of Learning Stories; the lack of effectiveness of the Kei Tua o te Pae (MOE, 2004, 2007, 2009) resource; the lack of time for consulting with colleagues and story writing; and the lack of guidance for assessment in Te Whāriki are all key factors.

2.4.1 Understanding of learning dispositions

Literature shows that teachers' lack of understanding of learning dispositions play a significant role in their struggles when analysing children's learning and showing continuity in their progress (Stuart et al., 2008). Learning dispositions are important since they describe children as learners in action, which is a requirement of an effective narrative (Carr & Lee, 2012; Stuart et al., 2008). Blaiklock (2013b) suggests that the main difficulty is that the dispositions teachers should assess have not been clarified and the links between particular behaviours and particular dispositions and strands is unclear. Stuart et al. (2008) reported that some teachers found using dispositions impractical and unnecessary and they would rather refer to Te Whāriki itself when analysing children's learning. There was lack of clarity in some services about what learning dispositions are. Stuart et al. (2008) found quite concerning and surprising the ambivalent and moderate support and use of learning dispositions in assessment despite their central position in learning outcomes in Te Whāriki (Stuart et al., 2008).

2.4.2 Kei Tua o te Pae

Many scholars question the Ministry's support document, Kei Tua o te Pae's (MOE, 2004, 2007, 2009), effectiveness and adequate guidance for teachers' assessment practices (Blaiklock, 2012; Buchanan, 2011; Cameron, 2014; Loggenberg, 2011; McLachlan, 2018; Perkins, 2013; Zhang, 2017). The booklets contain examples of how teachers attempt to use Learning Stories to assess children's development with very little guidance on how to assess changes in children's learning dispositions and specific developmental areas such as language, physical development and social relationships (Blaiklock, 2013a). Kei Tua o te Pae primarily focuses on only one approach to assessment, Learning Stories (Blaiklock, 2010a). According to McLachlan (2011) and Perkins (2013) Kei Tua o te Pae may not have helped teachers to understand the 'how' and 'what' of assessment. The insufficient guidance provided could be the reason for teachers' substandard approaches to narrative assessment, the wide variety of assessment quality and the failure to use Learning Stories effectively. The confusion of only focusing on children's strengths and achievements and overlooking that some children may need different in-depth assessment could be linked to Kei Tua o te Pae's appeal for teachers to document what children can do when they are at their best (McLachlan, 2018).

2.4.3 Time for consultation and story writing

Time, especially the lack of it, is a significant factor contributing to the quality of assessment in the ECE sector. Lack of time can put pressure on and cause stress for teachers (Cameron et al., 2016). Learning Story writing is a time-consuming assessment approach (Carr, 2001) that takes up a large amount of teachers' time which could be spent more productively with children (Blaiklock, 2013a). Scholars argue that teachers' limited time to share and reflect on assessment information and document collaboratively with colleagues affects the quality of their assessment (Blaiklock, 2012; Cameron, 2014; Cherrington, 2012; Perkins, 2013; Stuart et al., 2008). Carr and Lee (2019) highlight how critical it is for ECE teachers to have time to discuss and share assessment information with each other, share Learning Stories, give each other advice and plan for the 'what next' together. Karlsdóttir, & Garðarsdóttir's (2010) study also shows that reciprocal collaboration is a key element in the Learning Stories approach. Discussions of learning experiences and subjectivity such as feelings, attitudes and values as a team is very effective in helping teachers interpret children's experiences. Allocating ECE teachers adequate time for consultation and story writing would establish a strong quality assessment practice (Carr & Lee, 2019; Cherrington, 2012; Niles, 2015).

2.4.4 Guidance in Te Whāriki

New Zealand ECE assessment practices are closely linked to Te Whāriki's principles and learning outcomes (Carr & Lee, 2019). Blaiklock (2012) suggests that Te Whāriki's (MOE, 1996) unclear and generalised learning outcomes make them hard to use for assessment purposes and give little guidance in regards of children's developmental level and age. McLaughlin et al. (2015) shares this view stating that the aspirational nature of Te Whāriki do not give enough support to teachers to know how to implement the principles and strands in their practice. According to McLachlan (2018) in the revised Te Whāriki (MOE, 2017) the principles, strands and goals stayed the same but the learning outcomes were reduced from 118 to 20. The revised document indicates that the 20 learning outcomes are seen as the valued learning alongside parents' aspirations, which teachers should assess, and the centre programme should support. The reduction of learning outcomes may help teachers to focus what they are looking for as evidence of children's learning (McLachlan, 2018).

In summary, this section has revealed that after two decades of the implementation of the current assessment approach, many critics argue that teachers still struggle to make children's learning progress visible with Learning Stories and that they lack confidence and competence

in its use. Scholars suggest many factors as possible reasons for this struggle including the lack of training in the use of other assessment tools; the ineffectiveness of Learning Stories to meet with all assessment purposes; Te Whāriki's insufficient guidance for assessment; and teacher's limited understanding in narrative assessment and learning dispositions which may link to their training and the inefficiency of professional development resource Kei Tua o te Pae.

2.5 In Summary

This literature review has provided an outline of the characteristics of assessment and defined its important role in quality ECE practices. Two different approaches towards assessment and curriculum emerged from international literature and were explained, the social pedagogical or Nordic tradition and the infant school approach or Anglo-Saxon tradition. It has been suggested that the merger of the two approaches may contribute to higher quality ECE curriculum practices. Three purposes of assessment in education were outlined, the first - keeping track of progress and improvement, second - supporting learning, and third - keeping people accountable for the quality of their practices. All purposes were suggested equally important in a high quality ECE practice. Multiple data collection and data recording methods were described that are in use in different countries.

A number of common aspects of the NZ ECE assessment and curriculum practices and the Nordic social pedagogical tradition were examined. NZ assessment practice is closely linked and aligned with the national ECE curriculum Te Whāriki's principles, strands and learning outcomes. There is a strong focus in current official MOE documents and advice on the child, who is encouraged to continuously work on and develop his/her learning dispositions to become a lifelong learner. The characteristics and benefits of the currently dominant formative assessment tool, Learning Story, which utilises a narrative assessment approach to capture and analyse the child's learning, was outlined in the review. Many scholars' concerns about teachers' lack of understanding and practical competence in narrative assessment which affects the practicality and effectiveness of the current assessment approach were also outlined. These concerns set the ground for further research and investigation in everyday assessment practices. This study endeavours to examine how assessment information is actually managed in centres, what underlying aspects make assessment practices effective and what areas teachers find challenging in the assessment process.

The next chapter outlines the methodology utilised in the study and describes the process used to analyse the data and the ethical practices that were followed during the investigation.

Chapter 3

Methodology

3.1 Introduction to theoretical approaches

3.1.1 A qualitative approach

A qualitative approach was chosen for the research study as it was deemed best fit for achieving its multiple purposes. Qualitative research occupies a significant place in research literature (Nowell, Norris, White, & Moules, 2017). Qualitative methodologies are quite distinct from objective quantitative methodologies (Sloan & Bowe, 2014). While the quantitative approach requires rigidity of data and emphasises on the measurement and analysis of causal connections between variables, qualitative methodologies have the capacity to use real people's real experiences in real settings and describe their experiences in depth (Hatch, 2002). The qualitative approach lays emphasis on the qualities of the individual, the processes and meanings that are not experimentally scrutinised or measured in terms of amount, intensity or frequency (Denzin & Lincoln, 2005). Qualitative research uses text as data along with evidence that can be observed, recorded, that characterizes and approximates. Data that can be arranged categorically based on the properties and attributes of a phenomenon (Denzin & Lincoln, 2005). Qualitative research explores, interprets, makes meaning of a world in which reality is socially constructed (Sloan & Bowe, 2014) and stresses the intimate relationship between the researcher and the phenomena which is studied (Denzin & Lincoln, 2005).

This research is grounded in a constructivist-interpretive paradigm which aims to "understand and interpret the world in terms of its actors" (Cohen, Manion, & Morrison, 2017, p.51). This paradigm was chosen to give the study the best approach to explore the phenomena from the interior. This study takes the perspective of the research participants and interprets the phenomena according to the meanings the participating teachers brought to them (Denzin & Lincoln, 2005; Ritchie et al., 2013). The research recognises that meaning is constructed by people through their experiences and understanding; the knower and the known are co-created during the inquiry process (Krauss, 2005; Hatch, 2002).

The constructivist-interpretive approach enabled the participating teachers to bring their own reality, their experience, and their world of teaching from their own perspective to the investigation, and allowed new understandings to emerge from their perspectives (Cohen et al., 2017). A qualitative interpretive approach enabled me as a researcher to have a strong connection with the phenomena, interact with the subjects, and inquire their knowledge and views on the issues (Krauss, 2005). It also allowed me to acknowledge my perspectives and personal experiences of the field (Ritchie et al., 2013; Hatch, 2002).

3.1.2 The phenomenological approach

The study explored the participating teachers' subjective information that referred to the reality of their everyday work experiences, to their lived and tested practices (Krauss, 2005). The research aimed to allow the participants a voice to bring important characteristics of the phenomena to light and guide the data gathering process by determining which key elements came into focus in this study. They had the freedom to talk about and outline insights of their practical assessment experiences that they considered imperative.

It was Husserl (Sloan & Bowe, 2014) who recognised that the founding condition of attaining the internal reality is by focusing on someone's conscious experience. The methodology he developed, called phenomenology, focuses on consciousness and studies the phenomena from the inside (Lock, 2010). According to Pollio, Henley, and Thompson (1997) phenomenology is "a determinate method of inquiry [directed toward] attaining a rigorous and significant description of the world of everyday human experience as it is lived and described by specific individuals in specific circumstances" (p.28). Phenomenological research takes a bottom up viewpoint which makes it a democratic way of doing research (Sloan & Bowe, 2014). The outlined phenomenological approach resonated with the purposes of the study and was an appropriate approach to guide the investigation process.

During the research I was fully aware that a phenomenologist researcher cannot be separated from their own assumptions (Davison, 2014). They bring themselves into the research (Finlay, 2011), are present throughout the process, and develop a deep understanding of the phenomena while gaining self-awareness and self-knowledge (Henriksson, 2012). Therefore, I continuously reflected on my own position as a researcher, stepped back to view the work as a whole, and made a strenuous effort to focus on the participants' ideas and understanding of the phenomena as seen through their experiences (Sloan & Bowe, 2014).

3.2 The method

3.2.1 Sampling

The study used purposeful sampling by inviting early childhood centres known for high-quality practices and teachers with a broad knowledge in assessment practices to participate in the research. The centres were chosen by recommendation by other teachers who indicated that there might be knowledgeable candidates available there and by my personal knowledge through professional relationships with teachers from those centres. The aim was to recruit teachers who had a wide range of knowledge, experience and opportunity to be involved in assessment, planning, programming and performance evaluation procedures in their practice.

I sent an Introduction letter (Appendix A) by e-mail to each centre in which I introduced myself and explained my intentions with the study. I chose teachers to participate who had ample experience with ECE assessment practices and had the potential to contribute different viewpoints such as a practicing teacher and a senior leader perspective. I gave each possible participant the opportunity to refuse to participate and only involved teachers who were genuinely willing to take part in the study.

The participants were five ECE teachers: One kindergarten head teacher, one kindergarten teacher with head teaching experience, two centre managers who had active roles in the everyday teaching and assessment practices in their preschool and one preschool head teacher. The centres represented different regions of NZ. The study was interested in all the participants' experiences in their response not just their current centre's practice.

3.2.2 Participants and settings

The participating teachers brought a wide range of ECE teaching experience and extensive practical knowledge to the study. The participants had 114 years of ECE teaching experience in total, which individually varied between 18 years and 31 years. The average teaching experience of the participants was 22.8 years.

Two participants held a Bachelor of Teaching and Learning ECE qualification, one participant held a Play centre Diploma with a Bachelor of Education Degree (Psychology), one teacher had a Diploma of Teaching ECE with a Bachelor of Teaching Degree and a Post Graduate Diploma in Education, and one participant had a Master of Teaching and Learning Degree.

The type of settings and institutes the participants worked for during their ECE practice included: playcentres, home-based childcare, community childcare centres, kindergartens, privately owned centres, corporate centres, Toi Ohomai Institute of Technology, and Waikato University. Two of the participants owned their own centres.

The roles the participants fulfilled during their professional practice were: ECE teacher (under two and over two), head teacher, professional learning facilitator, coordinator, tutor, lecturer, head of education department, centre manager and owner.

The various settings and different roles the participating teachers drew their views from enabled the study to investigate the phenomena from different perspectives. The vast knowledge and diverse experience of the participating teachers gave the study a rich data source and a real-life outlook of current ECE assessment practices.

