7.3.5 Impact of ePortfolios on children’s learning

Most of the parents and whānau who responded to the Final Survey considered that the introduction of ePortfolios had affected their young children’s learning, with only four noting that they had seen no impact. The respondents could see greater engagement with their children’s learning and experiences, from their children, themselves, teachers and extended family. There were more contributions to their children’s ePortfolios from extended family and this added an extra layer to the children’s learning journey. The inclusion of videos had had a positive effect on children’s learning and one respondent noted that the ePortfolio had aided in their child’s transition to school process. One parent or whānau member reported that because of the dashboard notice system that their child never missed out on events. Caroline provided an example of when she had seen an impact on her child’s learning directly from the introduction of the ePortfolios:

We recently saw a great impact in that our son hadn't progressed with painting past the usual scribble and he is four years old. We've been waiting to see some kind of attempt at drawings shapes, and in particular, people which many of the kids are attempting. Our son's teacher noticed his interest in painting a person one day and encouraged him to paint further. To help pique his interest they got a tablet and scrolled through the photos in his ePortfolio to find people that he might be interested in painting. That day, he painted Mum, Dad, Buddy (his dog who had visited the centre), his sister (who also attends the daycare) and himself. It was a real breakthrough. I think the opportunity to look at photos and paint people that were important to him really helped encourage him to keep trying - and his last picture of himself was the best. In turn, his progress on these paintings was captured and turned into stories on his ePortfolio - and this has encouraged and motivated him further (Caroline, parent, Final Survey, August, 2014).

Table 7.32 Impact of ePortfolios on children’s learning (data from Final Survey, coded responses)

<table>
<thead>
<tr>
<th>Impact</th>
<th>Number of parents and whānau who recognised this (n=18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater engagement with learning and experiences</td>
<td>8</td>
</tr>
<tr>
<td>More contributions from others</td>
<td>4</td>
</tr>
<tr>
<td>No impact</td>
<td>4</td>
</tr>
<tr>
<td>Positive effect of videos</td>
<td>2</td>
</tr>
<tr>
<td>Aided in transition to school</td>
<td>1</td>
</tr>
<tr>
<td>Notification of events</td>
<td>1</td>
</tr>
</tbody>
</table>
All 18 respondents felt that the increased parent and whānau engagement with children’s learning through the ePortfolios would have positive benefits for their children’s learning journey. Crystal wrote “I think they are tremendous. It shows children that you are also part of the [setting’s name] programme and experience. Removes a divide from ELC [early learning centre] and home in terms of learning” (Crystal, parent, Final Survey, August, 2014). They felt strongly that ePortfolios had strengthened relationships and through parent and whānau contributions links were being made between home and the ECE setting (16/18). Some respondents also noted that communication with teachers had improved and that through responding to teachers’ Learning Stories and learning moments they were showing that they valued what the teachers did. Kelly noted:

It increases the child’s sense of wellbeing and belonging within the centre and allows the teachers to see an insight into their family life and the aspirations their parents/family have for them. It also values the work the teachers are doing and gives them a sense of achievement that their contributions to the child’s learning are appreciated and valued (Kelly, parent, Final Survey, August, 2014).

7.4 Interviews with management

In March 2015, just over a year and a half after the introduction of ePortfolios to the ECE setting, interviews were undertaken with the service’s management team. The following people were interviewed:

i) Erica – Supervisor
   Erica had been with the Trust since 2006 when she started as a Home-based Visiting Teacher. She became Supervisor of the ECE setting in 2008.

ii) Sian – Director
   Sian had been with the Trust for over 25 years. She started in 1986 as a Home-based Carer. From this she began relieving at the Trust managed settings and undertook her early childhood education training. On completion of her training she moved into a senior role at another of the Trust’s settings before moving to the ECE setting in this study. Sian was
Assistant Director of the Trust prior to becoming Director in 2000, a position she held for 15 years.

iii) Toni – Administration Team Leader

Toni had worked for the Trust for nearly 20 years, in various administration roles. For the last 14 years she had led the administration team. As part of her role Toni was responsible for supporting the settings with projects implementation, as such she was heavily involved in initiating Educa into the ECE setting.

This section will discuss the findings of these interviews.

Engagement with parents and whānau through ePortfolios

All three members of the ECE settings management team agreed that they had seen increased parental and whānau engagement in children’s learning through formative assessment practices since the intervention of ePortfolios. The increased engagement had culminated in a greater sense of partnership between the ECE setting and parents and whānau. Sian commented “It’s [ePortfolios] the biggest thing since sliced bread when it comes to involving parents and building that partnership” (Sian, Director, Interview, March, 2015). Erica agreed that the partnerships with parents and whānau had been strengthened by the use of ePortfolios. She felt that this was because there was now greater communication between the ECE setting and home. She said “We’ve been able to strengthen the communication in ways that we haven’t before and parents are contributing in ways that they haven’t before” (Erica, Supervisor, Interview, March, 2015). Erica went on to note that this communication had also resulted in a stronger sense of community and that the contents of the ePortfolios had a direct link to this. She elaborated:

It is not just about Learning Stories, it’s capturing the essence of the community as well. It’s almost how you make people feel, is if you do that then they give a little bit more which makes it [the sense of community] even better (Erica, Supervisor, Interview, March, 2015).

This meant that all the aspects of the ePortfolio system (formative assessment, dashboard and reporting tools) had contributed to the increase in communication and contribution.
Sian thought that the reason that the communication had increased between the ECE setting and home through the intervention of ePortfolios was because parent and whānau enthusiasm had increased in regards to formative assessment. This was, she said, because the platform meant that what was documented in the ePortfolios was happening in ‘real time’. This was evident in the feedback that parents and whānau were placing in their children’s ePortfolios. She provided the following example:

Some of the feedback is, well I saw one where a parent said ‘I was looking through the ePortfolio and then I realised that that’s what she was wearing today’. It’s instantaneous, it was there today so she [the parent] could see what was happening so she could contribute to that at the end of the day when she [the child] talked about it (Sian, Director, Interview, March, 2015).

Sian thought that this was particularly noticeable for extended family. Toni, on the other hand, remarked on the increase in engagement from immediate family members who did not often come to the ECE setting. She said “There’s some families that Dad drops off and picks up every day so it’s [the ePortfolios] really kept Mum in the loop” (Toni, Administration Team Leader, Interview, March, 2015).

**Teachers’ formative assessment practices**

Again, Sian, Toni and Erica had all noticed changes to the teachers’ formative assessment practices. The changes that they noted were significant and positive. When thinking about the Learning Stories and learning moments in the ePortfolios Sian said:

In my opinion they are richer, they are written better in terms of grammar and English and language used. They are relevant. They’re not duplicating, so when you used to pick up a portfolio and there would be eight stories about a child writing their name, they’ve not got that duplication now because teachers are looking back and adding to stories. I think when you look at the opportunities and the planning that happens for children it’s really well thought out and really real for the child based on their ePortfolio (Sian, Director, Interview, March, 2015).

Toni believed that the way the teachers understood formative assessment documentation had changed with the intervention of ePortfolios. Their understanding of what learning was and how to document it had increased.
She surmised “I think they just understand now what it means. They can look and recognise learning...they can recognise what they are looking at now” (Toni, Administration Team Leader, Interview, March, 2015). Sian agreed with this thought, and said “Staff get it. It’s like a light came on one day, they just get it” (Sian, Director, Interview, March, 2015).

For Erica, who had been immersed in the project and who had been supporting her team throughout, there were many positive changes to the teachers’ formative assessment practices. She felt that the teachers individual strengths were being highlighted more in the ePortfolios (for example Robin’s interest in risk and challenge was well documented in the children’s formative assessment). Erica noted that the teachers were challenging themselves to write meaningful and relevant stories; they were “responding in really authentic ways to the things that children come through the door with every day that are part of their family lives” (Erica, Supervisor, Interview, March, 2015). She considered that there were now multiple perspectives in the ePortfolios as teachers wrote joint Learning Stories and also stories about other teachers interacting with children. Erica noted that the dynamics in the team had changed; they were learning together to find the best ways to implement the ePortfolios. She said “I’d say it was peer learning. Or peer coaching like around documenting. So we’re looking at each other’s [stories] and going I really like the way they wrote it that way, and then having a go” (Erica, Supervisor, Interview, March, 2015). Finally Erica thought that the use of theory and literature had become stronger as teachers were making links between the learning that was being recognised and responded to and what they were reading or the professional development they were undertaking.

Other unexpected benefits

There were two unforeseen benefits which had arisen from the intervention of ePortfolios noted by Toni, Sian and Erica. The ePortfolios had become a great tool in the coaching process that was undertaken by management. Sian provided the following example:
Say I’ve had coaching with Erica, I can put those notes up in our conversation [on Educa], she’ll respond pretty much straight away with reflections. I can respond to that and I can see what she’s doing and what she’s committing to with her staff (Sian, Director, Interview, March, 2015).

The platform also provided an excellent resource for teacher registration. The teachers who were completing teacher registration were using ePortfolios to show supporting evidence such as Learning Stories they had written, reflections and appraisal documentation. Sian noted that doing this seemed to be a natural progression from the implementation of the ePortfolios and would probably not have been something they would have picked up otherwise.