3.2.3 Research method

The study used in-depth semi-structured individual interviews to collect qualitative data from teachers which, according to Creswell (2017), is the primary method of data collection for phenomenological studies. Semi-structured interview is the most commonly used type of interview (Elliot, Fairweather, Olsen, & Pamaka, 2016) which perfectly suited the purpose of this study for three reasons. Firstly, the less structured approach allowed me as the researcher to be open to new ideas being raised during the interview by the interviewee and gave me the flexibility to rephrase questions, change order, or abandon some lines of questioning when the participant had already covered them in their dialogue (Elliot et al., 2016). Secondly, there were a wide range of answers I received from the participants. Using semi-structured interviews meant I had the freedom to ask extra unplanned questions to explore and clarify the teachers' responses and to ask follow-up questions to explore dialogues in more depth. Using this approach sacrificed uniformity across all interviews in favour of a depth and richness of data, but because people's experiences were likely to be diverse, there was no reason to ask the same questions to everyone (Galletta, 2016). Some interviews raised areas I had not considered or added extra value that I had not planned on. For example, one participant used already written Learning Stories to give concrete examples for her answers. It was extremely hard to transcribe these parts of the interview but later they become very valuable as great examples of different aspects of Learning Story writing. Thirdly, I felt it was important to demonstrate to the participants that I was interested in and valued all their

contributions. Follow-up questions, asking for explanation and details were useful ways of doing this and in turn, made participants more involved in the interview process which also contributed to the credibility of the study.

I conducted two pilot interview sessions, which gave me good indication what ideas teachers would mention during the interviews. The pilot interviews also made me think about how I phrased my questions, their order, the usefulness of the questions, and the structure of the interview (Galletta, 2016). I wanted to make sure that everybody had the opportunity to consider every area of information use so at the end of the interview I asked probing questions and asked for example '*In what ways have you experienced using assessment information for evaluation purposes?*' if the participant had not mentioned it before. My questions were open-ended in order to create space for participants to narrate their experiences; I phrased my questions as *'Could you tell me about . . . ?' or 'What do you mean by . . . ?* I focused on listening carefully to the unfolding topics and took notes of insights I wanted to return to later in the interview. I allowed space for the areas to develop, holding back some questions until the participant had explained their ideas freely (Galletta, 2016).

The interview structure started with questions (Appendix B) about data gathering methods and data documenting methods to see if the participants used similar ways of gathering and documenting assessment information so I could compare how they actually utilised this information. I wanted to find out whether participants all used Learning Stories and whether they utilised the data from them. However, I did not want to limit teachers' thinking by asking questions only about Learning Stories. I kept it open referring to the data as assessment information. Then an open-ended question asked teachers to explain in what ways they utilised their documented assessment information. I took notes for every area the teachers mentioned they utilised Learning Stories for and asked them to talk about these in detail.

The interviews were undertaken during a 4-month period. Each individual interview lasted around an hour or hour and a half and they were all recorded. Three interviews were conducted face-to face and two by internet call. The face to face interviews took place in a convenient location for the teachers, in their centre or home.

3.3 Ethical considerations

The study gained ethical approval from the University of Waikato Division of Education Ethics Committee (Appendix D). In relation to my ethical practice, I provided the participants with an Introduction letter (Appendix A) with a clear explanation of my research and an introduction of myself. I informed them about the process and the risks and benefits of the research. In the Consent form (Appendix C), I emphasised the voluntary nature of the research and gave participants the right to withdraw from the study without any explanation up until the transcript had been approved. To ensure accuracy of the transcribed interviews I asked each participant to read their interview transcript and make changes as they felt necessary or withdraw their data if they wished. Since I personally met with the research participants and I am aware of their identities, I offered confidentiality in the reporting of the findings by replacing their names with pseudonyms and not mentioning the name or location of their centre in the study.

There was no identified likelihood of potential harm to any participant although I was aware that organizing interview time, participating in the interview and the extra workload of reviewing the transcripts could cause extra stress for participants. My questions had the potential to cause unintentional discomfort for participants which could be considered as potential harm. To minimize stress in relation to organising the interviews I was flexible and adjusted to the participants' needs with meeting time and place. To avoid potential discomfort or embarrassment caused by my questions I made it clear in the Consent Form that there were no right or wrong answers for the questions. During the research process all the written notes, and recorded interviews were only accessible to me and protected by passwords on my computer. In accordance with information and consent forms, all data will be destroyed after five years.

3.4 Trustworthiness of the research

In qualitative research, instead of validity and reliability, researchers talk about trustworthiness of data, which is addressed through depth, richness, honesty and scope of the data gathered, the objectivity of the researcher and the extent of triangulation (Cohen et al., 2007). Guba (1981) proposes four criteria of establishing trustworthiness in qualitative research, these are credibility, transferability, dependability, and confirmability of the study (as cited in Shenton, 2004).

a) *Credibility*, a term used in preference to internal validity, demonstrates how congruent are the findings represented by the researcher with the respondents' views (Shenton, 2004; Nowell et al., 2017). Lincoln and Guba (1985) both agree that credibility is one of most important aspects of achieving trustworthiness in qualitative research (as cited in Shenton, 2004). To establish credibility of my study I undertook the following measures:

   i. Gave a detailed description of my background, qualifications, experience, and my personal interest in the issue with the purpose of providing information for the readers to establish credibility acknowledging that I am the instrument of the data collection and analysis process.
   ii. Used well established research methods.
   iii. Made myself familiar with the participants' settings and background and built a good rapport with them to establish a trustful relationship which encouraged participants to be honest and open in their responses.
   iv. Utilised site triangulation purposefully choosing participants from different services. The settings were chosen from different parts of NZ; and data triangulation by conducting multiple interviews with teachers with a wide range of experiences who seem to share the same viewpoint and talked about issues in the same way, which reinforced the strength of the findings (Shenton, 2004).
   v. Used iterative questioning (Shenton, 2004). I made notes to myself during the interviews and returned to parts previously raised by the participants and asked rephrased questions so I could detect discrepancy in the data.
   vi. Made sure of the accuracy of the data by checking it on the spot by rephrasing questions, summarising, and clarifying viewpoints the participants brought up during the interviews. I sent the transcripts back to each participant to check to consider that their words actually match what they intended to say. Participants rephrased and clarified their viewpoints and sent the transcripts back with their full approval.
   vii. Used a reflective journal during the development of the literature review, the data collection and analysing process. I documented my impressions of the interviews, every idea, pattern I saw interesting in the data, and emerging theories during the analysis. I left notes to myself to pay

attention to or emphasise matter in later stages. Reading back my reflective journal helped me to monitor my own "progressive subjectivity" (Lincoln & Guba, 1985, cited in Shenton, 2004, p.68).

viii. Gave a thorough explanation of the background of the phenomena and described in detail all the factors that teachers felt were important aspects or influencers of the phenomena using as many real qualitative episodes with the participants' own words as possible to help the reader determine the degree to which the overall findings 'ring true'.

ix. Had frequent meetings with my supervisor which provided a sounding board to test and develop my ideas, recognise my own preferences and biases, to discuss alternative approaches, and simply being guided by her experience and practical knowledge in research.

x. Used every emerging opportunity to discuss my ideas with my working colleagues and let them challenge my assumptions and give a view of the matter with real detachment which helped me to strengthen my arguments.

b) *Transferability*, a term used in preference to external validity, indicates the scale that findings of one research project can be applied to other situations (Shenton, 2004). I provided comprehensive descriptions of contextual information to enable the reader to ascertain whether my findings are transferable to his/ her setting (Shenton, 2004). I have provided sufficient details of the context of the fieldwork such as background information of participants and their settings; the data collection method; details of the data collection process and the time period over which the data was collected (Shenton, 2004; Nowell et al., 2017).

c) *Dependability*, a term used in preference to reliability, is concerned with whether the research is repeatable in the future by other researcher to gain similar results (Shenton, 2004). I have attempted to give a clear, logical, and traceable description of the research process detailing the research design, how the methods were executed, how the data was collected and analysed, and the limitations of the process of the research.

d) *Conformability*, a term used in preference to objectivity, demonstrates that findings resulted from the experiences of the participants and not researchers' own predilections (Shenton, 2004). In relation to conformability, I have acknowledged my beliefs which underpinned my decision making for research approaches and methods

and admitted any limitations of the study I am aware of. I have created an audit trail which gives clear outlines of the research process which could enable readers to trace the course of the research step-by-step (Shenton, 2004; Nowell et al., 2017).

3.5 Data analysis

There is no one right way to conduct a phenomenological analysis. According to Finlay (2011) the researcher has the freedom to adjust the process and choose an approach which works for her. In my data analysis process, I used the seven step model outlined by Finlay (2011). I also followed Nowell et al.'s (2017) thematic analysis guidelines which give very clear explanations of what each step of the analysis process involved.

Step 1 - Reading and re-reading

I transcribed the interviews by myself which gave me the opportunity to become very familiar with the data (Finlay, 2011). I listened to the recordings numerous times and wrote down what I heard. Then I went back to listen and read again and fill out the gaps I missed. Before sending the transcripts for checking, I listened to the recordings again and reread the transcripts at the same time once again, then I proofread the transcripts. In taking the steps of reading, organizing, and transcribing, I was already engaging in early analysis (Galletta, 2016).

Step 2- Initial noting

While I was listening and re-reading the transcripts, I started to write down key points that I felt were interesting and resonated well with the research questions (Finlay, 2011). Qualitative research is less focused on the quantity of data, with more attention to the meaning generated by the data (Galletta, 2016). I felt it was important that each key point was documented and studied for its relationship to the research question and other emerging topics in the analysis. Nowell et al. (2017) suggest using a reflective journal which I found very effective. I recorded every thought that occurred to me about what participants talked about, important key points that they mentioned. When I felt the key point was quite significant in relation to the research question, I allocated a page for it in my journal and started to record every relevant comment about that key point from every participant. I left notes to myself during the transcribing and proof-reading process to follow up or check later (Galletta, 2016).

Step 3- Developing emergent themes

In this study the themes were initially generated inductively from the raw data. In this sense the research is data-driven (Nowell et al., 2017). I systematically worked through the transcripts and gave full and equal attention to each part and coded every relevant section (Nowell et al., 2017). I collected all the key points the teachers talked about and started to look for patterns to formulate themes with the key points which were mentioned the most. I identified themes by choosing significant concepts that link large portions of the data together.

Step 4 - Searching for connections across key points

I found that connecting and organising key points under a broader theme was quite challenging. Some key points shared connections and started to show thematic themes. Some key points were on the side-line and did not appear to belong to any emerging themes (Galletta, 2016). I was anxious not to leave important key points out which I learnt is very common for novice researchers (Nowell et al., 2017). So, while I refined the themes, I went back to the interviews again to see if there were more underlying key points that I missed. I used different colour coding for parts that I had already connected to themes, parts that suggest different key points and parts that may be useful later.

Step 5 - Bringing the cases together

At that stage I found myself constantly ‘running’ back to the original interviews to make sure that the themes originated from the data not from my preconceptions. I felt it would be useful to develop a record which brought all the key points from every interview together. I developed an Excel spreadsheet with all the possible themes and key points I recorded in my reflective journal and went through all the interviews one more time. I documented what was said about each theme, who said it, who did not. I added new key points that I missed at the previous rounds. After this process I could go back to this summary record any time to check on details; everything was there in black and white.

Step 6 - Looking for patterns across cases

I created a mind map to see how the themes connected to each other and what hierarchy they had. I found that some themes had not enough data to support them or they collapsed into

each other and other themes were too diverse and needed to be broken down (Nowell et al., 2017). After I found out how the themes related to each other and what the hierarchy was I started to name them. I found naming the themes the most challenging. According to Nowell et al. (2017) theme names need to be punchy which give the reader an immediate sense what the theme is about. It took me a long process of naming, changing and re-naming themes. These authors also suggested that spending ample time to develop themes would enhance the credibility of the findings. This notion justified the time I spent on this step. I kept all my draft versions of the development and hierarchies of themes. I revisited these drafts comparing them with the final version to make sure that the conclusion was logical and firmly grounded in the data. It also helped to establish confirmability through an audit trail (Nowell et al., 2017). I wrote a detailed analysis of the themes giving as much voice to the participants as possible.

Step 7 -Taking interpretations to deeper level

I approached this step in two phases. In the first phase my report findings attempted to show purely how the data portrayed participants' experiences in all their complexity which is, according to Finlay (2011), the biggest challenge for a phenomenological researcher. The phenomenological approach can make the findings obvious, "seem quite mundane…, the 'oh I knew that' variety" (Finlay, 2011, p.249). But Finlay (2011) also suggests that before any research we do not understand the phenomena fully in a way that was useful for other people. Reporting the findings from the participants using their own words fulfils the purpose of the study which is to give teachers the voice to decide what key elements are related to the phenomena. It also gives the reader the opportunity to see that the findings are not made up but are grounded in teachers' experiences (Finlay, 2011). In the second phase of the interpretation I went back to my literature review of past studies which relate to the phenomena and compared and contrasted my findings to the existing body of knowledge (Shenton, 2004; Nowell et al., 2017).

3.6 In summary

This chapter has outlined the underlying rational for undertaking a qualitative approach and using a constructivist-interpretive paradigm. The phenomenological approach underpinning this project and the data collection methods were discussed. Important information about the

participants' backgrounds were disclosed. Ethical aspects and validity issues have been discussed, and the approach to data coding and analysis outlined.

Chapter 4

Findings

4.1 Introduction

This research study has been designed to gain a deeper insight of the practical aspects of teachers' everyday assessment practices, with the goal of unveiling how complex the process is and see what is really happening, what is really working in reality. The study was interested in how the participating teachers collect data for assessment purposes; how they document the information; how they utilise assessment information and what challenges they encounter during the process. The research also highlighted important aspects of the teachers' competencies which seem imperative for the effective employment of assessment information from Learning Stories.

4.2 Information gathering in ECE context

4.2.1 The relationships factor

First teachers were asked to talk about how they collect information for assessment purposes. Before detailing any information gathering method, 4 of the 5 teachers felt it was crucial to emphasise how important relationship building with the child and the family is, and how significant knowing the child and their family's background are in the assessment process. As the following quotes illustrate:

> The more we know about [the child], the more we can understand about their identities as themselves as learners, with their experience, with their whānau, with the collective experience of their communities (P3).

> When I first start doing Learning Stories on a child, information I am collecting is more for me and for the parents to recognise that I am getting to know their child. As I get to know the child the relationship deepens, then I can write more formative Learning Stories about where I think the child is, especially after talking to their parents about what happens at home … what do they like and knowing the things the family is doing. That is much meaningful assessment (P1).

Teachers explained they spend a long period of time connecting and building relationships with the child and their family before they even attempt assessment work. They explained that knowing and being in tune with the child helped them to develop a holistic picture of

them, notice change in their behaviour and development and identify their learning needs. Teachers suggested that knowing the child is the key for thorough meaningful assessment.

Teachers in this study were found to highly value parents' knowledge as information sources and used different ways to access their funds of knowledge including through conversations, 'Getting to know me' sheets, parent questionnaires, teacher-parent meetings, and interviews. All the participants emphasised that conversations with parents are the best way to obtain information. They agreed that dialogues with parents about the child's observed activities could provide them with valuable background information.

4.2.2 Data gathering process

All the participant teachers believed including multiple perspectives in their assessment was fundamental. Participants incorporated children's, parents' and other teachers' voices in their information gathering process. Teachers commented that talking and listening to children is very important even if they are not verbal. Observing body language and listening to the child enable a teacher to find out what the child likes.

In relation to information gathering, teachers talked about the following methods:

> Observations. I think in quite a natural way when observations of my daily interactions with children. Something that really stands out, that I am noticing. I think that would be the main way. Obviously, dialogue with colleagues, sometimes dialogue with parents. Using photographs... Taking notes of the children's voice, any spoken word. Discussing with parents sometime the observation, getting some background information from them. Discussing with colleagues. Often, I would look back, you know previous stories, relating it, see if it's common themes. If it is a reoccurring theme (P5).

> Definitely parents, definitely children, you know having those conversations. Children will tell you what they know, or they will show you. Parents come in as the holder of the most knowledge about that child especially when they start in a preschool, young. We use a 'Getting to know you' sheet. So, we invite parents to formally share information with us and what their aspirations for their children are as well. It is pretty common throughout services (P2).

> Lots of informal observations on children obviously, while playing with them, spending time with them. What is in their play, what is in conversations with children? It is all informal gathering of information about what the learning, what they are interested in. Asking them questions, about what they are doing. From that I might take notes and talk to other teachers about it, see if they have noticed anything (P4).

P3 explained why she disagrees using the term of ‘observing’:

> Observing is not the word we would use so much. Just only because observing seems to have… traditionally speaking more of this objective, ‘I am standing out here, looking at you, and making a series of judgement’. And they are summative judgements. We are not doing that. We are emotionally connected. So, we are owning our biases. This is what I think, I see of you. And we are tentative. This is formative assessment (P3).

P4 developed a documentation form to gather information from multiple sources:

> I am writing running records of conversations, a parent part documentation and there is a child voice documentation as well as a collegial area just to document. The end of the cycle of the child’s learning that is a very rich evidence of all those multiple voices coming in that learning. And all the ways that I have cooperated community into it (P4).

Three teachers reported using the method of writing the assessment together with the child, capturing their words and thinking about their own learning. P4 explains:

> What I am trying to do, especially with my four-year-old children, the ones that really can give you that feedback… before I finish the story on the laptop, I will bring it out and talk about it. Talk about what went on. I read the story to them, we talk about photos, and then I get their perspective what learning was happening there. Often, I get them to name their story. So, right from the beginning… they have a real interest in that story (P4).

However, P5’s comment showed this method does not work for everyone:

> In the real-life context of our busy job, there is not enough hours in the day to do it. I have once or twice literally got my laptop out, uploaded the photos and we tried; you know let them tell me what they like to put in. It was a fun exercise, but it was not very practical (P5).

Teachers utilised different techniques to achieve parent contribution in the assessment process. P1 explained:

> So really the korero with parents is the best way to get parent involvement. If you have written a story about a child, go and speak to a parent about it. Show them and talk to them about it, because then you can get a lot more information right there, and then that you can store in your brain and write it a little bit later (P1).

P4 mentioned other methods:

> I encourage parents to physically put stuff in so I might leave a gap in the story or ask a question too (P4).

> Sometimes I do, what is called ‘story snapshot’. I might take 6 photos of [children] doing something. They could take it home and I would say to the parent, ‘This is what N. did today. Have a talk to him about it, have a look at each photo, how he responds, what he is doing.’ That is very effective. The snapshots really worked when the children are challenging

> themselves, physically, or perhaps when they are doing building on something at the carpentry table (P4).

All the participants used an online assessment platform, either Educa or Story park. They found them very useful tools to involve parents in the assessment process. They believed this software makes it convenient for parents to look at the stories where and when they want to. Other family members can feed into the stories and contribute valuable information. The online tool also can help monitor the frequency of children's assessment and notify teachers when a story is due.

Teachers indicated professional discussions during the day, staff and planning meetings, as platforms they used to gather information from colleagues. P5 gave her opinion on the benefits of including different teacher voices in children's portfolios:

> Authentic learning is captured, (not just a feeling of 'oh dear I have not written a story on Jonny for six weeks, what can I find quickly'). Whole team is focused on whole learning community and all tamariki. We are reading each other's work and linking stories to one another. We are benefitting from each other's perspectives on the same child so the broad team focus gives a big picture, and the child can be advantaged by different teachers' skills and strengths supporting them in progressing their individual goal. In a strong team where relationships are good between teachers, I believe multi-voicing should be a positive thing, we are all communicating and collaboratively building a picture of that child's learning (P5).

All teachers mentioned using previously written Learning Stories as an information source. Teachers believed that stories help to gather information about the child in a holistic way since stories from different teachers may represent a different perspective on the child. Teachers reported that they used previous stories before they started writing their assessment to identify change, to look for emerging similar themes and links to enact continuity in children's learning and development.

4.3 Data documentation

It was apparent from the interview discussions that when teachers referred to assessment documentation, they all meant Learning Stories, which they identified as their dominant assessment documentation format. Besides Learning Stories, photographs and children's portfolios were mentioned by all as assessment tools. Children's portfolios in the participating teachers' practice contained Learning Stories, Welcome stories, photographs, children's artwork, parents' contributions, and things the child wanted to include.

When teachers were asked about what other documentation format they used, four teachers mentioned other types of assessment tools, which they included in children's portfolios, such as magic moments (a photo with a short story) and assessment summaries. Assessment summaries, teachers explained, still followed the Learning Story format but they included more robust summary of assessment information from previous Learning Stories with the purpose of evaluating children's goals. Assessment tools which teachers said did not place in the child's portfolio included running records of parents/children/colleagues' conversations which served as information gathering format; time samples, duration samples and targeted observations which were mentioned in relation to identifying and documenting children's special learning needs.

Teachers commented that they all followed the 'notice, recognise, respond' format in their Learning Stories. It was clear that they only considered an entry in a child's portfolio a credible assessment, if the format contained analysis of child's learning. How teachers saw the value of photographs as legitimate assessment format is an example of this discourse.

P2 explained:

> Sometimes we just take photographs, because children will say … 'Ah, look at me, I can do this'… So, you know they have learnt to do this, you can tell by their words they want to share with you or by the excitement on their face. So, if you take a photograph, that is all they want, and they know their own story, and they know why you have taken that picture of them. We might just write a couple of lines but more formally we write our Learning Stories and use Te Whāriki or other theorist to back up why we have written the story and what we have seen what changes we have seen or growth or new things (P2).

P1 argued:

> If it was just a photograph, the whole thing like a magic moment and just a little sentence down at the bottom, which was more about 'this is what they did', that is not a Learning Story. But if it was a short Learning Story with the evaluation of learning then that counts (P1).

P3 believes:

> Photographs help children to be able to 'read' their stories. Photographs are important. But anybody who thinks that you can get away in terms of assessment having some photos and some captions on those photos is not a professional teacher. That is a short cut to nothing (P3).

P3 shared a very strong opinion on using assessment tools other than Learning Stories:

> We would not use anything else. No, we would not be bothered. We think it is a rot actually, there are people now who's doing individual developmental programmes for their children. I just cannot believe it. If you look at this is it. This form is that. Why would you bother to pull out small bits of information from the rich text, the rich narrative that Learning Stories provide. It is just accountability driven rubbish. And someone somewhere is frightened I think what either ERO or the Ministry think. The Ministry and ERO have never asked us 'what kind of planning do you do for your children?' They read their stories and they can see it. I think over the years we understood how valuable [Learning Stories] are, for so many reasons. We are just so engaged with this work now; we just love it. You can talk to any of these teachers, and they would say that they are so in love with what happens (P3).

All teachers involved in this research stated that they were satisfied with the Learning Story format. Their arguments included that learning is not black and white in ECE. They explained that teachers ought to assume, guess what is going on in children's play and describe it with tentative language. Teachers believed Learning Stories are perfect form for that. Participants emphasised that Learning Stories are not like a check list. They explained that Learning Stories are social stories which allow teachers to capture and depict learning and delineate a deeper insight of what's behind, what's going on for the child.

Participants outlined some practical advice for effective Learning Story writing:

- Keep balance between describing and analysing the experience.
- Give more focus on identifying and defining why the teacher wrote the story, what were the key values and valued learning in children's play.
- Notice subtle changes in children's behaviour, abilities, language, or their confidence of participating in groups activities.
- Use explicit language that shows change in children's behaviour and abilities.
- Describe dispositions while unpacking the learning.
- Notice what is not written in previous stories, identify what other teachers' language indicate about the child's behaviour or progress.
- Refer to previous stories; link stories together and use the information by quoting from previous interpretations to refer to changes in children's learning dispositions.
- Embody multiple perspectives and professional readings, quotes from scholars in the analysis part.

The participating teachers believed that Learning Stories are rich in information, they engage children, families, and the teaching team in the assessment process. They suggested that one story is just a piece of a jigsaw puzzle and explained that stories take their own journey from beginning to end of the time the child is in an early childhood centre. P3 argued that since Learning Stories are credit based and reinforce children's strengths and achievements, they can make a difference in children's life, and let teachers unveil who the child is as a learner.

4.4 Assessment information utilisation

The quotes below illustrate the participating teachers' opinion on utilising assessment information from Learning Stories:

> The teachers take half an hour, three quarter of hours, an hour to write one story. You would not just leave it in the book. What would be the point of that? But also, do not want to waste our time with an overlay of additional accountability driven thing which sit in a book, or in a cupboard or online, and go nowhere. So, we write our Learning Stories, because even if nothing else happens to that one Learning Story, it goes to the family. It makes a difference in the child's life and in the family's life (P3).

> It's making sure that those Learning Stories are not just printed and put in their book and not discussed with children. Making sure that those stories are not just a document stuck in their book. They are living documents and get talked about. And go back to them (P4).

Teachers clearly articulated that Learning Stories are formative assessment and information must be used and utilised from them.

4.4.1 Ways teachers extract information from stories

All the participants used the same method to extract information from stories: they read each other's stories. In the participant teachers' practice, reading Learning Stories were incorporated in non-contact times, in shared proof-reading routines or as part of their everyday practice with children.

P1 explained her centre's system:

> The system we had was, extra non-contact time to actually look back. Having books out at meeting times, so people can read them and mainly reading them with children was really good. Just reading with children, because children would love to read them, and we read other children's and actually we have a lot of information from that being with children (P1).

P2 and P4 outlined:

> You want to read what everyone has written beforehand. Before you write a story. You read stories when you have a spare five minutes. Honestly sometimes it is before contact time, after work or between like in your break. Whenever you get time. It helps everybody to keep stay connected and grow our knowledge of that child, which is the most important thing (P2).

> That would be an unwritten sort of expectation. A totally unwritten expectation. Just being professional and passionate. You want to know. I would be disappointed if the teacher did not read the Learning Story or the previous Learning Stories of that child, before they start thinking about, that would be the first thing that they would do. Even myself I will read back my own Learning Stories you know, just read back. Read what I have identified even if I know, I know but this is very important to read back. Read back who was involved in that play (P4).

It was evident from the teachers' comments that reading each other's stories is embedded in their centre's cultures. They believed it is a necessary part of the assessment process, part of being professional and is a kind of unwritten expectation.

4.4.2 Ways assessment information is utilised from Learning Stories

The research participants utilised written assessment information in many ways. Teachers considered information sharing about children's learning and using information for planning for individual children and whole centre projects as most important factors. Other purposes such as positively influencing children's behaviour and using assessment information as raw data for self-reviews and inquiry purposes were revealed. Assessment information was found to be utilised for developing teachers' professional knowledge and for appraisal purposes in the participating teachers' practices.

a) Sharing knowledge about learning

Teachers in this research considered knowledge sharing as the most important use of assessment information, which they believed, could fulfil different purposes for different agents.