7.5 Emerging themes

A number of themes have emerged from the findings of the Final Surveys, ePortfolio analysis and teacher reflections. Significant changes to the teachers’ formative assessment practices meant that the teachers in this ECE setting were demonstrating several of the key tenets described as important features of successful formative assessment by authors such as Sadler and Black and Wiliam. The assessment practices of the teachers were putting the children’s learning first and consequently the assessments were promoting the learning (Black, 2001, 2010; Black et al., 2004; Black & Wiliam, 2004; Sadler, 1989, 1998). It is clear, therefore, that a portfolio (either paper-based or online) which documents children’s formative assessment and experiences in the ECE setting is vital to enable children to recall, reconnect with and restart their learning (see 5.6.1 and 7.5.3).

Furthermore, it was evident that there had been changes in the way parents and whānau were engaging with their children’s learning through formative assessment in the ePortfolios. The increase in parent and whānau engagement exemplifies Bronfenbrenner’s (1979, 1988) conclusion that parents, whānau and the community should be involved in children’s learning to ensure future educational success and enhanced adult lives.
Like the earlier findings (see Chapters Five and Six), this chapter has also identified that portfolios are a vital artefact in early childhood education to assist children to recall, reconnect with and restart learning experiences.

Finally, the changes in parent and whānau engagement and teachers formative assessment show a strengthening community of practice, the theoretical framework of this study, within the ECE setting. The community of practice which was already evident in the ECE setting at the start of the research had grown from its juvenile form to encompass all the components of a successful CoP as defined by Wenger and others (Lave & Wenger, 1991; Wenger, 1998, 2000, 2011, 2015a, 2015b; Wenger et al., 2002). These themes are consistent with those that have emerged from the previous findings chapters and will be discussed in more depth in the following sections.

*Figure 7.7 Emerging themes - ePortfolios*
7.5.1 Changes to teachers’ formative assessment practices

The teachers’ formative assessment practices had changed since the introduction of ePortfolios. These changes were recognised by teachers, parents and whānau. The quantity and frequency of formative assessment contributions to the children’s ePortfolios had increased dramatically from what was included in their paper-based portfolios. The quality of the teachers writing had also changed. Their Learning Stories and learning moments were richer. They were noticing learning (the story), recognising the learning (what learning is happening here?) and responding to learning (opportunities and possibilities) in all Learning Stories and in some learning moments. The teachers were focussing the Learning Stories and moments on the learner, constructing purposeful and individualised formative assessment (Black, 2010; Black et al., 2004; Black & Wiliam, 2004; Sadler, 1989, 1998). The teachers were using resources such as research and theory to support their reflections on children’s learning and they were making more frequent links to the early childhood curriculum, Te Whāriki (see Appendix Ten for examples). Parents and whānau had noticed that the teachers were using media in a more thoughtful way. The photos and videos now complemented the Learning Stories and learning moments, not the other way round as they had previously. Finally, teachers, parents and whānau agreed that the quality and depth of conversations about children’s learning and their experiences at the ECE setting was deeper and that such conversations occurred more often. This meant that the relationships between teachers and teachers, teachers and parents and whānau and teachers and children were intentional, stronger, more reciprocal and responsive (Cankar et al., 2012; Daniel, 2009; Hattie, 2010; Howe & Simmons, 2005). These relationships have contributed to the strengthened community of practice within the ECE setting and in the community it serves (Lave & Wenger, 1991; Wenger, 1998, 2000, 2011, 2015a, 2015b; Wenger et al., 2002).

7.5.2 Changes to the way adults use the portfolios – increased engagement

The introduction of the ePortfolios saw a marked increase in parent and whānau engagement in their young children’s learning which could have a direct impact on future educational experience and later life (Arndt & McGuire-
Schwartz, 2008; Bronfenbrenner, 1979, 1988; Douglass, 2011; Hango, 2007; Siraj-Blatchford, 2010; Waanders et al., 2007). Although parents and whānau were involved in the learning through the paper-based portfolios and verbal interactions with the teachers prior to the introduction of the ePortfolios, their involvement had increased in quality and depth since the intervention. The interactions between the parents, whānau and teachers had become centred on learning. Thus, learning conversations which invited the parents and whānau to be part of their children’s learning had become commonplace. This meant that the important relationship between the ECE setting and home was strengthened as parents and whānau became more involved in their children’s learning (Cankar et al., 2012; Hattie, 2010; Howe & Simmons, 2005). The parents and whānau had a clearer idea of what learning was valued at the ECE setting and how it was responded to by the teachers. The teachers considered that the parents and whānau had a deeper understanding of how learning occurred through the way the formative assessment was being written and how teachers’ were responding to the learning. Parents and whānau response had become integral to children’s learning. The adults in this study showed increased confidence in their engagement with children’s learning. Teachers were more reflective and their conversations centred on learning and planning for learning, while the increased contributions made to the ePortfolios by parents and whānau affirmed what the teachers were doing and intensified their engagement with their young children’s learning.

The ways that the teachers, parents and whānau were using the paper-based portfolios had changed since the introduction of the ePortfolios. Interactions with the paper-based portfolios were only occurring when they were initiated by a child. In the past the adults, particularly the teachers, had used the paper-based portfolios when they wanted to encourage children to recall, reconnect with or restart their learning. They were now using only the ePortfolios to do this. Similarly the parents and whānau were no longer taking the paper-based portfolios home intentionally. Although this still occurred, it was only when the children initiated the event.
The ePortfolios were recognised as a tool which could beneficially be used by teachers, parents and whānau to aid children’s transition from the ECE setting to school. Links between *Te Whāriki* and the Key Competencies in the New Zealand School Curriculum could be clearly made. Also, the teachers thought that giving the children’s New Entrants teachers access to their ePortfolios before they started school would mean that the those teachers would have a broader knowledge of who the child was as a learner prior to their starting formal schooling. Relationships between the child, family and teacher could also be nurtured before the child started school if the New Entrants teacher were given access to the ePortfolio.

7.5.3 Portfolios are vital for children’s learning – recall, reconnect and restart

As identified previously, portfolios can be important artefacts which enable authentic learning journeys to be constructed throughout the individual’s involvement in education (Anh & Marginson, 2012; Cohen, 1999; Goldsmith, 2007; Vygotsky, 1978; Wenger, 2015b). Teachers, parents and whānau all felt that the paper-based portfolios were vitally important to children’s learning and must therefore remain available and accessible for children. The paper-based portfolios provided children with a tangible object for which they felt a sense of ownership. As the paper-based portfolios were readily available for the children and the ePortfolios were not, because these could only be accessed with the help of a teacher, parent or whānau member, children at the setting were observed accessing only their paper-based portfolios by themselves after the introduction of the ePortfolios. Any interactions with the ePortfolios involved a teacher or other adult. However, the teachers noted in the Final Surveys and their reflections that the children were requesting to access their ePortfolios more and more. It is assumed, then, that as the ECE setting provides children with the technology to look at their ePortfolios on their own whenever they choose, interactions with the ePortfolios will increase. When the technology is adequate to support this access then the children will be able to use the
ePortfolios, as they did the paper-based portfolios, to recall, reconnect with and restart their learning (see 5.6.1).

The introduction of ePortfolios had impacted on children’s learning, nonetheless. The children’s learning was being captured in a more timely manner. Parents and whānau were seeing these experiences in “real” time (see 7.1.7). The teachers were writing the Learning Stories and learning moments on the floor and they were uploading the supporting photos and videos to the ePortfolios straight away. The child’s voice was far more evident in the Learning Stories and learning moments since the introduction of the ePortfolios. Children were dictating their own learning experiences and selecting which media were used to support these within their ePortfolios (as identified in 7.1.5 and 7.2). These things led to the teachers having a greater knowledge of who the child was as a learner, hence learning had become visible (Hattie, 2010). They were able to see the children’s strengths, interests and passions developing through the various lenses of all the teachers who were contributing to their ePortfolios; and this had greatly increased when compared with contributions to the paper-based portfolios. As with the changes to the teachers’ formative assessment practices, the impacts on children’s learning which had developed from the introduction of the ePortfolios also strengthened the relationships within the ECE setting, and the links between home and setting were more apparent (Cankar et al., 2012; Cohen, 1999; Daniel, 2009; Hattie, 2010; Howe & Simmons, 2005).

7.5.4 A strengthening community of practice

The theoretical framework chosen for this study, communities of practice, proved to be accurate as the CoP in the ECE setting grew and strengthened. Several of the key components of a community of practice as identified by Wenger and others became evident, and each was impacted on by the intervention of ePortfolios. In chapter three I wondered if a community of practice was present at the beginning of this research. There was indeed a community of practice in place, however it was juvenile and had nowhere near reached its full potential (see figure 5.9). While the teachers, parents and whānau had a shared domain (or mutual engagement) – an interest in children’s
learning through formative assessment and they were part of a community (or joint enterprise) with fledgling relationships being developed around the shared domain, they were not actively engaged together in the practice (or repertoire) of the community (Kerno & Mace, 2010; Kerno, 2008; Lave & Wenger, 1991; Liedka, 1999; Tummons, 2012; Wenger, 1998, 2000; Wenger et al., 2002). After the introduction of ePortfolios the relationship between the teachers, parents and whānau had become stronger and many were working together on the practice, forming a stronger community of practice (see figure 7.5). There was still room to grow and develop here, however, as the contributions from children had begun to have a stronger presence in the ePortfolios towards the end of the research period.