For the child:

> It is for the child to look back and see how they have been successful and what their community, what sort of learning their community values. And to encourage them to do more, because they got that lovely picture that lovely story about them, and everyone always likes praise and recognition of what they have done well and so the children look at that and they

> go back look at the Learning Story folder again and again and again. There is definitely for them. They can enjoy their learning and it reminds them what they did. Sometimes they get a new idea based on that. Mainly to celebrate the learning that we value, so they can see that and enjoy it (P1).
>
> A precious document for the child, to revisit their own learning…So, say for a very underconfident child to literally look back at the photos when tried the balancing beam or something, to really try to reassure them in their own abilities. Look what you can do. So, I think they are very precious documents for the children themselves…Partly it is a nice thing to own (P5).

For whānau:

> The baseline that we connect with families (P3).
>
> To show families the learning that we feel is taking place. And hopefully to open a pathway to have dialogue with the families. If they can give us feedback or something is happening at home. Then we get the bigger picture of the child's life, what is happening for them. (P5)
>
> We want families to understand what valued learning looks like. So, we want to make it obvious… Families have ideas about learning from all sorts of places like social media, from their own parenting, from their relatives' parenting style, from their friends' parenting style. And half of it is not based, oh I not to judge that, but much of it has no bearing in research…We want to support families and parents too. How often parents get told that they are doing a great job. Oh, rarely if never, rarely. Not on the deep level, not on a connected contextual piece of learning (P3).
>
> The Learning Stories are a very good way to educate parents in terms of what we are looking for in learning. I think it is educating parents about wider learning. That is kind a natural way to weave that knowledge into the stories (P4).

According to the participants, the knowledge obtained from assessment information helps teachers gain a deeper, holistic understanding of the child by seeing them from other teachers' perspectives and develop a sound knowledge where the child is. Participants utilised this knowledge by incorporating it in their stories and by planning for children and centre projects.

b) Planning for children

Teachers reported that they utilised assessment information from Learning Stories for planning for individual children learning purposes. The way participating teachers carried out the planning process was quite different, unique to all centres. The common characteristics the findings show was that all the participants discussed individual children at meetings and planned collaboratively.

The quotes below demonstrate how teachers utilised Learning Stories for this purpose:

> It would be a section of the meeting all about planning for individual children. We would summarise the recent stories. That have been written in the last few weeks. Just a very short summary. The main point of discussion would be the teaching strategies we have come up with towards the end of the stories. So, we have lots of self-responsibility to come to the meeting prepared summarising the stories, summarising the teaching strategies. The document is always there for us to revisit when we are writing a story for another child (P5).

> One system was that teachers having time to read those Learning Stories and then the planning came from each teacher … then it was collaborated. [From] the stories from that week usually … that child has, from their own knowledge of that child they would write a short sentence about 'this is what I see that child is learning'. 'And this is some ideas for the planning' (P1).

> We share these stories together at team meetings where we can have a more team-based discussion about what we think is happening here for this child. But also, for the building of the environment that enables him to do this. We want to make sure that we are designing the environment for learning. That we have a learning focused culture; that teaching and learning here is very focused on individually wrapping that mātauranga around each child (P3).

> The information comes to a meeting when I write a planning story. I talk about what happened that sparked the Learning Story, and we will all talk about it. Other teachers will have different perspective about how you support that. We all will come on board with that learning that is all grounded in the teachers (P4).

Teachers' willingness to engage in professional conversations with their colleagues was very evident in their comments. All the participants had allocated meeting times, but they were also inclined to use every arising opportunity to discuss children and share assessment information with each other. They considered it as part of their professional practice.

c) Improving children's social and emotional competence

Four of the participants said they utilised Learning Stories to positively influence a child's behaviour. The practice of capturing moments when the child succeeds, documenting it with photos in a credit-based story and reading it to the child over and over again participants believed is a great way to support children's social and emotional learning.

The below quotes explain it further:

> When a child is struggling with being kind, we will write a story about them when they are kind and we will reread those stories, remind them 'Look at this story, you remember when your friend J. was having trouble and you did this? Oh my gosh this made our heart sing. So that's why listening to these Learning Stories is such a fabulous thing (P3).

> If we have a programme for the child, we would use Learning Stories to capture those moments that he or she was succeeding whatever that programme was. So, say you had a child who was biting … little babies. You would capture a Learning Story when you saw the child beside a baby engaging with the baby in a positive way. Read the Learning Stories to the child, show the parent that it does happen (P1).

Teachers' arguments included that the credit-based story can send a very powerful message to the child, highlighting what kind of behaviour is valued in the setting. Teachers believed that sharing the story with the child, one on one attention, focusing on positive dispositions could reinforce the child's positive behaviour.

d) Raw data for self-reviews, inquiries

Teachers said they utilised Learning Stories as raw data for evaluating teaching practices and children's learning through self-reviews, as the quotes below outline:

> It gives us that base data. And it makes us accountable. For example, biculturalism or maths. We would go back on our last 6 months Learning Stories and look at where we incorporated it. That would be our raw data for our self-review. We read them through, make a list and tick. How often have you done? How many times it happened in the last 6 months? (P4)

> The internal evaluation was about how we are meeting the needs of 4-year-olds. One teacher took it on board to analyse all the 4-year-olds Learning Stories. She looked back over six months work of stories for anyone who was in the 4-year-old age bracket. She was trying to work out if there were common themes. She would have gone through Educa. She would be looking for phrases in the 'What learning is happening here'. [Stories] were certainly used as part of the [process], I mean took real part of it (P5).

> We have Learning Stories in our internal review folders. Especially when we reviewed an area like Te Ao Māori or the dispositions. Would evaluate one, how we were assessing it, and two, how the children were responding, and three, how the parents were responding. If you are using Story park platform, which I have done in the past, it is really useful, a fantastic tool for that. You get awesome reports, so you can tag all your stories and the reports will come out and tell you how many stories you wrote on that disposition or theme etc. Which is great, it is a very good tool (P2).

All the participants mentioned six months as their time period to look back, reread stories and use assessment information for analysis. Online assessment platforms were mentioned again as useful tools in the analysis part.

e) Teachers' professional growth

Three of the participating teachers, who held professional leadership roles, used learning stories to help develop teachers' skills and understanding in assessment. As professional leaders they read teachers' stories, and this enabled them to identify gaps in their assessment

practice which they needed support with. By revisiting teachers' stories at the beginning and the end of the year they could measure progress in teachers' writing skills. Teachers gave feedback to improve the quality of the stories but encouraged teachers to keep their own writing style. In their settings, teachers were encouraged to give ongoing feedback to each other about their stories.

P3's comment explains it clearly:

> We are learning from each other by reading each other's stories. We are learning from each other by giving each other feedback. Our teachers who are provisionally certificated have a mentor, so they are getting very good feedback. It is very important to learn from our colleagues and read their stories, and it is such a deep and effective way to do this (P3).

> Learning stories are "evidence of both of your own learning and the children's. I think you get an opportunity here to identify we are learning as well not just the children (P2).

Four of the participants used Learning Stories in their appraisal process. Observing and writing stories about other teachers' practices was a well-used method in the participating teachers' appraisal practices, as the quotes below explain:

> You can read somebody's Learning Story they do on children and evaluate their knowledge of those children and their pedagogical knowledge… Also, you can write teaching stories for teachers, which is the same as a Learning Story except you are evaluating instead of their learning you are evaluating their teaching. And I think it's a nice way to evaluate a teacher (P1).

> So, that Learning Story becomes a formal observation twice a year. We all go around and decide who will do it for each teacher. So, you would not write one for me, and I would not write one for you. That would be too close. I would write one for someone and someone would write one for me … And then we sit around together as a group, and we read everybody's stories. It is a very great celebration. It is a huge team building exercise. There is the narrative and then there is the 'Thoughts on your learning', and 'How I think you might stretch it further'. But it is all credit based, because of Te Whāriki (P3).

> I would do a Learning Story on a teacher twice a year. Before it we have a discussion and say 'What do you want to achieve here? What do you want from us? What do you think we will see within your practice? What things do you want feedback on?' You have a conversation after wards, talk about the experience. It links to our appraisal (P4).

Three participants mentioned writing Learning Stories about student teachers as a very effective way of giving feedback, as P4 explained:

> I have found it very good with students. Especially if you want to give them a particular feedback on something that they need to improve on. Because you can talk about the good

> things that are happening and then just note things they could be doing or change. I find it really really helpful. Positive … not confrontational. A positive way of giving feedback (P4).

Teachers in this research suggested that Learning Stories can contain valuable information about teachers' pedagogical and theoretical knowledge, their knowledge in child development, and can indicate how well they know the children. Teachers recommended embedding professional readings and research through quotes from relevant authors, theorists and incorporating newly gained understanding in the analysing part of the story. In this way Learning Stories can be proof of teachers' professional development.

4.5 Underlying factors of assessment information utilisation

By examining the findings on a deeper level, numerous factors were revealed that may affect the utilisation of assessment information form Learning Stories. It was apparent in the teachers' comments that teachers' professional knowledge, understanding and competence in data gathering, analysis and academic writing play a significant part in the assessment process. According to the participants, teachers' abilities to plan and work as part of a highly performing team and show dedication and positive attitudes towards assessment were crucial elements of an effective assessment practice.

4.5.1 Competence in data gathering methods

Participants highlighted that a high level of observational skills and the ability to notice valuable moments that were worth documenting and were significant for the child are important factors of the ECE assessment process. Knowing what to notice is a skill, as P2 explained:

> There are no set goals, perhaps there is more set goals in primary where they are expected to be able to sight and read ten words then sight read twenty words and spell them. We are more interested in how they grow themselves. I am more interested in their ability to be kind or their ability to be confident or their ability to ask questions, their capacity for listening to stories and recalling them, or having an imagination… and their ability to think and plan and problem solve (P2).

Teachers suggested that taking the right pictures, using photographs to effectively show those dispositions and be able to verbalise what they noticed requires teachers' high level of competence, as P2 explained:

> Sometimes it can be a challenge just to articulate what magical moment you have just seen. That takes a lot of language, a lot of writing. The pictures are way more powerful if you

> captured the right pictures. And time. Ahh, it would be great to have so much more time to write them (P2).

According to P1 perceiving children's interest also calls for advanced skills:

> When children are interested in something, they will do it more therefore teachers can notice it more. The challenging part is that the learning and interest are not always in the same activity. It can manifest in different things with a similar theme that teachers need to notice (P1).

Teachers' comments highlighted how complex the process is to know what significant moment to notice which is relevant to the child. The process requires teachers' deep holistic knowledge of the child, their ability to capture visual evidence for it and be able to articulate it on an engaging way using high level of language, writing and ICT skills.

4.5.2 Ability to recognise learning

Teachers explained that after they collected their own assessment data, they needed to be able to analyse it and recognise the learning that took place in the observed activity. Teachers considered this phase as the most important part of the assessment process:

> A Learning Story is not a Learning Story until there is an analysis (P3).

They acknowledged the challenging tentative nature of the assessment approach as P2 explained:

> We might be thinking they are feeling very confident because they jumped off the box, but actually the confidence might be the fact that they are talking to you or might be at the interaction they have got with you and that's how they made a connection with you, so for them, it was about communication or friendships. So, we make huge assumption writing Learning Stories (P2).

It was apparent from the participant teachers' comments that they had great experience in identifying learning dispositions in children's play, as P4 comment shows:

> I would do a story and would reflect on what learning is in that story. So, you know why that learning is valid. Why it is worthwhile to write about. So, what my interpretation of that, the learning that is going on visible. It is not so much about the experience this is the disposition we really trying to build (P4).

Participants' comments highlighted their belief that teachers' understanding of learning dispositions and their ability to link them to children's observed experiences are crucial in ECE assessment. Teachers acknowledged that the recognising part of the assessment is quite subjective. They suggested using tentative words and label this part as "What I feel is

happening" (P5), 'My thoughts on this learning' (P3) to demonstrate that this is their view, the way they see the child, this is what they think about the child's learning.

4.5.3 Ability to respond and extend children's learning as a team

In their explanations the participant teachers showed great confidence and understanding of determining future opportunities and possibilities as a response to children's interest and learning. It was evident that teachers extended and stretched children's learning as a team. They shared the information about the child through professional discussions, meetings and by reading each other's stories. They made their decision of where the child's learning might lead on multiple stories, forming a more holistic and meaningful 'What Next'. A high level of teamwork and great communication among staff members with the practice of making sure that the whole team is on board with the child's learning goal were evident in the findings.

P5 explained:

> The planning would be very open; it would be more looking for the traits the underlying traits. When we saw a child dance, we would not be planning for more and more dance it would be thinking 'ok so, self-expression, confidence, what other ways we could offer opportunities maybe with board stories with art. So, it becomes broadened out (P5).

According to P3 and P5 comments the responding part requires teachers' professional perceptions to make it purposeful:

> Teachers set learning outcomes and they think they are teaching children something. Most often children are learning something different. Very rarely you are on the same page. Unless you are having a conversation with each other, and that is quite different. So, we wait to be invited into the conversation with children. We are there as a resource and we connect, and we love. We love our children (P3).

> For a new child we are always going to set a goal of settling and building relationships because that is foundational. We always want a child to settle, to be happy and to form relationships to get to know us. So, while it is individual it is also quite samey. All the new children will have a similar goal because that's the starting point. Likewise, maybe all the older children as they approach school, we are often looking for similar things we want them to build their confidence, we want them to take responsibility, showing some leadership. So, there will be similar traits across different age brands (P5).