*Figure 7.8 A strengthening community of practice*

![Diagram showing the relationship between teachers, children, children's ePortfolios, and parents/whānau]

**Key:**
- Significant engagement
- Some engagement

**Membership**

As noted in 3.4.1, one of the key components of a community of practice is participation (Kerno & Mace, 2010; Kerno, 2008; Nemec & LaMaster, 2014; Porter Kuh, 2012). To enable the practice to be achieved the members of the CoP must participate in the practice. At the onset of the research there was very little participation by parents, whānau and children in the practice of engaging in children’s learning through documentation (see 5.5.2). After the intervention of ePortfolios, participation in the practice by parents and whānau had increased enormously. A significant number of parents and whānau had begun contributing to their children’s ePortfolios and were thus engaging in the practice of children’s learning (see 7.3.1). It is fair to say, therefore, that the membership of
the community of practice had become meaningful for the members as participation increased.

*Legitimate Peripheral Participation*

Indeed, as suggested in 3.4.2, parents and whānau had began the ePortfolio journey on the periphery of the community of practice. However, this quickly changed as they became familiar with the ePortfolio platform and became fully functioning members. It was assumed that children would become active participants in the practice, but, surprisingly, they were the members of the CoP who sat on the periphery. Towards the end of the research period this had begun to change as teachers were inviting children to become active in selecting what would be uploaded to their ePortfolios and were including their voices in the stories they were writing, as noted by several of the teachers in their Final Surveys, interviews and reflections.

*Modes of Belonging*

As noted in Chapter Three (3.4.2), there are three modes of belonging within a community of practice that members can fall into: engagement, imagination and alignment (Wenger, 2000). At the onset of this research I postulated which mode each member of the CoP might position themselves within after the introduction of ePortfolios.

*Engagement*

In the engagement mode, members of the CoP become engaged with the practice of the CoP (in this case, children’s learning through formative assessment). Within this mode the members are beginning to know about the practice and may begin to produce artefacts which support the practice. I posited that the children, parents and whānau and teachers might all be positioned in engagement mode and indeed they were. The teachers, parents and whānau were actively engaging in the practice by contributing tangible items to the children’s ePortfolios. The children were engaging, too, as they viewed the contents of their ePortfolios with teachers, parents and whānau.
Imagination

Members who are positioned in the imagination mode of the CoP are beginning to find new ways to contribute to the practice. In this study they were finding new ways of doing, belonging, becoming, and experiencing formative assessment which would contribute to an authentic learning journey for children. As with engagement, I surmised that children, parents and whānau and teachers could be positioned in this mode. After the introduction of ePortfolios the teachers were strongly positioned here as they worked alongside each other and with parents and whānau to find new ways of utilising the ePortfolios to enhance, strengthen and support the children’s learning journeys through formative assessment. Some of the parents and whānau could also be placed in this mode as they began contributing tangible items to the children’s ePortfolios that they had not contributed before. The example of “one special family” provided in Leslie’s reflection (7.2.3) highlights this. Although there was no strong evidence to show that the children were operating in this mode I believe that they were definitely moving towards this as they became more active contributors to their ePortfolios.

Alignment

In the alignment mode of belonging, members of the CoP are making sure that their practice is aligned with the processes which may have an impact on the practice. This is the most advanced mode of belonging within a CoP and I proposed that the teachers might be functioning at this level by the end of the study. When the study began the teachers were in some disarray in terms of their formative assessment practices. As highlighted in Chapter Five, there were no set ways to complete formative assessment. There was also no shared understanding between the teachers of how they could work together to strengthen, enhance and support formative assessment for children. By the end of the study a cycle of collaboration between the teachers had been developed (see Figure 11.1). Their processes had become aligned, and through this they were achieving higher goals.
**Identity**

Through the course of this study each member’s identity within the community of practice evolved depending on their mode of belonging, becoming rich and complex. Members’ identities were also enhanced by the learning trajectory each member followed and by their engagement with the unfamiliar (ePortfolios). Depending on the level of engagement and the various ways of participating (such as tangible contributions and verbal contributions), member’s identities either remained stagnant, grew slightly or flourished. The teachers developed strong identities, regularly contributing to the ePortfolios through formative assessment and being involved in finding new ways to strengthen, enhance and support this. They were involved in the practice on a local and global level. At the local level they were working together as a team to strengthen the practice, and on the global level they were sharing their learning with others beyond the early childhood setting. As parents and whānau became much more visible in their children’s learning journeys through their engagement with the formative assessment in the ePortfolios, their identities within the community of practice also grew. Of course, this was more the case for some parents and whānau members than others, depending on their level and type of engagement. As with the modes of belonging, I believe that the children’s identities within the CoP were still evolving as they moved towards becoming fully functioning members.

**Leadership**

Strong leadership is central to a well-functioning community of practice (McDermott, 2001; Nemec & LaMaster, 2014; Wenger, 2000). The leader (or leaders) of the CoP constitutes the nexus which holds the group together. In this study the supervisor, of the early childhood setting quickly became the leader of the CoP focussed on the practice of formative assessment to strengthen children’s learning. She led by example. Her contributions to the children’s ePortfolios were prolific and she supported the teachers to do the same.

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21 For example, during the course of the study a group of teachers shared their experiences at a symposium.
Towards the end of the study the supervisor began to share the leadership of the CoP and other teachers took responsibility for growing the practice through such things as beginning to involve the children in writing and producing their own formative assessment.

7.6 Summary and looking forward

This chapter has discussed the findings of the Midway and Final Surveys. It has drawn on data from the case studies, interviews with management and teachers’ reflections. The findings show that there are three key themes that have emerged from this study. These are:

- Changes to teachers’ formative assessment practices;
- Changes to adult engagement, and;
- The fundamental necessity to have portfolios as an artefact to support children’s learning within early childhood education.

Each of these themes responds to a research question posed at the onset of this study and will be discussed in turn in the following chapters. Chapter Eight investigates the changes to teachers’ formative assessment since the introduction of ePortfolios.
Chapter Eight – Formative Assessment

8.0 Introduction

As identified in the literature review, narrative formative assessments are used widely to support children’s learning in early childhood education settings in Aotearoa New Zealand (Carr, 2009). The portfolios (paper-based and online) which are the central focus of this study contain formative assessment documentation mainly in the form of Learning Stories and learning moments (Carr, 2001, 2009; Carr & Lee, 2012; Carr et al., 2002). These types of documentation enable children to revisit their learning (including opportunities to contribute and self-assess), parents and whānau to engage with learning, and teachers to plan future learning experiences or support current interests. By utilising the contents of children’s portfolios in these ways the key principles of formative assessment are being applied to children’s learning. Formative assessment occurs when teachers and children give feedback on the activities or experiences they are providing or are involved in, to extend or support the learning which is occurring (Black & Wiliam, 1998a, 1998b; Carr et al., 2015).

The assessments make a difference

Formative assessment can promote children’s learning, and co-operation and interactions with others are vital for formative assessment to be successful. These interactions become central to ensuring that the assessment does some work. Formative assessment should promote experiences which directly respond to feedback (Black et al., 2004; Black & Wiliam, 1998b; Clarke et al., 2003; Crooks, 2002; Crooks, 1988; Sadler, 1989, 1998). This chapter will explore the way the teachers present formative assessment within paper-based and ePortfolios, drawing on the earlier findings chapters of this thesis. Any changes to their formative assessment practices since using both paper-based portfolios and ePortfolios will be identified and discussed. This chapter responds to the first research question posed at the onset of this study:

(i) How does the introduction of an ePortfolio programme change teacher’s formative assessments?
8.1 Changes to teachers formative assessment

A significant proportion of parents and whānau who responded to the Final Survey (16/18) noted that they had seen changes in the way the teachers were carrying out formative assessment, and writing/presenting the subsequent documentation, for the children. Several of the parents interviewed for the case studies had also noticed changes. Alongside the parents and whānau the teachers, too, could identify changes to the way they were completing formative assessment for the children, and how they were using this within the ECE setting.

8.1.1 Consistency and frequency of additions to the portfolios

Consistency and frequency of additions to the paper-based portfolios was noted as an issue for parents, whānau and teachers. This section discusses this issue further.

Parent and whānau concerns

One of the biggest frustrations for some of the parents and whānau with the paper-based portfolios was that they were not consistently updated on a regular and frequent basis. For example, Megan (parent, case study five) did not like the inconsistency with the paper-based portfolios. She felt that there were often long gaps between additions, and then there were times when a lot was added. She acknowledged that this was most likely because of the time constraints on the teachers so the paper-based portfolio may not have been a priority for them. In fact Megan said that she would rather that the teachers spent time with the children rather than “tutū”22 around with the paper-based portfolios. The analysis of the paper-based portfolios of the case study children reflected what Megan suggested and showed that they were not added to on a regular basis. All of the paper-based portfolios had significant lengths of time between additions, and for some children this could be as long as three months. Sometimes there would be a flurry of entries evident in the paper-based portfolios. This usually centred on an event of some kind, for example Matariki

\[\text{22 Tutū is a te reo Māori word commonly used in Aotearoa New Zealand to mean ‘play around with’ or ‘mess around’}.\]
(see footnote 10 for definition), when several pieces of documentation would be added. Pauline (parent, case study two) said that she thought that the paper-based portfolios were added to in “fits and bursts” (Pauline, parent, Initial Interview, July, 2013).

Changes to consistency and frequency of additions after the intervention of ePortfolios – parents and whānau observations

Although the case study children had all been attending the ECE setting for different lengths of time, ranging from two and a half years to three months, at the onset of the study, the analysis of their portfolios showed a significant increase in documentation for all of them over the data collection period (July 2013-June 2014) compared to what had been in their paper-based portfolios previously. Based on the data it can be assumed that the children who had been attending for only a few months would have had a similar number of additions to their paper-based portfolios if they had been at the setting longer (see Table 8.0). For example Lila who had been at the setting for 23 months prior to the intervention of ePortfolios had 25 items in her paper-based portfolio – so on average just over one addition per month. While Ethan who had been at the setting for five months had four additions – on average just under one per month. This is a comparable number of additions. Additions to the ePortfolios in the year of data collection at least doubled compared to what was added to the paper-based portfolios in the year prior. Graph 8.0 shows the number of additions to the children’s paper-based portfolios in the year prior to the implementation of ePortfolios and the number of additions to the ePortfolios in the year of data collection.

Table 8.0 Length of time at the ECE setting at the end of the data collection period

<table>
<thead>
<tr>
<th>Child</th>
<th>Length of time at the ECE setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lila</td>
<td>2 years, 11 months</td>
</tr>
<tr>
<td>Ethan</td>
<td>1 year, 5 months</td>
</tr>
<tr>
<td>Jordan</td>
<td>1 year, 9 months</td>
</tr>
<tr>
<td>Amelia</td>
<td>1 year, 3 months</td>
</tr>
<tr>
<td>Reece</td>
<td>3 years, 6 months</td>
</tr>
<tr>
<td>Kate</td>
<td>2 years, 6 months</td>
</tr>
</tbody>
</table>
A significant number of parents and whānau indicated that there had been an increase in the frequency of additions to the children’s formative assessment documentation portfolios with the introduction of ePortfolios, and that the entries were more meaningful (16/19 survey respondents; 6/6 case study parents). Liz (parent, Final Survey, August, 2014) said she considered that there was “more frequency and the teachers are able to use all forms of media to express the children’s learning”. Claire (parent, case study three) had definitely noticed an increase in the number and frequency of additions in Jordan’s ePortfolio. She felt that the style of the ePortfolios probably made it easier for the teachers to write the stories, in particular the template provided (as described in 1.3). However, Claire also attributed the rise in number and frequency to the fact that parents and whānau were contributing to the ePortfolios. She thought that this affirmed to the teachers that what they were doing was valued and valuable. Megan (parent, case study five) had talked about the inconsistency in her Initial Interview; she felt that this had changed with the ePortfolios, which were now being added to regularly. The analysis of the ePortfolios of the case study children also showed a significant increase in frequency of additions. Learning Stories and learning moments were being added to the children’s ePortfolios on a regular basis, on average once a week,
and there were no longer gaps of several months. However, on occasion, there were still sometimes gaps in the additions to the ePortfolios, as there had been with the paper-based portfolios, as noted by Pauline (parent, case study two). She said that some weeks there were heaps of new stories added and then none for quite a while. At the time of the Final Interview Pauline said that there had been no new stories added for the last “couple or weeks or more” (Pauline, parent, Final Interview, August, 2014). She attributed this to teacher absences.

Changes to consistency and frequency of additions after the intervention of ePortfolios – teachers’ observations

Several of the teachers also identified that the frequency and consistency of their contributions to the portfolios had changed since the intervention of ePortfolios.

Contributions to paper-based portfolios

In regards to the paper-based portfolios, some of the teachers noted that they did not have enough time to contribute as much formative assessment documentation to them as they would like. Georgina (teacher, case study six) felt that there was not enough time to really capture the children’s learning as she would like to.

My main issue is that there is never enough time. I find while there’s lots of moments and lots of learning happening, and through writing the stories it gives me time to think more about the learning and how I’m responding to it, reflect on it, go a bit more in depth in the analysis and what learning’s actually happening there. And I enjoy writing but my main thing is I actually like time to think. I’m not very good at writing a story quickly; I need to think about it and go back over it. So it is a time factor for me (Georgina, teacher, Initial Interview, July, 2013).

As noted previously, Robin (teacher, case study three) noted that the writing was hard for her, particularly typing Learning Stories up ready to go into the children’s portfolios. Robin said that she would like to contribute more and she certainly had many more stories that he could write for the children. Stephanie (teacher, case study four) said that she would add only one learning story to each of her key children’s paper-based portfolios per month. She said this was because of the primary care system that they used in the under-twos section of the ECE setting. This is an interesting statement. I wonder if Stephanie was
using the primary care system as justification for not being able to complete more formative assessment for the infants, perhaps because of the time it took to administer, or because of the image she and the other infant teachers held of children who were under-twos years of age. As identified in a recent Education Review Office report on the quality of care and education for this age group, almost half of the ECE settings in Aotearoa New Zealand do not have a strong enough focus on exploration and communication (Education Review Office, 2015). This could be because the teachers who work with this age group and the children’s parents may have a different image of infants as opposed to older children – focussing more in issues of belonging and wellbeing. This is reflected in Stephanie’s earlier comment when she stated that she did not think that parents and whānau understood the significance of portfolios, and their link to children’s learning. However, Stephanie would like to contribute more. She said:

Ideally it would be once a fortnight. In reality with primary care and that, and staffing and that, that’s been a little bit, how can I say, erratic? I wouldn’t be able to tell you. But there would be something in there, at least once learning story a month from myself (Stephanie, teacher, Initial Interview, July, 2013).

Contributions to ePortfolios

With the introduction of ePortfolios the teachers felt that they had increased the frequency of their contributions significantly. Sandra (teacher, case study one) said that contributing was a lot easier because of the technology and that this meant that she was now adding to the ePortfolios more often than she did to the paper-based portfolios. Like Sandra, Joanne (teacher, case study two) felt that she was adding more to the ePortfolios than she was to the paper-based portfolios, for all of the children in her section. Robin (teacher, case study three) thought that her contributions to the children’s portfolios had increased since introduction of ePortfolios. As she was using the tool more her typing had improved and with continual practice she felt it was only going to get better. Robin was also more motivated to write the stories because she knew that they were going to be seen by a parent or whānau member in a much quicker time frame.

As a teacher it is knowing that in the next 24 to 48 hours the story will be seen by somebody. It means I’ve got to get it done. I’ve got to finish it. It was important enough for me to collect his information and make sure I wanted to
get it down so I will get it down. Whereas before it was like, oh well I know this parent doesn’t take their portfolio home that regularly, so I can probably leave this until next week or I can leave it to the week after (Robin, teacher, Final Interview, August, 2014).

Georgina (teacher, case study six) also said that she was contributing more formative assessment documentation to the ePortfolios than she had to the paper-based portfolios in the past. Interestingly, Georgina was also involving the children in the learning story writing as they contributed their own ideas and selected photos to upload.

I am contributing way more than I was. Because it’s got a set format too it’s just time saving in terms of taking and uploading photos, I can upload them straight away from the floor...I can start writing straight away. I can do some writing with the children so they are contributing their own words...and choosing their own photos to, so I love that aspect of it too (Georgina, teacher, Final Interview, August, 2014).

Although Stephanie (teacher, case study four) said that she liked writing Learning Stories for children’s paper-based portfolios, she was more enthusiastic about doing so with the introduction of ePortfolios. Stephanie felt that she was completing more stories in the ePortfolio system than she was before with the paper-based system. She liked that she was able to keep a story in draft form and could go back and edit the contents after she had undertaken some further research on the learning that she had identified before they were uploaded. Stephanie thought that the ePortfolio system suited the way she worked. She said “It [the ePortfolios] actually suits my style of learning and my style of writing too, so it’s really cool” (Stephanie, teacher, Final Interview, August, 2014). Another change for Stephanie was the number of portfolios that she now contributed to. Previously Stephanie had only contributed Learning Stories to the paper-based portfolios of her key children. With the introduction of ePortfolios this had increased considerably. Stephanie considered that she was now adding Learning Stories to “99 per cent of them [the ePortfolios]” of the children in the under-twos section of the ECE setting. As well as using her non-contact time, Stephanie was writing Learning Stories for children’s ePortfolios at home on occasion. She said “I have had times if I’ve got a few drafts I want to finish; I will sit at home, go in and finish them off, where I wouldn’t do that with
a paper-based [portfolio]” (Stephanie, teacher, Final Interview, August, 2014).

Like Stephanie, Leslie (teacher, case study five) was sometimes working on her Learning Stories at home.

I do feel that ePortfolios makes me feel like I can contribute more. I feel like Educa provides more [opportunities to contribute]. So I can sit at home and I can write Learning Stories and moments for children and because I can work on them at home my output is higher (Leslie, teacher, Final Interview, August, 2014).