Findings revealed that in the participating teachers' teams planning for individual children is a collaborative effort. Teachers' comments showed their awareness of keeping planning open, and leave room for the child's participation, of keeping planning broad and dispositional, and keeping planning individualised.

4.5.4 Academic writing skills

The interview process highlighted that the participating teachers were confident in their own writing style and showed great competence in deciding how to write a story according to the context of the learning and the observed experience, as P1 and P3 explained:

> If it's a Learning Story I could write it in first person or second person. I might write it as Te Whatu Pōkeka story using Māori concepts of learning rather than English concepts of learning depending on what the occasion was. It does not matter whether if it was a Māori child or an Indonesian child or whatever child. I might just use that perspective if I saw that happening. Some stories I use lots of photos and not have much text, but other stories would be less photos and more about what happened depending on the context of the story. I do not have a particular format; it depends on how I see the context happening (P1).

> Often, we have been told that Learning Stories are for children and we should write them in a way that it is meaningful for them. On one level it is true of course. We only have to watch the way children hug their folders to their hearts to know how much they love their stories about their learning. As with any great children's picture book I think the photos draw the reader in. The children have had their experience, and if teachers have chosen the significant moments of learning to write about, then children will recall the essence of these to be able to retell the story. The words are equally important they often insight that needs us to come back again and again to enjoy the lords of the words the fascination that insight that photos alone might not offer (P3).

The research participants also understood the importance of adjusting their writing style to the parents' needs:

> You need to be aware where you are and who you are writing the story for. You would not write the story the same if you were in a high socio-economic area as what you would in a lower socio-economic area. You know your people are different, the demographics are different, or the educational level of your parents are different. They want to know different things (P2).

According to the participating teachers it is important to describe the observed moment in an emotionally engaged way which captures the parent's interest and resonates with parents, children and teachers at the same time.

4.5.5 Effective writing processes

The participant teachers' comments suggested that great time and data management skills are important. According to them they were well organised in their process of story writing and in assessment information preparation for planning meetings.

P5 explained her effective writing process:

> I upload photos very early that I know I will forget. If it is even a couple of days later, it will not be as fresh in my mind. I would automatically that day put my photos onto Educa or a Publisher document. And I often just write a note form on the computer just to jog my memory. Just putting down key words, then when I have more time, I will come and write it more fully. And then usually a third visit to sort of polish it up. Add my Māori and make sure that I am linking everything, always linking stories that I have got before. Trying to engage the parents, you know asking questions. Making sure that I have included the child's voice. Sort of I have a list of criteria that I believe makes a good Learning Story (P5).

All the participants commented on putting significant effort into their story writing. Participants felt that it was important in their Learning Story writing to capture and choose the right photos, read each other's stories beforehand, well articulate what was happening, and thoroughly discuss the child's learning. It was an interesting finding that teachers preferred taking their assessment work home during their allocated non-contact time, or to complete it in their own time.

Teachers commented on spending significant time mentoring new graduates and new staff members in story writing. The participating teachers understood that there is a huge diversity in teachers' writing skills. They commented that some teachers' stories can be very light weight, and some are very deep. (P5) noted that "to set a benchmark of quality is very difficult". Teachers acknowledged that supporting teachers who struggle with Learning Story writing as an important part of their practice, but they also found it quite challenging.

4.6 Challenges faced when utilising assessment information from Learning Stories

All the participants strongly indicated that they would not document assessment information in Learning Stories in relation to a concern about a child's challenging behaviour or special learning needs. Teachers also stated that they did not utilise Learning Stories as evidence for identifying a child's additional learning needs or to refer a child to early intervention services. They all chose different assessment tools to document the information which they did not include in children's portfolios and rather used communication to address their concerns with parents. Information sharing with other centres and schools was another area where teachers considered their current assessment practice insufficient.

4.6.1 Documenting challenging behaviour and special learning needs

Three participants argued that documenting children's challenging behaviour or special learning needs is difficult in Learning Stories. Four teachers talked about their endeavour to word the stories in a positive way when observing a challenging behaviour and emphasising what the child has learnt during the experience to make the story credit based. Teachers explained that this facet required teachers' experience and skills to 'read between the lines' in other teachers' stories to identify what is really happening for the child, as the quotes show below:

> You do feel … in a trap as a teacher, you feel like you need to write your story and say, hey it was all wonderful... And you feel programmed to have a positive journey and actually it isn't always positive (P5).

> Usually I can write around without saying your child is hitting those people, constantly. You can write a Learning Story about how self-controlled the child was in this occasion, how he learned to self-control and respect others. If there were some behaviour challenges, you could see what was not written. So, you could see blanks rather than what was written you would see what was not written (P1).

P2 believed teachers also need to be realistic when they try to present the story in a positive way:

> Parents know what their children are like, where their learning is at, and where their development is at. And they do not want you putting stuff in there that is not real either. So, you just have to be kind and be respectful (P2).

P5 suggested that the lack of stories can be a warning sign:

> There are certainly some children can be like a dream, you think you can write a story every day. The child is so articulate, so busy, so confident, so creative, so easy. But for me where the focus should be is the children are not capturing the Learning Stories because that should be a real indicator that something is not quite sitting right. The hard to capture children, maybe the hard to reach children, the hard to build a relationship with children (P5).

Participants also acknowledged that the practice of communicating their concern about a child to the parent highly depended on the positive trustful relationship they established with parents, as the below quotes highlight:

> I probably would not document it in Learning Stories. No, it is more a conversation that we have. We do not want to shock parents. I do not want parents to get worried. Seriously, they do. They do not like to hear that their child is sick. …I would not write about having trouble communicating or someone having trouble understanding them… I would not be identifying, not in a story. I would say it verbally. I would say, 'look I've noticed when they are playing,

> they play really well but couple of times they really did not understand what he was saying', rather than have it in black and white (P4).
>
> We will talk to each other about like, 'I just struggling to figure out how best to work in this'. So, I am might not be the right person, because I have not got a relationship with that child. So, it will be the key teacher who will talk a bit and have these big conversations with parents. And besides that, if the parent comes in and hears from everybody, some negative conversation, it is not fair. Those conversations go through the key teacher (P3).
>
> So again, you have to know the child, and have to know the parent, as well and know what they want to be documented for ever. Because even just a written word it's still there for ever, but when you put it on the electronic platform too, it's even more permanent, these days, it stays there for ever (P2).

Findings revealed that none of the participants would use Learning Stories to address a concern about a child. Four of the research participants emphasised using open and honest verbal communication with parents as their main method when it comes to information sharing about a concern.

4.6.2 Challenge utilising Learning Stories for referral purposes

None of the participants said they would use Learning Stories as evidence for referring a child to early intervention services. According to the research participants the identification and decision-making process about a child's special learning needs are a collaborative team effort. Three teachers mentioned that their first step of raising their concern about a child would be having a discussion with their colleagues. Teaching teams would decide on what type of assessment tools they want to use to collect and document additional information about the child. They would appoint the teacher who has the best relationship with the parent to communicate the concern. Teachers acknowledged that this approach required a high level of professional communication and teamwork from staff members, as the below quotes illustrate:

> If there is a concern, first it would go to a staff meeting, and someone would say 'I have a concern what do you guys think?' And again, the teachers know the children so it would be discussions about that we need to do something about it, and then it depends what it is usually a concern is followed up by pointed observations (P1).
>
> The team is communicating and working on a good professional standard, a child who was not achieving well in social skills or not building relationships it would certainly be addressed…We would be having more time discussing at meetings. So, often we would keep an additional documentation. Maybe sometimes just a notebook form. If there was an incident, we felt was significant sometimes just typing up a quick word document, so we are keeping ongoing documentation (P5).

> Through meetings, sometimes we will come up with set phrases we are using. For example, if we have a child who is getting very angry, very volatile for no reason just prone to being very heightened. So, we are all trying to have a common approach with that with our words saying, 'using your kind words and your calm body' and everybody is using that little phrase just that he is hearing the same words from everybody (P5).

The primary assessment methods teachers mentioned they used to document and identify children's special learning needs were targeted observations, running records, time samples, anecdotal samples, and speech language tests. In kindergartens professional leaders were invited to come and do extra observations and offer professional opinion about the child in concern. This additional information was documented in a notebook or a word document in the participants' centres. It was not included in the child's portfolio book and stayed with the teachers in the centre after the child transitioned away.

The study found that teachers' high level of professional knowledge and experience played a significant part in the identification process, which P4 comment is a perfect example of:

> I have got one new child that I have referred now, who has got all the sounds, but he is just putting them in the wrong places. I had documented 3 months earlier, and then done again 3 months later and he is still doing the same thing. That is when I referred him. It really confused me that he does the sounds but not correctly in the right order. I had probably two very strong pieces of evidence of his speech language what he is not saying. I kind of feel like that is enough to be honest. Because they come along to do their own testing anyway. I am not just doing it willy nilly. I just did two good strong tests on them, ones that got lots of opportunity to hear lots of different sounds and then refer them. I am very aware what is out there. It took 5 months to someone to come and see our children recently. To come from the Ministry. I am very aware of getting onto this thing, so once you hear it, I would get on to it very quick" (P4).

All the participants believed that the current process of identifying a child's special learning need strongly depends on the teachers' professional skills and confidence in addressing their concern to parents and other colleagues.

4.6.3 Information sharing between settings

Three teachers raised concerns about information sharing with other ECE services or primary schools through Learning Stories. As the research findings indicate, in the participating teachers' practice a concern about a child was not documented in Learning Stories; the additionally collected information was not included in the child's portfolio and communication was used as a platform to address the concern to the parent. Information sharing with other settings relied on the trustful relationship between the teacher and parents

anticipating that parents would transfer the information over to the next setting. Teachers addressed their worry about this process, as P4 and P5 explained:

> There is no documentation in the book… If there is no referral, if it just a few warning bells are going off, then it is nothing… And it could be as simple as a little note in the book, not much as a Learning Story but saying that 'I noticed that sometimes I cannot understand you'. But then of course they not necessarily take that book to the next preschool either. So, it is really up to those conversations with parents. Hoping that they will mention it to the next teacher. If you have that relationship with the parents, you would be passing that information on with the family. But you would have some families who would just disappear, and they would be gone. So, I do not know what you can do about that (P4).

> That is often a problem that the transition to school or to another setting is a problem, especially when families are dysfunctional. But even generally, even for mainstream average children it is very typically not a very well-done process sharing documentation from one setting to another (P5).

Teachers felt information sharing during transition to school through the child's portfolio could be a challenge due to the time-consuming factor that a large number of stories need to be read through to truly gain a holistic picture of the child. Primary school teachers may not necessarily have the time to do that.

P3 talked about a practice to overcome that challenge:

> We make a transition to school booklet, where we take one of those Learning Stories and put it in under a strand and a key competency. So that children take it to school, keep it in the classroom for however long, and teachers get a chance to read at least five stories about that child. So, there is no excuse for teachers not to read them. It was an excuse when the book, this thick, and the parents brought them in and they flicked through them and said 'Ah, nice stories, goodbye' …These books are supposed to stay in the classroom… They are amazing information. We will have a lovely photograph and that Te Whāriki strand, and the competency down the bottom, and then a Learning Story which fits with that… So, we got to have a wide variety of things about this child, amazing, awesome child. We just choose the stories within the previous year (P3).

Findings clearly highlighted that information sharing through Learning Stories were problematic during the child's transition to another ECE centre or primary school. This is especially so when the child has been identified as having developmental delay or behavioural issues.

4.7 In summary

The findings outlined that the participating teachers all followed the same data gathering methods, for example informal observations, photographs, listening to and communicating with children, dialogue with parents and colleagues, and revisiting previously written Learning Stories. Knowing and building relationships with the child first was considered as the foundation of meaningful assessment among the participant teachers. In the case of information documentation, they all used the same assessment tool, Learning Stories, which was seen as a valued assessment format in their practice. Teachers clearly articulated their love of Learning Stories and their comments demonstrated a comprehensive understanding of the worth of this assessment tool. They all collected Learning Stories in portfolios alongside photographs, children's art, parent and child contributions. Some teachers included magic moments or summarised Learning Stories in the portfolio. Other documentation formats, such as running records, anecdotal observations, time samples, duration samples and targeted observation were not included in the child's portfolio and were rather used for special learning need identification and documentation purposes.

Assessment information from Learning Stories was well utilised in the research participants' practice. They all employed reading each other's stories as their main method of extracting information from Learning Stories. This practice was reported to be embedded in their centre culture and seen as an unwritten expectation. Assessment information was utilised for information sharing for different agents such as children, parents and teachers; for planning for individual children; supporting a child's social and emotional development; as data source for centre self-reviews and inquiries; to develop teachers' competence in their assessment practices; and for appraisal purposes.

The research revealed several underlying aspects in teachers' competencies which enabled the participating teachers' Learning Stories to be utilised in the above ways. These aspects included data gathering skills; competence in recognising and responding to children's learning; academic writing skills with high confidence in own writing style, professional knowledge, data literacy skills, the ability to give and receive feedback from other teachers regarding their teaching practices; and high level of dedication.

A considerable finding of this research was that even if Learning Stories were written on a high professional standard there were still areas where the participating teachers felt utilising

assessment information from Learning Stories was challenging. These areas included documenting a concern about a child, a challenging behaviour or special learning needs; using Learning Stories as evidence for referral purposes; and information sharing between different educational settings. The significance of these findings will be further discussed in Chapter 5.