Georgina’s (teacher, case study six) feelings about contributing to portfolios had positively changed during the year. She valued the ePortfolio system and was really enjoying making contributions. Although she was spending a lot of her own time writing the Learning Stories she did not resent this because her enjoyment had increased so much.

I love the ePortfolio system and also I’ve bought my own iPad Mini which has really made a difference for me. But in saying that, I’m probably writing a lot more stories than I used to, so I’m probably not doing less time, but contributing more. I like it all in one place and the fact that the tablet is here as well, but I can take this [her iPad] at lunch time and upload photos and start writing a story straight away and that’s really valuable (Georgina, teacher, Final Interview, August, 2014).

It is vital to acknowledge here that although some of the teachers were using their own time to contribute to the ePortfolios they did not see this as a negative.

The increase in frequency and number of additions to the children’s portfolios was seen as a notable benefit of the introduction of ePortfolios. This was reported by teachers, parents and whānau. The teachers were feeling affirmed by the response they were receiving from the parents and whānau and this was encouraging them to write more. Alongside this, knowing that their stories were going to be read by a parent or whānau member in a timely manner also meant that they were spurred on to add these quickly. For children the timeliness of the additions to their ePortfolios meant that the learning experiences that they were having at the ECE setting could be shared at home while they were still fresh in their minds. They could also provide ‘concrete proof’ of what they were doing at the ECE setting. By seeing what their children were doing at the ECE setting almost instantly, parents and whānau were
becoming more connected to what was going on and their conversations with teachers about their children’s learning were increasing in frequency and deepening. The affordances of the digital technology were a salient factor in the regularity and frequency of the teachers’ contributions to the children’s learning journeys through ePortfolios. Being able to access the ePortfolios anytime, anywhere meant that the teachers were contributing whilst at the ECE setting and also from home. As noted by Simonsen, Blake, LaHood, Haggerty, Mitchell and Wray (2009) “Writing tends to require us to sequence what we apprehend, while visual representation can enable us to present what is apprehended simultaneously. Digital technology affords us the capacity to work interactively and three dimensionally” (p. 19). EPortfolios, thus, provide a way to communicate that is accessible to teachers, parents and whānau (and to a lesser extent in this study, children) and is multimodal.

8.1.2 Writing style and content

The analysis of the case study children’s paper-based portfolios showed that there was no set way of presenting or writing the formative assessment documentation (see Appendix Ten for examples). Each teacher wrote in their own way and each piece of documentation was presented differently. Very seldom were any links made over time between the formative assessments in the paper-based portfolios, and there was very little evidence of teachers using the documentation in planning for further learning experiences to extend on or support what children had already learnt. However, the teachers expressed a different view to what the analysis of the paper-based portfolios showed. Some teachers felt that they were effectively using the formative assessment contained in the paper-based portfolios to plan for future experiences. Joanne (teacher, case study two) saw the value of paper-based portfolios as an assessment tool. She supposed that through the paper-based portfolios the teachers were able to notice what was important to the child and also their development over time. From this they were then able to think about “where to next”. They could plan their programme to suit the children’s interests and needs and they could discover what extra equipment or resources they might need to enhance the child’s learning. This meant that the children were “actually
excited about what’s happening and being able to repeat things they want to repeat or engage in things they want to engage in” (Joanne, teacher, Initial Interview, July, 2013). For Leslie (teacher, case study five), the paper-based portfolios contained rich documentation which supported children’s learning, helped her plan as a teacher and incorporated formative assessment which identified further opportunities and possibilities for extending learning experiences. The teachers, therefore, were using the paper-based portfolios to plan for the environment and experiences in the ECE setting by reading the contents and responding to them in this way. Marie wrote “reading portfolios enables me to get a sense of the children’s interests, abilities and strengths, which enables me to know what they might need to flourish within their environment” (Marie, teacher, Initial Survey, July, 2014). It was apparent when observing the day to day happenings in the ECE setting that extending on the formative assessment contained in the children’s paper-based portfolios was indeed happening; however the supporting documentation in the portfolios was not so evident.

**Changes to writing style and content after the intervention of ePortfolios – parent and whānau observations**

With the introduction of the ePortfolios the content of the formative assessment documentation and the teachers’ writing styles had changed. Connections between learning experiences were also being made far more often by the teachers. These changes were acknowledged by parents, whānau and teachers. The changes were also evident in the analysis of the ePortfolios belonging to the case study children. Pauline (parent, case study two) had noticed that the length of the Learning Stories had increased in the ePortfolios. She also observed that the level of detail in the stories was better in the ePortfolios. Pauline said:

> I think it’s probably actually even better. Maybe it’s easier for the teachers to do it that way but it does seem that way. There was nothing wrong with them [paper-based portfolios] before but it does seem that they have even more detail in them now, and the videos and stuff help as well, which you obviously can’t do with a paper one (Pauline, parent, Final Interview, August, 2014).
For Trudy (parent, case study one) the set format and the addition of videos had made a difference. She liked the capacity the ePortfolios had for videos to be included with the Learning Stories. This was something that she had mentioned as being problematic with the paper-based portfolios in her Initial Interview. She knew that there were videos being taken of Lila at the setting but unless a teacher took the time to show them to her then she did not see them. This meant that Trudy now had access to a medium that wasn’t readily available before. Until the ePortfolios were introduced Lila’s father had not seen the videos at all. Trudy felt that the introduction of the ePortfolios meant it was a lot easier to see the videos and photos taken of Lila at the ECE setting. Jasmine (parent, case study four) also thought the addition of videos added to the teacher formative assessment. She really valued the extra layer they added to the children’s learning journeys.

Claire (parent, case study three) said that the way the teachers were writing Learning Stories had changed since the introduction of the ePortfolios. The consistent format meant that parents knew what to expect. She knew that she could scroll down and that the teachers would have identified what learning was happening in any given experience. Claire also liked how the learning was being linked to *Te Whāriki* in the ePortfolios. She said that this was happening more often now and for her this was important. This reflected the positive change in depth and richness of the Learning Stories that were being written for the children’s ePortfolios that was evident in the ePortfolio analysis.

In the Initial Interview Sarah (parent, case study six) had identified that she sometimes did not like the way the Learning Stories contained in the paper-based portfolios were written. She felt that they contained jargon and were sometimes hard to understand because of this. Sarah commented that this had changed with the introduction of ePortfolios. She thought that the teachers were writing their Learning Stories aimed at parents and they were being written better. Megan (parent, case study five) had also noticed a difference. She said that there was now more information contained in the ePortfolios and that the
teachers were now linking back to what learning was happening consistently as they were commenting on existing stories, or expanding on them with new ones (for an example of this see Figure 7.3).

**Changes to writing style and content after the intervention of ePortfolios – teachers’ observations**

The teachers had noticed several ways in which their writing and the content of the formative assessment had changed with the introduction of ePortfolios. Sandra (teacher, case study one) had identified in the Initial Interview that she felt that her Learning Stories were difficult for children, and sometimes parents and whānau, to understand. With the introduction of Educa she felt her writing had become more succinct. The format provided by the ePortfolio platform for the Learning Stories (the body of the story, what learning is happening and opportunities and possibilities for support/extension) meant nothing was missed and that she was able to get the stories “out there” quickly. Also, because Sandra was writing stories more frequently she was becoming more practiced in producing something that the parents and whānau would respond to. Stephanie (teacher, case study four) had also noticed a change in the way the teachers were writing formative assessment for children through Learning Stories. She said that there was now a lot more theory added, which supported the learning that was being observed, and that teachers were putting more thought into what they were writing. The template provided by Educa helped this as teachers had to think about what learning was happening and what opportunities and possibilities there were for extending this learning. Eilish agreed with this in terms of the way her writing had changed. She supposed that her increase of literature use was because as she was writing the stories online she was accessing research online alongside this (see Appendix Ten for examples of Learning Stories containing literature). She wrote “often when I write stories online, I am also able to access different articles while I am on the internet. This enables me at times to think more deeply about that child’s learning” (Eilish, teacher, Final Survey, August, 2014).
With the introduction of the ePortfolio system, Leslie (teacher, case study five) felt even more confident in her capability to write quality Learning Stories. “I think that over time using ePortfolios my confidence has definitely grown...how I use it and how I communicate the values of [the ECE setting] through my stories, through ePortfolios” (Leslie, teacher, Final Interview, August, 2014). Leslie thought that the other teachers had also changed how they were writing the Learning Stories. Leslie thought that the teachers were writing for more children now, not just their key children. The stories were more frequent and contained deeper reflection through reference to theory and research. Leslie considered that the teachers were discussing children’s learning more. This was now not limited to meetings but happened regularly during the day to day running of the ECE setting.

I think as teachers our output is higher, we’re having more discussions on the floor about children’s learning so as teachers we’re collaborating a lot more on the floor and we’re building on that place. So what one teacher started with another teacher can add to and another teacher can add to, so the children’s learning, it’s just getting deeper and deeper and richer and richer (Leslie, teacher, Final Interview, August, 2014).