Chapter 5

Discussion

5.1 Introduction

This research study was designed to investigate current, real life ECE assessment practices that teachers used for data collection, documentation and utilisation. The study looked at these phenomena from the perspective of experienced early childhood teachers, who had the knowledge, confidence, and openness to contribute useful practical ideas regarding ECE assessment for the profession and identify areas which they found problematic. The research was guided by three research questions, which provided structure to this chapter, and explored how the participating teachers collected information for assessment purposes, how they documented the information, how they utilised assessment information and what challenges they identified during the process. This chapter also discusses important underlying competencies that participants considered imperative for teachers to retain in relation to assessment documentation, that may influence the effective employment of assessment information. Recommendations to improve teachers' competencies and assessment practices are made at the end of this chapter.

5.2 How assessment data is generated in an ECE context

The participants described relationships, which included teacher-child, teacher-parents and teacher-teacher relationships; a thorough data gathering; and a complex data documentation process which they felt were fundamental for the effective utilisation of assessment information.

5.2.1 The relationships factor

The participants' comments highlighted that relationship building was in their view, the most fundamental first step of their assessment practices. This notion has been raised by many researchers stating that relationships are the heart of early childhood pedagogy (McLaughlin, Aspden, & McLachlan, 2015), central to quality assessment (Dunphy, 2010; ERO, 2011; Mitchell, 2008) and one of the key principles of the national ECE curriculum, Te Whāriki (MOE, 2017). The highly experienced participants involved in this study strongly emphasised

that the practice of knowing the child well is the most important element of early childhood assessment. Building a potent relationship with the child and with the family, they believed, lays the foundation for effective data collection and meaningful assessment.

The teachers' notions about relationship resonate well with Smith's (1999) argument that profound adult-child, in our context teacher-child relationship, is necessary for intersubjectivity, which is the determinant that allows the teacher to deduce how much the child already understands and knows, and aids the teacher to scaffold the child's further development. The key aspects of attaining intersubjectivity are the meaningful experiences and interactions the teacher engages in with the child. Those interactions are acknowledged as being a substantial influence on children's learning, and identified as critical factors of quality in ECE (McLaughlin, Aspden, & Snyder, 2016). The participating teachers in this study suggested spending long periods of time on connecting, engaging, and building relationships with the child before starting any kind of assessment process. Consistent with research literature (Clarkin-Phillips, 2012; McLaughlin et al., 2015, 2016; Niles, 2015) teachers' comments also reiterated the importance of establishing strong trustful relationships with parents, involving them in the assessment process, valuing their input and aspirations, and utilising the family background information for a deeper, more holistic understanding of the child.

Participants also considered good working relationships among team members and low staff turnover as important factors in ECE assessment. They stated that team members who communicate well with each other, are open for critique and are confident in their professional knowledge to receive and give feedback will contribute to higher level of teamwork and effective assessment practices. Participants felt that in a highly functioning team with good communication, record keeping, and regular meetings teachers can collaboratively build a big picture of the child's learning. The benefit is a broad team focus on the child's progress who can be advantaged by different teachers' skills and strengths (P5). This finding resonates with McLaughlin et al.'s (2015) ideas that in a team where members work well together children's experiences are better coordinated, expectations for children's behaviour are more consistent, collective assessment practices are promoted and communication with parents is more effective. ERO (2011) similarly states that positive team relationship is an important aspect of collaborative assessment and planning practices and can lead to increased consistency of practice. Both Cherrington (2012) and Niles (2015) raised

concerns about services that struggle to find sufficient time to meet regularly and teachers to discuss issues of teaching and learning. Cherrington (2012) suggests that resourcing regular opportunities for teachers to engage in reflective dialogues is important to develop an effective community of practice.

5.2.2 Data gathering process

According to the participants children, parents and colleagues were primary information sources for teachers alongside informal observation, photographs, and previously written Learning Stories. This demonstrates that aspects of their practice align with Mitchell's (2008) findings. According to Mitchell (2008) most teachers/educators use six or more methods to gather data about children's learning. The most common methods are "photographs/digital photographs (96 percent), Learning Stories (94 percent), conversations with children (93 percent), examples of children's work (90 percent), consultation with parents (87 percent), discussion with teachers/educators (86 percent), and informal observations (84 percent)" (Mitchell, 2008, p. 12).

Teachers' explanations revealed a very thorough information gathering practice and manifested a strong emphasis on incorporating multiple perspectives in the process. This aspect moderated that their practice aligned with McLachlan's (2018) claim that the revised Te Whāriki (MOE, 2017) requires teachers to move away from the "minute by minute" (MOE, 1996, p.26) observation method, to collect their information from multiple sources and to use formal and informal assessment to develop a clear, holistic picture about the child's learning. Teachers emphasised the significance of investing time and effort into their information gathering which, they suggested would make the assessment process meaningful and valid.

The term 'observation' was challenged by one of the participants, who highlighted the tentative and formative nature of the current assessment approach. The teacher warned against summative judgement making and emphasised the importance of strong emotional connection with the child during interactions and the assessment documentation process. Carr and Lee (2019) and Hargraves (2019) also accentuate being emotionally invested in assessment documentation and thoughtfully connecting the learning episode to the child. This connection they say makes assessment and planning more substantial and encourages family engagement in the assessment process.

Findings revealed that parents' funds of knowledge were highly valued in the teachers' practices. Teachers acknowledged that achieving parent engagement and parent voice in the assessment process can be challenging. This finding is aligned with Stuart et al.'s (2008) report which after auditing a large number of children's portfolios found that very few narratives were achieved through collaboration with parents. Parent voices were rather brief and communicated general summative feedback instead of the formative process of recognising and considering next steps. To obtain parent's insights of their child's learning, the participants in this study found conversations with parents the most effective form of information gathering. A participant suggested that discussing children's experiences with the family before writing the story, remembering to parents' relevant comments and incorporating them in the story writing later were effective practices (P1). Niles (2015) also mentioned this method in her research, but teachers in her study felt that the effectiveness of this method depended on the relationships teachers had with the parents and on how organised the teacher was to make notes of the conversation for later use.

Participants in this study also utilised parent-teacher meetings, interviews, questionnaires, photographs, and Learning Stories for obtaining parent's funds of knowledge. These aspects of the teachers' practice are consistent with ERO (2011) which considers engaging in daily conversations with parents, and sharing and gathering information through parent meetings, whānau hui, children's portfolios and photographs as highly effective practice. The participating teachers also found online assessment platforms very effective in encouraging parent contribution. Similar is Carr and Lee's (2019) suggestion that e-portfolios provide fast and easy communication with parents and whānau, can cross boundaries, reach extended family members and can boost parent involvement in the assessment process.

In relation to information gathering from children, the practice of writing stories with the child was mentioned by the participants. Teachers explained a practice of inviting older children to look at photographs or videos of their recorded experiences and writing stories together. Teachers incorporated children's comments in the writing or asked children to name the story. Some teachers found involving children in the writing process as an effective practice, and used it regularly highlighting its benefit in helping children become invested in the story from the beginning. Other teachers found this practice problematic in a busy everyday routine, mentioning lack of time and lack of practicality as undermining factors.

These comments reflect Niles' (2015) study in which participants also addressed their uneasiness of using this practice while they were working with children on the floor.

5.2.3 Data documentation

All the participants in this research used Learning Stories as their predominant assessment documentation tool alongside photographs and portfolios. Similar is Mitchell's (2008) report which states that 94% of teachers use Learning Stories as their main assessment tool in NZ. All the participants related assessment documentation with Learning Story writing and none of them mentioned any of the assessment tools that other countries may use, as outlined in the literature review.

The participating teachers explained that they were very satisfied with the Learning Story format. Their commentary revealed an enthusiastic, fervent and passionate disposition towards this current assessment approach, in ways similar to that found by Buchanan (2011) and Smith (2007). Smith (2007) states that narrative assessments "have the power to excite and energise teachers, parents and children" (p.5). One of the participants of this study strongly opposed using any assessment tools other than Learning Stories. Her comments supported Reese et al.'s (2019) statement that practitioners in NZ ECE are deeply engaged in working with Learning Stories.

The participants described the benefits of the Learning Story approach as: "Learning is not black and white in ECE" (P2). According to P3, Learning Stories allow teachers to assume, guess what is going on behind the observed activity, use tentative language to describe children's experiences and have room for subjectivity. Teachers explained that through Learning Stories teachers can tell a story, analyse it and blend these two elements together to help children internalise who they are as learners. These ideas align with Carr and Lee's (2019) argument that Learning Stories allow teachers to describe the context of the learning, how it began, where the learning occurred, and who was involved. Teachers can describe the child's role played in the experience and include exactly what the child said.

The findings revealed that all participating teachers followed the notice, recognise, respond (MOE, 2004) sequence in their Learning Story writing. Teachers emphasised the importance of the analysis part of the story and reinforced that this is the crucial part where teachers should make the recognised learning behind the observed experience visible. Their explanation mirrored Carr and Lee's (2019) notion that analysis makes the connection

between the observed experience and the child's learning, and changes the story into a Learning Story.

The strong opinions voiced on photographs as stand-alone assessment tools supported the above discourse. Teachers in this study felt that photographs are important elements of Learning Stories but without analysis of the child's learning, photographs are not credible assessment tools. The opinion is aligned with Reese et al.'s (2019) study which state that photographs are effective physical cues that help children to retrieve their memory on the documented experience but they do not convey the rich, personal narrative that could be utilised during shared story reading times. McLachlan (2018) also warns teachers that evidence gathering such as photographs is not assessment. Teachers need to spend time on analysing and synthesising the collected data.

In line with Carr and Lee's (2019) notion the participants' descriptions and comments reiterated the complexity of the Learning Story writing process, and highlighted the process' high dependency on teachers' skills, competencies and professional attitude. Smith (2013) also acknowledges that assessment is the most demanding task of teacher practice and it requires their thoroughly professional knowledge and attitude. Teachers' explanations of the complexity of Learning Story writing and the ways in which it may influence the utilisation of assessment information is further detailed in the next section.

5.3 Underlying factors of Learning Story writing

The participant teachers' comments suggested that each step of the Learning Story writing process can present challenges for teachers, an idea which is well recognised and reiterated in numerous research articles (Blaiklock, 2011, 2013a, 2013b; Dunphy, 2010; Loggenberg, 2011; McLachlan, 2018; Perkins, 2013). In regards to the start of the story writing process, the participating teachers' comments were in line with Carr and Lee's (2019) statement that a deep connection and holistic knowledge of the child is needed in order to recognise the right moment to document, as this must be significant for the child and relate to valued learning.

This study found that this first step is underlined by many factors. Firstly, the teacher requires skills to build strong, deep relationship with the child and the family. According to McLaughlin et al. (2016), the teachers' role in achieving this relationship is of primary significance and needs to be central to their daily work. Participants of this study also emphasised that a supportive environment that allows the teacher to achieve this relationship

is also paramount. A supportive environment, as McLaughlin et al. (2016) and ERO (2011) suggest, may include a shared understanding and value system in the centre, the right teacher to child ratio and effective team work.

Secondly, the participants explained that noticing what is significant for the child requires teachers thorough understanding of what valued learning is and why this significant moment matters. This notion aligns with Perkins' (2013) and Loggenberg' (2011) findings who both suggest that knowing what learning to notice during observations is a problematic area for teachers. Loggenberg's (2011) study showed that a significantly low percentage of teachers felt confident in this aspect of Learning Story writing.

Thirdly, the teacher needs to have the right skills and ample time to well articulate this significant moment in writing, with the child in mind, threading that close emotional connection through the story. Findings revealed that even the highly experienced participants of this study found adequately articulating that special moment challenging. They felt this practice required a high level of writing skills, and a significant amount of time "to be able to get it right" (P2). This finding agrees with Cameron et al. (2016) who state that time for story writing, especially the lack of it, is a significant factor contributing to the quality of assessment. They found that lack of time can put pressure on and cause stress to teachers.

According to the participants of this study, the most crucial part of the Learning Story writing process - recognising the underlying dispositional learning behind an observed activity - can be very challenging. Teachers explained, that children's same interests and learning dispositions can manifest in different activities in different contexts, and that teachers were expected to be able to recognise these. Carr (2001) describes the underlying dispositional learning as complex and elusive. Claxton and Carr (2004) acknowledge that while it is important to focus on children's developing dispositions in ECE assessment, teachers are faced with the difficulty to determine which disposition to name and assess and how to track them. According to the participants, taking the right photographs that show the observed dispositions is also a challenge. These findings are in line with ERO (2007, 2011) reports which show that a large percentage of teachers struggle with this practice. They found that teachers' assessment records often focused on children's participation in activities and described enjoyment rather than learning. It is alarming that fifty percent of teachers' Learning Stories contained inadequate evidence of children's learning. Blaiklock (2013b) finds the demand placed on teachers to assess dispositions unfair. He states that the reason

teachers struggle with this practice is that this area is poorly investigated and not clearly defined.