In her Initial Interview, Georgina (teacher, case study six) noted that she felt as if she was still learning about formative assessment, as this was not covered thoroughly in her qualification. She thought that through using the ePortfolio system her knowledge around assessment had greatly improved. Georgina thought that she had gained more of an understanding about formative assessment from not only using the tool to make links and connections, but also from the increased discussion among the teaching team (further discussed in 9.1.3 below). Georgina further thought that there had been a change in the way the teachers were writing Learning Stories which meant that she had identified a change in their formative assessment practices. The template provided for the Learning Stories on Educa helped this as teachers now included not only what they had noticed in the way of learning but how they had recognised it as learning and how they had responded to the learning. When asked if there had been a change Georgina said

Yeah, definitely and the format that's set out, write the story, what learning is happening here and what next, because we’re all using that format now,
whereas we were not before, I think that’s definitely changed the way we are writing them [the Learning Stories] (Georgina, teacher, Final Interview, August, 2014).

When asked what had changed for her Joanne (teacher, case study two) simply said “the quality of my stories”. This is interesting because in her Initial Interview Joanne felt that her formative assessment documentation was already well written and thoughtful. In terms of the other teachers Joanne considered that their writing of Learning Stories had also become a lot more in depth since the introduction of the ePortfolios. She said:

...it has a lot more depth too in the way that we’re thinking about our writing and the way that we use theory and the way that we use the ‘what next’ is a lot more thoughtful. We’re actually a lot more critical of ourselves and the way we write because we know that the parents have access to it straight away. I think that people are a lot more thoughtful and critical about what they write (Joanne, teacher, Final Interview, August, 2014).

Changes to writing style and content after the intervention of ePortfolios – review of the portfolios

The analysis of the ePortfolios reinforced all of the changes to writing style and content noted above. In the paper-based portfolios it was sometimes difficult to see a clear difference between a learning story and a learning moment (see 2.2 for an explanation of Learning Stories and 5.1.4 for an explanation of learning moments). What was very obviously thought of as a learning story by the teachers was not written as one as designed by Carr (Carr, 2001; Carr & Lee, 2012). The majority of the entries in the paper-based portfolios did not identify what learning was happening during the documented experience, or indeed ideas for future direction or support. This had changed significantly with the formative assessment documentation in the ePortfolios. The differentiation between Learning Stories and learning moments was very clear. Learning moments were a snippet in time that was worth capturing and adding to the ePortfolio. As previously noted by Kelly (parent) in her Final Survey – experiences that may not have been considered important enough to include in the paper-based portfolios were being added to the ePortfolios in this way. The Learning Stories, on the other hand, all followed the same format. They all
identified the learning that was happening during the experience and therefore the teachers could present ways to further support, or extend on, this learning.

8.1.3 Collaboration

The introduction of ePortfolios had seen a change in the way the teachers collaborated with each other when completing formative assessment documentation. The ePortfolio tool had opened avenues for collaboration that were not so easily present in the paper-based portfolios. This was because the medium for communication was multimodal, including video, which enabled documentation of real time events that could be more easily accessed by many participants. This meant that teachers were able to write stories collectively, at the same time; they were able to easily see what others had written so there double-ups were no longer occurring and they could see the learning through multiple lenses. This was identified by several of the teachers. Sandra (teacher, case study one) noted the benefit of being able to see what other teachers had written and could make links between these stories and her own. This, she said, meant that by having different lenses recording children’s learning teachers were “actually able to get to know the child and understand how they learn” (Sandra, teacher, Initial Interview, July, 2013). Sandra also thought that teachers were reading each other’s stories far more often with the introduction of the ePortfolio system. This meant Sandra thought that they were becoming a more reflective teaching team. Robin (teacher, case study three) said that teachers were no longer “doubling-up” on stories. By this Robin meant that rather than several teachers writing about the same thing, for example a child learning to write their name, they were now expanding on the first story. This was because, Robin felt, the ePortfolios made looking back at what had been written in the past so much easier. Eilish felt that the increased collaboration between the teachers meant that children were assured of having relevant documentation in their ePortfolios. She noted “Teachers can visually see which children are lacking in stories thus might be encouraged to have a lens for that child and capture a moment of learning or discuss with other teachers about the current learning for that child” (Eilish, teacher, Final Survey, August, 2014).
Georgina thought that the ePortfolios also made planning for children’s learning experiences easier. This was because of the ease of access and because it could always be accessed (using the settings tablets and computer) as opposed to the paper-based portfolios which were not always at the ECE setting. Georgina found that the ePortfolios helped her to make links to what other teachers had written and build on what learning they had noticed, recognised and responded to.

Educa is way easier for planning. It’s been fantastic in that respect because it is so easy to access previous stories for a child, and it’s always there, whereas the portfolios [paper-based] go out of the centre...or if I’m outside and I want to access the stories I can do it on the spot, rather than having to come and find a portfolio. Also, it’s really easy to read what other teachers are writing so you can see, make links, and then build up the planning from there. It’s just having it all on one place that’s so easily accessible and just easy to scroll back through and find a story that you might want to link the learning to (Georgina, teacher, Final Interview, August, 2014).

She said “We talk a lot more as teachers too actually between us about what’s happening” (Georgina, teacher, Final Interview, August, 2014). These rich discussions meant that the ECE settings philosophy on learning was more visible in the children’s Learning Stories. “That comes through in the assessment and planning as the values that are really important for us in the centre are coming through much more in our stories” (Georgina, teacher, Final Interview, August, 2014).

Joanne (teacher, case study two) considered that through using the Educa ePortfolio system teachers were thinking more about what they were writing in relation to each other. They were able to reflect on what each other was noticing when composing their stories. Joanne said:

Often because I can go to the reports and see everybody’s recent stories I can start to make those connections, whereas with the paper-based it was talking to people or wading through what needed to be filed. It’s just having real quick access (Joanne, teacher, Final Interview, August, 2014).

This also meant, Joanne thought, that teachers were writing more shared stories. Like Robin she thought that the teachers were adding to each other’s stories and were making sure that they were not repetitive. She said “Some people may have not written that story fully because they were not quite sure where to take
it, then I’d be like oh I’ve noticed that as well, how can we pull it together, or what might come next?” (Joanne, teacher, Final Interview, August, 2014). Finally, Erica commented that through the collaboration afforded by the ePortfolios the teachers were ensuring that “Documentation is timely, authentic, reflects the pedagogy of centre, reflects who the child is as a learner, reflects relationships with the teachers and reflects the strengths of the teaching team” (Erica, teacher, Final Survey, August, 2014).

The increase in collaboration was an unexpected outcome of this study. The teaching team at this ECE setting were already well established at the onset of the research period and worked well together. The fact that the ePortfolios further deepened their collaboration with one another meant that the formative assessment that they were writing for the children became even more meaningful and reflected the changes that were happening in the team.

8.2 What had changed?

Several changes to the way the teachers’ structured formative assessment for the children have been identified in this chapter. Although the teachers were somewhat comfortable with what they were including in the paper-based portfolios, as were the parents and whānau, the changes made during the year of data collection were immense. Notably, of particular importance to the parents and whānau, the frequency and consistency of additions to the children’s portfolios had increased. For all of the children in the case studies there had been an increase in what was added to their ePortfolios from what was in their paper-based portfolios. For most of the children this increase was significant. From counting the average number of entries in the paper-based portfolios and ePortfolios of all the children in the ECE setting per month, it is fair to say that this is an across the board finding. Parents and whānau reported an increase in the number of pieces of documentation being added to the portfolios and alongside this teachers identified that they were adding more. However, and very importantly, the increase in the frequency of formative assessment documentation did not mean that the quality was reduced. Conversely, analysis of the portfolios and the comments from the
participants indicated the way in which the teachers were writing the Learning Stories and learning moments showed far deeper thinking and reflection than they had shown in their stories in the past. They were regularly referring to theory and research to support what they were writing, the stories were written in a way that encouraged parent and whānau contribution, the learning that the teachers had noticed was clearly articulated and they were identifying ways to support and/or extend on the learning. This meant that the teachers were engaging in assessment that was clearly meeting the definitions of formative assessment provided earlier (Black & Wiliam, 1998a, 1998b; Carr et al., 2015). It is important to note that although the mediums of communication (written, conversed and videoed) had all been available to the teachers for some time, the intervention of the ePortfolios meant that they could pull them all together and provide ready access to them at the same time for parents, whānau and children (as well as each other).

The sense of collaboration amongst the teachers in terms of their formative assessment documentation had also increased. This team was already working incredibly well together at the onset of the research and they had a strong loyalty to each other and the ECE setting. However, this did not necessarily translate into their formative assessment documentation. There was little evidence in the paper-based portfolios of collaboration when it came to recording learning documentation for the children. Rather than build on previous learning evidenced in the paper-based portfolios, the documentation was disjointed and did not flow. Again there was a notable change here after the introduction of the ePortfolios. The teachers were talking more about what they were writing - with each other, parents and whānau and with the children. They were reading each other’s Learning Stories and learning moments, and they were seeking feedback on what they had written from their colleagues. They were writing shared stories – stories which contained thoughts from more than one teacher – on occasion and were referring to stories others had written (see figure 7.3, where one teacher notes that she is aware of a story that another teacher in the process of writing). This increased collaboration in formative assessment

**How the introduction of ePortfolios impacted on the changes**

The design, alongside ease of use and accessibility, of the ePortfolio platform (Educa) used in this study was a critical factor in the changes to the teachers formative assessment practices. Therefore, this must be a significant consideration for ECE settings investigating using ePortfolios and the associated providers. The template designed and implemented by Educa was based on sound educational knowledge with input from ECE practitioners and researchers. This meant that it was fit for purpose and had no unnecessary features. Through using the template the teachers were producing consistent Learning Stories which recognised the learning that was happening as well as identifying opportunities and possibilities for future extension and/or support of the experience or interest. The template allowed the teachers to make meaningful links to Aotearoa New Zealand’s early childhood education curriculum, *Te Whāriki* (Ministry of Education, 1996) and provided space for ongoing feedback from parents, whānau and teachers.