Participants felt that using effective language that reflects emotional connection to a child's learning and considers cultural and social aspects of the parents are crucial in Learning Story writing. Teachers' comments highlighted that newly graduated and provisionally registered teachers needed extensive time, support, and mentoring for the above aspects of Learning Story writing. This finding mirrors that of Niles' (2015) and Loggenberg's (2011) research which state that teachers gain their training in story writing mainly from their colleagues. These findings raise the question, do teachers receive adequate preparation for this complex task during their teacher training? Findings suggest that an investigation of the training providers' programmes on preparing early childhood teachers for assessment practices would be beneficial.

Literature shows that some centres may have lower proportions of qualified and experienced teachers or may have unqualified teachers who have limited knowledge of curriculum and assessment, yet these people are asked to write Learning Stories (McLachlan, 2011). There is also a concern that there is an increased attrition of experienced teaching staff from the sector (Ministry of Education, 2014). These findings are raising the question, if some teachers are highly confident and others struggle with the current assessment process how can consistency in the assessment quality be achieved? Blaiklock (2013b) also raises concern that this issue may contribute to inequality of learning outcomes among different centres and lead to disparities in learning which found at school entry.

5.4 Assessment information utilisation

Teachers in this study all highlighted that Learning Stories are a formative assessment tool and that they must be revisited, and the information utilised from them. Their idea is consistent with a wide range of national literature (Bell & Cowie, 2001; Buchanan, 2011; Carr & Lee, 2019; MOE, 2017; Smith, 2013) and international literature (Dunphy, 2010; Marbina et al., 2010; Wiliam, 2011, 2014) which explains that assessment becomes formative when the assessment information is utilised by actions that support learning, give feedback and feed information back into the teaching process. Carr and Lee (2019) also emphasise that the word formative in assessment refers to a feedback which focuses on the action that needs to be done to extend learning. Participants of this study suggested implementing practical and

functional practices in information utilisation and warned against creating extensive administrative paperwork for accountability purposes.

Teachers in this research felt that the most important purpose of their assessment practice was information sharing with different agents such as children, parents, and teachers. Participants' opinion is in line with an extensive range of literature (Alasuutari et al., 2014; Blaiklock, 2010a, 2012; Brassard & Boehm, 2007; Carr, 2001; Dichtelmiller, 2004; Fraser & McLaughlin, 2016; Loggenberg, 2011; Marbina et al., 2010; MOE, 2017; Ntuli et al., 2014; Smith, 2013; Wiliam, 2014; Zhang, 2015) which highlight that the primary focus of assessment is to provide essential information for parents, families and teachers about children's learning.

Participants' practice highlighted an interesting and important way of assessment information utilisation with children in this study. Teachers believed that credit-based Learning Stories could be a positive influence on children's behaviour. They felt that the practice of capturing children when they succeed, reminding them of their positive experiences through the photographs and reading the credit-based stories over and over again can positively influence children's challenging behaviour. Dunn's (2004) explanation of the advantages of Learning Stories in early intervention is in agreement with the teachers' beliefs. Dunn highlights that the information in the stories is collected in a natural context in familiar settings during meaningful activities; the stories describe the environment and the social context of the experiment. The information interpreted by people who know the child well and the focus is on the child's strengths. ERO (2011) in its '*Positive Foundations for Learning: Confident and Competent Children in Early Childhood Services'* support document gives a detailed list of different strategies teachers use to manage children's challenging behaviour. The list includes establishing and discussing rules, knowing and respecting children's preferences, redirecting children, using pictorial prompts with younger children, and developing individual plans for children that need additional help with their learning or behaviour however the document does not mention using Learning Stories for this purpose.

According to the teachers of this study Learning Stories can be a great resource for this purpose. They explained that stories have the potential to build children's self-esteem by allowing children to see themselves achieving their goals and hearing encouraging language through having the stories read to them. They believed this practice can foster children's self-confidence and motivate them to do more of the valued learning highlighted in their stories.

Reese et al.'s (2019) study is consistent with the participants' beliefs. They found that the child's interwoven personal experiences make Learning Stories more appealing for children, and more effective than commercially available picture books. The effectiveness of Learning Stories relates to the fact that the child is in the focus, the main character of the stories and children as early as toddler age are very interested in personal narratives. Reese et al. (2019) also add that the one-on-one teacher-child interactions with Learning Stories can highly support children's language development and suggest that this practice should be treasured and fostered. "We propose that sharing Learning Stories in dyadic interactions is a complementary form of interaction over and above the assessment purposes of learning stories" (Reese et al., 2019. p.12).

In the case of utilising information for supporting children's learning purposes a team approach was very evident in this study's findings. All teachers discussed children and Learning Stories during staff meetings and used a collection of stories to make decisions about children's future learning goals. Teachers' comments highlighted the importance of high-level teamwork and great communication among staff members in their planning practices. Teachers made sure that everybody in the team was on board with the child's learning goals and needs. Carr and Lee (2019) supports the described practice stating that sharing Learning Stories and discussing each other's stories are critical in early childhood teachers' practice. Cherrington (2012) adds that teachers' regular collaborative dialogue is paramount for ongoing professional reflections and critique of practices.

An important common practice, reading each other's stories, was revealed in the findings. Teachers in this study all considered this practice as an imperative part of their assessment process. Some of them referred to it as an unwritten expectation for professional teachers. Carr and Lee (2019) argue that time allocated for teachers to read stories is crucial. On one hand participants of this study found this practice time consuming and hard to fit into their busy days. However, on the other hand they highly valued the benefits that reading Learning Stories written by their colleagues gave them. Teachers described the benefits of this practice as allowing them to stay connected with the everyday dynamic of children's experiences and interests and deepening their understanding and knowledge about children through the perspectives of other teachers. Participants believed this practice helped them find important information about children's previous experiences, identify emerging themes, make links between stories and achieve continuity in documenting children's progress. The participants'

beliefs align with Carr and Lee's (2019) argument when they state that one Learning Story which only assesses a particular moment, is only a piece of a big mosaic. They explain that revisiting a collection of stories enables the teacher to assess the big picture and show the child's growth and development in learning dispositions over time. According to Carr and Lee (2019), to be able to utilise the information this way, teachers must implement the practice of revisiting their previous Learning Stories and read each other's stories.

Utilising this practice as a professional developmental tool for teachers to develop their Learning Story writing skills was another interesting finding of this research. Teachers described utilising Learning Stories for learning from each other and developing their story writing skills as part of their professional practice. Participants' comments align with Niles' (2015) and Loggenberg's (2011) study which highlight that teachers mainly gain their knowledge in Learning Story writing during their practice from their colleagues. According to one of the research participants of this study "it is very important to learn from our colleagues and read their stories, and it's such a deep and effective way to do this" (P3). Teachers suggested giving constructive feedback to each other and using other teachers' stories as examples to find effective or new ways to articulate the significant moments or explain children's learning. This aspect of assessment information utilisation relates back to the relationships factor highlighted previously underlying the importance of a highly functioning team where staff members communicate well with each other, are open for critique and are confident in their professional knowledge to receive and give feedback (ERO, 2011; McLaughlin et al., 2015).

5.5 Challenging areas to utilise assessment data from Learning Stories

Besides the great benefits of Learning Stories, the teachers in this study identified certain areas of assessment for which they found documenting and utilising assessment information from Learning Stories problematic. These areas included documenting children's challenging behaviour, learning difficulties or needs, and sharing information or concerns about a child with parents and other education services. Teachers in this study strongly stated that they would not use Learning Stories for documenting and identifying children's additional learning needs and would not use them for referral purposes. They talked about different ways they documented assessment information for this purpose which they did not include in children's portfolios and rather preferred communication to address their concerns with parents. The participant's notions are corroborated by Williamson, Cullen, and Lepper's

(2006) study which claims that narrative assessments have not commonly been used for children with special learning and teaching needs.

Literature underlines that this issue is an important aspect within ECE assessment (Aspden et al., 2019; Baxter, 2017; Blaiklock, 2010; Downs & Strand, 2006; McLachlan, 2018; Williamson et al., 2006; Zhang & Morrison, 2020). According to Downs and Strand (2006) one of the most important purposes of assessment is accurately identifying children in need of specialised educational services and early intervention. This is critical in ensuring children's access to support services which may tremendously impact their abilities and development throughout their school journey and later in life. NZ has one of the most inclusive education systems in the world, having only one percent of children attending schooling outside regular education settings (Zhang & Morrison, 2020). Early childhood teachers play an important part in the assessment and identifying process of children's special learning needs. They may be the first professionals who meet with the child outside of the family which place them in the perfect position to asses and identify children's additional needs (Aspden et al., 2019; Baxter, 2017; Zhang & Morrison, 2020). Baxter (2017) points out that a substantial number of young children under the age of five have additional learning needs in NZ. Both Baxter (2017) and Zhang and Morrison (2020) emphasise that children with special educational needs should be identified early. In reality, Zhang and Morrison (2020) claim that many children start school at five with delays including motor language delays, dyslexia, visual perceptual delay and audio processing delays. According to Aspden et al. (2019) there is a concern that young children's additional learning needs are not identified as early as they could be, especially by education professionals. This issue raises the question, does the difficulty of documenting and utilising assessment information from Learning Stories in this area contribute to this issue?

The participants of this study explained the processes they used to document and identify children's additional needs. These processes were all different, unique to the teachers' centres, and were mainly based on their teaching team's decisions. Teachers talked about having a team discussion first which was trigged by a teacher's concern and followed by data collection about the child. Teachers acknowledged that this approach required a high level of teamwork and professional communication among staff members. The findings of this study are similar to those of Aspden et al. (2019) study, who found that in the current system teachers' assessment and referral practices were highly collaborative in nature. The authors

felt that the collaborative approach was critical in working both with colleagues and parents to carry out the referral processes. Their study identified a range of factors that influenced this process. These included teachers' relevant knowledge, prior experiences, skills, qualifications and opportunities for ongoing professional development.

While participants of this research clearly expressed that they did not use Learning Stories for the purpose of documenting and identifying children's special learning needs, they did not mention using any other formal identification screening tools, method, or systematic approach similar to those found in other countries. Their explanations suggested that they started collecting additional information at the point when a concern was raised about the child. Targeted observations, running records, time samples and duration samples were mentioned as data collection methods. Teachers documented the collected information in notebooks or word documents, in different ways in each centre. In all the participants' practice, the additional information was kept separate from the child's portfolio and stayed with the teachers in the centre. This aspect of the participants' practice is consistent with Aspden et al. (2019) research which states that there are no formal identification screening tools used in current NZ ECE practices. In addition, the authors found no formal referral policies or procedures in place within their participating centres either. Aspden et al. (2019) found it concerning that there is no requirement in NZ for identification and referral policies and procedures. They felt, in the current system "teachers are left to subjective, ad hoc practices that lack accountability and rigor" (p.7). This study echoes the above concerns, especially in the case of centres which may have a lower proportion of experienced teachers or a lower level of team performance and communication among staff members.

Participants of this study explained why they found using Learning Stories for the purpose of documenting children's challenging behaviour or developmental delays problematic. Teachers talked about struggling to keep a balance between the credit-based focus using positive dispositions when describing a child's challenging behaviour and trying to "keep it real" (P2) for parents and other teachers at the same time. "You do feel … in a trap as a teacher… you feel programmed to have a positive journey and actually it isn't always positive" (P5). Teachers explained a practice of "writing around without saying [the challenging behaviour]" (P1) and focusing on the positive learning during the incident. Participants' comments align with Dunn (2004) and McLachlan (2018). Dunn's (2004) research participants also felt that by focusing only on the positive may not describe the full

picture and could be misleading to parents. McLachlan (2018) argues that only assessing children's strengths is problematic as hindering children's learning needs may belie their rights to an education. Cameron et al.'s (2016) research found that strengths-based stories could create a challenge for other teachers by expecting them to "read between the lines" (p.14) in Learning Stories. This practice can make it difficult for teachers to get a real picture about the child's behaviour, abilities or needs (Cameron et al., 2016).

Participants raised concerns about children who had not been referred to special education services but have special learning needs. Teachers believed that the current information sharing process strongly depends on the parents' willingness to share the concerning information with the next service. Participants voiced their worry for dysfunctional families where they saw the failure and ineffectiveness of this practice. Teachers were concerned that with no formal documentation system in place, which would cross settings with the child through the transition process, the new centre or school would not be aware of the needs of the child. This may mean that in the new setting the teachers may need to start information gathering again, wasting valuable time and data which may delay the referral process. These findings echo Cameron et al.'s (2016) study which calls for a better equipped transition process. The authors suggest that ECE teachers and new entrant teachers need to engage in sustained and ongoing collaboration to better understand each other's assessment approaches and to enhance continuity between the two sectors.

The participating teachers' comments about endeavouring to document a child's learning or behaviour difficulty in Learning Stories were in line with Williamson et al.' s (2006) research. Williamson et al. found that information about what constrains the child's development is important for the identification and referral process, however it can be a challenge to incorporate it into the narrative without imperilling the positive focus on children's strengths. While the deficit, skill-based approach has continued to dominate the early intervention assessment practices (Williamson et al., 2006), in the current assessment system, ECE teachers are less likely to assess children against developmental milestones (Aspden et al., 2019). Aspden et al. (2019) find the unbalanced focus on interest, strengths and abilities problematic. The authors are concerned that the process and access of appropriate support might be delayed if ECE teachers associate the identification and referral processes with a deficit orientation. They question if NZ ECE teachers are well resourced with assessment

tools other than Learning Stories or feel comfortable using a strengths-based approach for this purpose.

In contrary Williamson et al.'s (2006) study, which invited early intervention professionals to trial Learning Stories for their assessment and planning purposes, showed that the early intervention team, which included special education professionals, support workers, parents and early childhood teachers, could successfully use the narrative assessment tool for complex and high need children. The narrative approach empowered the participants and supported a collaborative relationship among team members. The authors found that Learning Stories accommodated many perspectives within the team, and successfully harmonised the skill and strength- based assessment models. Their study suggested that the Learning Story format needed to be adapted to suit this purpose to allow the documentation of educational constrains although kept the positive focus on the child as a learner. The professionals in Williamson et al.'s (2006) study argued that they also would use additional assessment tools alongside Learning Stories to be able to report more precise developmental information at times (Williamson et al., 2006). Since the same assessment tool was used for all children the process fostered an inclusive approach. Dunn (2004) adds to the value of Learning Stories in becoming the vehicle of inclusion in the early intervention assessment process that they encourage children to take part in the assessment journey. According to Aspden et al. (2019) for narrative assessment to be used effectively for this purpose requires high level of teacher skills. Their study found that beginner teachers may face significant challenges in achieving this assessment standard. This argument is consistent with the findings of this present research. Teachers' high level of competencies in Learning Story writing were well articulated throughout this research and the need to review ECE teachers' teacher training in regards for their preparation for this very complex and multipurpose assessment process was well justified. Additional recommendations of this study are further detailed in the next section.

5.6 Implications, recommendations, and limitations of the study

5.6.1 Implications

In the case of new teachers' struggling with writing Learning Stories, the findings raised the question, do teachers receive adequate preparation for this complex task during their teacher training? The study suggests a nation-wide audit on teacher training providers' programmes.

This could investigate whether teachers receive adequate preparation for the professionally demanding and complex assessment practices used in ECE, with the goal being that providers make sure teachers enter the workforce with the requisite theoretical and practical expertise.

In relation to the competencies needed for writing Learning Stories, the findings raised the question, if some teachers are highly confident and others struggle with the current assessment process, how can consistency in the assessment quality be achieved? It would be valuable to conduct a research study on teachers' competencies in Leaning Story writing, using beginner teachers as data source, giving them the voice to identify areas they struggle with and hearing their ideas about what would be beneficial for them to make their assessment practice more efficient.

In regards to Aspden et al.'s (2019) concern whether NZ ECE teachers are well resourced with assessment tools other than Learning Stories or whether they feel comfortable using a strengths-based approach for identifying and documenting young children's additional learning needs, the study suggests conducting further research to investigate centres' practices in this area.

5.6.2 Recommendations

The findings highlighted the significant benefit of teachers reading each other's stories. The study would suggest teachers incorporate this practice into their everyday assessment processes and centre management to support teachers by allocating time for this crucial practice. The study also encourages centres to develop a team culture in their teacher community where critiquing, commenting on each other's stories and using them to learn from each other is a widely accepted and appreciated practice.

Using Learning Stories for motivating children's positive behaviour is a practice that the study would encourage teachers to try. It is important to acknowledge that Learning Stories to be used for this purpose requires teachers' advanced writing skills. The study agrees with Carr and Lee (2019) that strengthening teachers' competence in Learning Story writing is a crucial factor. The study supports the reinstatement of professional development in assessment for all teachers in all early childhood settings as Niles' (2015) report suggests. The study would recommend a wider range of professional development in Learning Story writing which specifically would target assessment areas and purposes which would lay more focus on practical skills and writing strategies.

In relation to identification of children's special needs the study indicates that Aspden et al.'s (2019) call for formal identification policies together with robust assessment practices with clearer expectations of how to identify children with disabilities needs to be heard to make sure that teachers are better equipped to take earlier actions. The study findings also align with Loggenberg's (2011) notion that "not all assessment purposes can be successfully carried out through Learning Stories" (p. 62), and supports the growing number of scholars (Aspden et al., 2019; Blaiklock, 2010; Loggenberg, 2011; McLachlan, 2018; Zhang, 2015, 2017) who argue that teachers need to use multiple tools in their assessment process alongside Learning Stories, and encourage educators not to dismiss approaches from other models because of anticipated ideological differences. The study would suggest investigating the possible utilization of other internationally used assessment tools.

With respect to government policies, the participants in this study felt it is important that measures are put in place to ensure experienced teachers are valued and encouraged to stay in the sector, considering how much the current assessment system relies on their advanced experience and expertise.

5.6.3 Limitations of the study

In the research proposal the study planned to interview 6-8 teachers involving different types of settings, however the difficultness of recruiting participants for the study was under anticipated. A wide range of different centres such as large corporate centres, Kōhanga Reo, privately-owned childcare and kindergartens were invited for the study. Unfortunately, despite numerous attempts, no interest was indicated from corporate centres or Kōhanga Reo centres. The reason for this might be the timing of the data collection, which happened at the end and the beginning of the year which could have been a very busy time for centres. Even though on one hand the study did not have access to the number of different centres that was planned, the teachers who have participated in the study had a wide range of experiences working in different type of services which gave the same variety in experiences the study planned for.

Any recommendations made from this project need to be tempered with the fact that only five early childhood teachers' experiences and points of view were analysed in the findings. For this reason, generalisations cannot be made. These participants do not represent the whole ECE teaching profession. However, they are highly experienced teachers and contributed

their valuable insight of current assessment practices, extensive practical knowledge and great ideas for the utilisation of assessment information from Learning Stories. The participants raised issues that were important to them, and therefore these need to be heard and considered.

5.7 Conclusion

The present study has offered a valuable insight of current assessment practices through a phenomenological investigation basing the findings on five highly experienced ECE teachers' real-life practical experiences. The participants' commentary revealed a highly complex assessment process through Learning Stories and identified interesting ways of assessment information utilisation practices. The findings identified crucial underlying factors of the current ECE assessment process highlighting teachers' abilities to build strong reciprocal relationships with children and to develop a holistic knowledge and understanding of the child they observe as key factors of quality and effective assessment. Teachers' professional knowledge in noticing and recognising learning, teacher's writing skills and ability of describing and analysing children's learning were positioned as essential and indispensable aspects of the assessment process. The findings also emphasised the necessity of a highly performing ECE teaching team with great communication among team members and sufficient time allocated for team discussions. Learning Stories were identified as dominant assessment tools in the participating teacher's practices. A very thorough data gathering, and data documentation process were revealed which highlighted a complex skill set the participants felt teachers needed for effective assessment information documentation and utilisation in Learning Stories. The study raised concerns about the current assessment process' strong dependency on teacher's professional knowledge, expertise and writing skills and gave an insight of the challenges each part of the assessment process possesses for teachers.

Findings show that the participating teachers were able to utilise assessment information from Learning Stories in a wide range of ways. Interesting and important practices were identified which included using Learning Stories to positively influence children's behaviour, reading each other's stories to maximise the benefit of assessment information from Learning Stories, and using stories as professional developmental tools for improving teachers' story writing skills.

The teachers' explanations of the assessment process highlighted the complexity of the current assessment approach and its high dependency on teachers' professional knowledge, data literacy skills and dedication. The challenges teachers identified in Learning Story writing included the process of noticing and articulating a significant learning moment, understanding the value of the observed experience and recognising the dispositional learning which underlines its significance. Teachers reading each other's and their own stories were considered as a highly valued practice by the participants and were identified as their main method used to extract assessment information from Learning Stories. The challenges participants highlighted in relation to assessment information utilisation from Learning Stories related to teachers' professional preparation for assessment practices, the limited practicality of Learning Stories for documenting children's special learning needs and the lack of resources available for effective information sharing between services and schools.

The study also identified a crucial area of assessment, identifying and documenting children's additional learning needs (Downs & Strand, 2006), where participants found the utilisation of assessment information from Learning stories difficult. Documenting and sharing information about children's challenging behaviour and special learning needs with parents and other teachers were identified as problematic areas. The research explored different views on the effectiveness of Learning Stories for this assessment purpose and raised questions about the lack of formal requirements for consistent practices among centres for this assessment purpose.

The study made several recommendations for addressing the above issues acknowledging the limitations of this research project. The study also encouraged teachers to incorporate the identified practical ideas in their assessment practices with the aim of increasing the effectiveness of assessment information utilisation from Learning Stories in their practice.

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Appendices

Appendix A – Introduction letter

THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

Introduction Letter

Kia ora,

My name is Katalin Fabian (Kate), a fellow Early Childhood teacher who is currently working on her master's degree through University of Waikato and would like to utilise your centre's high-quality professional knowledge as data source for my thesis paper. Including a Kōhanga Reo centre's perspective would greatly enhance the quality and accuracy of my study.

During my professional practice I have developed a strong interest in ECE assessment practices. I am particularly interested in the information we obtain and document in Learning Stories, the purposes and the ways we use them, and the challenges we are faced with.

The purpose of my thesis is to raise awareness of our assessment practices, find and share examples, methods, systems and tools which could make teachers' work more effective when utilising information from Learning Stories. To achieve this, I would like to visit your centre and ask for the opportunity to talk to a volunteering senior teacher to discuss assessment information use practices by way of an interview. The interview would take around an hour. Recording the interview would allow me to transcribe the information accurately.

Ethical procedures would be strictly followed; the participant's and the centre's identity will be kept confidential and s/he, and the centre will be assigned a pseudonym (a fictitious name) in any resulting publications or presentations.

If you agree to one of your staff members to take part in the study, please share the volunteering teacher's contact details with me so I can organise an interview time with her/him. Thanking you in advance for your time and interest in my project. I would feel privileged working with you and with your teacher.

Looking forward to hearing from you.

Ngā mihi nui,

Kate

Email: [redacted]

Phone: [redacted]

Appendix B – Interview questions

In what ways do you collect information for assessment purposes?

In what ways do you document children's assessment information?

For what purposes do you use assessment information from Learning Stories?

How do you extract the information from Learning Stories for this purpose?

In what ways are Learning Stories helpful or beneficial for this purpose?

What challenges do you encounter when extracting information out from Learning Stories?

Probing questions:

What part do Learning Stories play in your evaluation procedures?

In what ways do teachers utilise assessment information from Learning Stories for developing their own teaching practices?

What systems do you use to recognise individual children's progress?

In what ways do you use information from Learning Stories to identify children with special needs?

What practice do you have in place to enable teachers to share assessment information from their Learning Stories?

Appendix C – Consent form

THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

Consent Form

Research topic: Utilization of Learning Stories in Early Childhood Centres

- I understand that the aim of this study is to increase awareness about assessment information documentation in ECE and how it's utilised for different purposes.
- I am aware that the findings will help to identify effective systems centres use to utilise assessment information from learning stories.
- I understand that my participation in this study is strictly voluntary and can be withdrawn until the transcripts has been approved without consequence. I will have the right to ask questions at any point during the study.
- I am aware that I won't have any compensation for my participation, but possible benefits I may experience as a result of having my voice heard and valued and by sharing my experience with the knowledge that it may help others.
- I agree to take part in the interview; I understand that I will be asked a series of open-ended questions about my experience of using learning stories in my professional practice and there aren't right or wrong responses.
- I understand that the interview will take approximately an hour.
- I give permission for the interview session to be recorded, so that it can later be transcribed accurately.
- My identity will be kept confidential and I will be assigned a pseudonym (a fictitious name) in any resulting publications or presentations.
- The recordings will be stored on a computer which protected by a password. The interview transcripts will bear only my assigned pseudonym. I will have the right to read through the transcribed interview and change any part I would like to.

- I agree that the findings will be documented in a master's thesis which will be publicly available, and parts of the findings may be published in educational journals or presented on conferences.

If you have any questions or concerns about participating in this study, please contact Kate Fabian at [redacted] or by phone [redacted].

If you would like to discuss details or concerns with Kate's supervisor, please contact Frances Edwards at [redacted] or by phone [redacted]

If you agree to participate in the study, please sign and date this form below. Once I have received your signed informed consent letter, I will contact you to set up an interview time.

Thank you.

Kate

Participant:

I agree to take part in the study and understand my rights detailed in the above consent form. My participation is voluntary.

Name…….……. Signature
……..

Date ……..

Appendix D – Ethics approval

Te Kura Toi Tangata
Division of Education
The University of Waikato
Private Bag 3105
Hamilton, New Zealand, 3240

DivEd Ethics Committee

fedu.ethics@waikato.ac.nz
07 8384500 ext. 7870
www.waikato.ac.nz/education

THE UNIVERSITY OF WAIKATO
Te Whare Wānanga o Waikato

15/10/2019

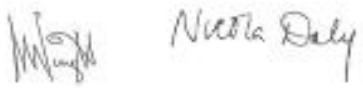
Dear Katalin Kotanne Fabian

Division of Education Ethics Application Approved FEDU074/19

I am pleased to advise you that your ethics application for the project entitled "Utilization of Learning Stories in New Zealand Early Childhood Centres" was approved by Te Kura Toi Tangata Division of Education Ethics Committee on October 15th, 2019.

Please be aware that the Te Kura Toi Tangata Division of Education Ethics Committee must be advised (by memo) of any changes to the details recorded in your ethics application. Please send any such advice to fedu.ethics@waikato.ac.nz. You will receive a memo of approval once the change(s) has been considered.

Kind regards



Co-chair
Te Kura Toi Tangata Division of Education Ethics Committee