**8.3 Summary and looking forward**

This chapter has described the findings from the study in terms of formative assessment. It has identified the way in which the teachers were providing formative assessment for children in the paper-based portfolios and has ascertained what changed after the introduction of the ePortfolios. Parents and whānau, as well as the teachers, recognised changes to the formative assessment practices and pedagogy of the ECE setting and these views were presented.

Chapter Nine will explore the findings of the study in terms of any changes to parent and whānau engagement with their young children’s learning.
Chapter Nine – Parent and Whānau Engagement

9.0 Introduction

Parent and whānau engagement with their young children’s learning can have a critical role in their educational development and life experiences (Hango, 2007; Siraj-Blatchford, 2010; Waanders et al., 2007). As noted previously it has also been argued that parent and whānau engagement is a vital factor in high quality education (Cankar et al., 2012; Douglass, 2011; Hattie, 2010; Howe & Simmons, 2005; Ministry of Education, 1996). This study sought to find out how parents and whānau engaged with their young children’s learning through formative assessment presented in paper-based portfolios. Furthermore it investigated whether there were any changes to this engagement when ePortfolios were introduced to the ECE setting. This chapter responds to the first research question posed at the onset of this study:

(ii) Does an ePortfolio programme assist parents and whānau in an early childhood education setting to engage with their children’s learning? If so, in what ways?

Each of the sections includes the opinions of parents, whānau and teachers.

9.1 Parent and whānau engagement with paper-based portfolios and ePortfolios

9.1.1 Access

The extent to which parents and whānau were engaging with their children’s paper-based portfolios at the onset of this study varied. The majority of parents and whānau identified that they accessed their children’s paper-based portfolios on a semi-regular basis, generally monthly. They usually took the paper-based portfolios home to look at with their children, rather than at the ECE setting. All of the parents and whānau members who took part in this study knew where the paper-based portfolios were located in the ECE setting.

*Ease of access*

The ease of access this afforded was highlighted as a benefit by several respondents. For example, Claire (parent, case study three) said that her
favourite thing about the paper-based portfolios was how accessible they were to both herself and her children. Claire and her children, Jordan and James, all knew where the paper-based portfolios were kept and that they were free to take them any time they liked. Claire said that if the paper-based portfolios were not readily accessible then she would be less inclined to seek them out. Although Claire noted the lack of notifications of new stories as a downside of paper-based portfolios she did admit that she was usually aware that something new had been added “...nine times out of ten the teachers are really good, they’ve already spoken to me about it [a new story] because it’s been something wonderful that they’ve seen the boys do and they’ve chosen to write about it” (Claire, parent, Initial Interview, July, 2013).

**Ease of access and interactions**

Sandra (teacher, case study one) also identified the main benefit of paper-based portfolios as the ease with which parents, whānau and children could access them. This led, she thought, to increased interactions between teachers and children, children and their peers and children and their parents and whānau with their formative assessment documentation. Sandra liked the way that the paper-based portfolios were accessible to children. She often noticed the children picking them up and looking through them. She said that children demonstrated a sense of ownership about their portfolios, they knew that they were theirs and that they could go and get the portfolio whenever they want to. She also saw the portfolios as tools which demonstrated children’s learning over time, showing a picture of their growth and development. She said that portfolios “show as essence of who they [children] are” (Sandra, teacher, Initial Interview, July, 2013). The children, parents, whānau and teachers were able to get a portfolio whenever they wanted.

**Placement of the paper-based portfolios**

Leslie (teacher, case study five) considered that the placement of the paper-based portfolios was something that was carefully considered by the teachers when deciding where equipment was located within the ECE setting. At
the time of the Initial Interview the paper-based portfolios for the children in the over-twos section were located by the ECE setting’s front door so parents and whānau had to walk past them when they were dropping off or picking up their children. Leslie would use these key times of the day to notify a parent or whānau member of an addition to the paper-based portfolio. She acknowledged that she did this more with her key families as the relationships with them were stronger.

Probably more so my key children in the sense that I generally know what the parents and families are thinking and how I can support that. And if I’ve got a story that I have written for them then I will share it with them. Whereas with other children, if I’ve got a relationship with that family I might try or give it a shot but otherwise those key teachers know that child really well and what those parents have [goals for their children] (Leslie, teacher, Initial Interview, July, 2013).

**Frequency of access**

In two of the surveys (Initial and Midway), the parents and whānau were asked to identify how often they accessed their children’s portfolio (in the Initial Survey these were the paper-based portfolios, in the Midway Survey the ePortfolios). Although the parents and whānau all indicated that they accessed their children’s paper-based portfolios, the frequency of access varied, ranging from daily to when they were notified (verbally by a teacher) that something new had been added. When the ePortfolios were introduced all of the participants indicated that they had also accessed their children’s formative assessment in this platform. Checking of the ePortfolios ranged from daily to when they received a notification (via email) that something new had been added. The data show that parents and whānau were accessing their children’s ePortfolios far more frequently than they were accessing the paper-based portfolios.
9.1.2 Initiators of interactions with portfolios

The findings from the case studies showed that the initiator of the interactions with the portfolios had changed. The families and teachers in the case studies reported that they generally looked at the paper-based portfolios with the children when they initiated the interaction. Observations in the setting of children interacting with their paper-based portfolios before the ePortfolios were introduced also showed that the interactions were nearly always initiated by the children. This had changed with the ePortfolios as the teachers were now initiating the interactions.

Initiators of interactions – teachers’ perspective

Leslie (teacher, case study five) said she regularly witnessed children accessing their paper-based portfolios to share with teachers or their peers. Leslie noted that it was the children, rather than the adults, that usually initiated interactions. Robin (teacher, case study three) said that she very rarely initiated looking at the portfolios with the children. She was very happy to do this when the children brought their portfolios to her but she would not actively initiate this revisiting herself. Instead Robin preferred to tell stories directly from her head:

I like to verbalise telling stories so I tend not to read books with the children as well. So if I’m telling a story it comes from here [pointing to her head] and it’s got a little bit of imagination and there’s tweaks to the stories I’ve read in the
past. Yeah, I’m a bit more of a story teller than a story reader (Robin, teacher, Initial Interview, July 2013).

Since the introduction of ePortfolios Robin had noticed a change in the initiator of interactions with formative assessment documentation. Robin said that she now saw teachers sharing the children’s ePortfolios with them more than they had with the paper-based portfolios. In the past any revisiting of the contents of the paper-based portfolio was initiated by the children. Now, with the introduction of the ePortfolios, and because the teachers had access to technology which allowed them to access them at anytime and anywhere, Robin supposed that more often than not the teachers were initiating the interactions with the ePortfolios.

This was demonstrated by Joanne (teacher, case study two). If Joanne wanted to revisit a story with a child she would use the ePortfolios and would access them through a tablet. Joanne also thought that the children were beginning to utilise the ePortfolios more. She considered that they had picked up the skills to use the tablets effectively really quickly. The children were able to swipe the screen to move between stories and pictures. They knew that they could make the pictures bigger or smaller, and they knew how to make a picture go away so they could choose another one. Joanne said that if there were tablets available to the children all the time, and if they knew that they could access them, then she “could imagine groups of children hanging over the tablet” (Joanne, teacher, Final Interview, August, 2014). Leslie (teacher, case study five), like Joanne, would also use the tablets with the children to initiate conversations about the contents of their ePortfolio. However, Leslie surmised that the children would still go to their paper-based portfolios first. Anecdotal evidence obtained during my visits to the ECE setting would support Leslie’s conjecture. As the paper-based portfolios were far easier to access than the ePortfolios the children were still accessing these often.

Access to portfolios is an important consideration for teachers when deciding which system to use. This discussion demonstrates the value that
teachers hold for children to be able to access their portfolios at any time they choose.

Initiators of interactions – parent and whānau perspective

Like the teachers, parents and whānau also engaged with the paper-based portfolios when the children initiated the interaction. This then prompted the parent or whānau member to take the paper-based portfolio home where it was shared with the children, extended family and friends. Megan (parent, case study five) said that they would normally bring her children’s paper-based portfolios home “once in a while” when the children asked for them to be taken home. Megan admitted that taking the paper-based portfolios home wasn’t a priority for her; it wasn’t something that she regularly thought about doing. With the introduction of the ePortfolios, parents and whānau, in particular, were accessing the portfolios when they wanted too and were then initiating interactions with their children, extended family and friends around the ePortfolio. For Megan (parent, case study five) any interactions between herself and children with the ePortfolios were initiated by Megan or her partner. Megan’s interactions with the paper-based portfolios had stopped altogether. She said this was because “They’re just printing out from Educa and putting it into the paper-based” (Megan, parent, Final Interview, August, 2014).

Pauline (parent, case study two) would look at the paper-based portfolios with her children when they initiated the interaction which was fairly often as they were usually at home. Pauline’s main concern with the paper-based portfolios was forgetting to take them back to the ECE setting. From my observations in the ECE setting I knew that this was frustrating for Pauline’s older daughter. Every time I came to the setting Milly wanted to show me her portfolio and every time it wasn’t there. Sometimes she found this quite upsetting. With the introduction of the ePortfolios this was no longer a problem for this family. The children’s paper-based portfolios no longer came home so they were always at the setting, and Pauline and her partner were happy to simply look at the ePortfolios online. This did mean a change for the way
Pauline viewed the children’s assessment for learning documentation with her children. She would access the ePortfolios when the children were not home or when they were in bed, using her phone. Educa had designed an app specifically for this purpose. As the children were not allowed to use Pauline’s phone they did not look at their ePortfolios at all when at home. This meant that, unlike with the paper-based portfolios, Pauline was no longer directly looking at the assessment for learning documentation with Ethan and Milly. She would still talk about the stories she had read with them, however.

Jasmine (parent, case study four) had become the initiator of investigating the contents of the ePortfolio. She looked at them regularly with Amelia and Jack. She said “We look at them together on the computer, or on my phone, so we can look at them anywhere” (Jasmine, parent, Final Interview, August, 2014). This meant that she was no longer looking at the paper-based portfolios with her children. In fact, she actually did not even know where Jack’s paper-based portfolio was “I have no idea where Jack’s one is. It’s at home somewhere. Just don’t even use it anymore, there’s no need to” (Jasmine, parent, Final Interview, August, 2014).

9.1.3 Sharing

Sharing the paper-based portfolios with others was mentioned as a significant benefit by several of the participants.

Value of sharing the contents of paper-based portfolios

Leslie (teacher, case study five) deemed that the value of sharing the children’s portfolios with parents and whānau could not be underestimated. She felt that parents and whānau were the children’s biggest “cheerleaders” and that it was important for teachers to work in conjunction with parents and whānau to capture their aspirations for their children. Alongside this, Sandra (teacher, case study one) noted that the paper-based portfolios were a valuable tool to demonstrate children’s learning to parents. She thought that through the portfolios going home, parents were able to “visually see what’s happening and read about what’s happening, as well as understand how learning works for
children in the early years” (Sandra, teacher, Initial Interview, July, 2013). Robin (teacher, case study three) mentioned that she would share the paper-based portfolios with parents and whānau when she had added something new. Robin felt that the paper-based portfolios had tremendous potential for encouraging parent and whānau engagement with their young children’s learning. She would share the contents of her stories, sometimes before they were even added to the portfolio, with parents and whānau. Robin said that the paper-based portfolios were “an important tool for conveying the child’s journey, and what they’re doing” and that through teachers “offering our insights into what their child is doing and learning” parents and whānau would have a broader view of what their child was able to do (Robin, teacher, Initial Interview, July, 2013). Furthermore Joanne (teacher, case study two) thought that it was important to talk to parents and whānau about the portfolios, not just send them home: this, she said, was where the connections between home and the ECE setting were made.

If I’m just sending it home but we’re never talking about it, then I’m not knowing whether it’s actually important to them, whether they care or [resonate] with what I’ve written, it might not make any sense to them, they might not care about what I’ve written. So it’s that sort of making links and again sharing in that excitement... (Joanne, teacher, Initial Interview, July, 2013).

Another teacher, Stephanie (teacher, case study four) also recognised the benefits of sharing the children’s paper-based portfolios with parents and whānau. Stephanie said when she had been able to spend some time with parents and whānau looking at the children’s paper-based portfolios, they were often able to link what she was showing them to what was happening at home. These interactions were important, Stephanie noted, because they helped her to have a better understanding of the child and she was then able to use this understanding to shape her practice. Stephanie also felt that these interactions strengthened the relationship between the ECE setting and the family. Stephanie knew that these interactions were particularly important for the primary care system used in the under-twos year olds’ section to be successful. Interestingly, Stephanie noted that not many parents of the under-twos regularly
took their children’s paper-based portfolios home. She knew that this happened more in the over-two year olds’ section of the ECE setting but for some reason the parents and whānau of the infants preferred to leave their children’s paper-based portfolios at the ECE setting. Stephanie estimated that only two or three of the 10 families currently in the under-twos would take their children’s paper-based portfolios home. Stephanie speculated: “I don’t know if they actually understand the really full potential” (Stephanie, teacher, Initial Interview, July, 2013).

Frustration caused by lack of notification of new content in the paper-based portfolios

The lack of a notification system when new content had been added to the paper-based portfolios was a common frustration for parents and whānau. It was clear from the responses in the surveys and interviews that the paper-based portfolios were added to infrequently, and when something new was added there was no system to let parents and whānau know of the addition. This was also noticeable in the analysis of the paper-based portfolios which showed that the paper-based portfolios were added to infrequently and inconsistently. The teachers were aware of this and it was something that they were trying to rectify as a team.

Finding time to share

Sandra (teacher, case study one) thought that by sharing the contents of the paper-based portfolio with a parent or whānau member she was opening the lines of communication. She did note, however, that this was often difficult as parents had such busy lives and were often in a hurry to leave the ECE setting. But ultimately it was the setting’s responsibility to find ways to engage the parents and whānau. Sandra said “it’s up to us to actually reach out to that parent which I know is important, but sometimes it takes a bit of courage to make that step” (Sandra, teacher, Initial Interview, July, 2013).
Several teachers agreed that they were sometimes constrained by the busy-ness of parents and whānau when it came to finding time to share the paper-based portfolios. Stephanie (teacher, case study four) said that this was something that she very rarely did. She knew that it would be beneficial but she felt that the time factor inhibited these types of interactions. “It would be nice to do it but it’s often they’re dropping off, picking up, and they’re in and out really fast” (Stephanie, teacher, Initial Interview, July, 2013). This was also highlighted by Sarah and Jasmine (parents), who noted that they did not have time to engage with their children’s paper-based portfolios when they came to the ECE setting.

**Value of sharing the contents of the ePortfolios and increased communication**

With the introduction of ePortfolios the teachers hadn’t shifted in their view that sharing the children’s formative assessment documentation with parents and whānau was of the upmost importance. However, because the parents and whānau members were viewing the children’s Learning Stories and learning moments in a more timely manner, conversations about their learning between parents, whānau and teachers had become more meaningful. Joanne (teacher, case study two) noted that the communication between parents, whānau and teachers had been strengthened with the introduction of the ePortfolios. She was still telling parents and whānau when she had added a story but with the ePortfolios they were often feeding back to her about the story and how they had extended on the learning at home before she had the chance to tell them to look out for it. This meant that the parents and whānau were more open to engaging in conversations about the children’s formative assessment documented in the ePortfolios. The ability for parents and whānau to comment on the stories that the ePortfolios afforded was also impacting on Joanne’s communication with the families.

Robin (teacher, case study three) remarked that she saw immense value in the change to parent engagement with formative assessment documentation, particularly because of her teaching pedagogy. Much of Robin’s teaching
centred around risk and challenge. She was often with the children encouraging challenging outdoor play or ‘messy’ play with art materials. In the past this had caused concerns for some parents and whānau members. Since the introduction of the ePortfolios the two way communication between parents, whānau and teachers that had become more common meant, for Robin, that the concerns around her teaching (using risk and challenge) were no longer there. Through the instant communication with parents and whānau that the ePortfolios allowed, the concerns that had been raised by parents in the past had now changed to valuable comments. For example, Robin noted that in the past when children had gone home covered in paint parents had complained about this. Now, because, they were seeing the learning that went alongside this almost instantly, their comments had changed to include the value of messy play. She also talked about the fact that she carried a knife (Robin used this in the setting for tasks such as making kindling for the fire and as a crafting tool). In the past parents had ‘freaked out’ when told this by their child, but now they were seeing in real time how this tool was being used in the ECE setting, and that it was a tool that Robin felt was necessary in her teaching to allow her to provide excellent experiences for children involving risk, challenge, art and craft.

Value of sharing the contents of portfolios with extended family

Trudy (parent, case study one) also discussed the value of sharing the contents of Lila’s portfolio. The main reason she valued the paper-based portfolios was because she was able to share the activities at the ECE setting with Lila’s father, who very rarely came to the setting. Trudy noted that although she got to hear the stories from Lila first hand as she recounted the day’s events when she was picked up, her father missed out on these. By the time they reached home Lila would be ready to move on and get involved in something else, meaning she did not share the stories with her dad with the same enthusiasm. This was where the portfolio came to the fore for Lila’s family. Once a week Trudy would take the portfolio home to share its contents with her partner. Trudy also regularly shared her daughter’s paper-based portfolio with several other family members. Lila’s grandmother visited often
and sometimes the portfolio was already at home so she could look at the contents with her granddaughter. Trudy had, on occasion, also taken the portfolio on trips to visit out of town family members “I took it when we went to see my dad, so Lila’s Poppa, and that was quite cool for him cos he lives so far away and he doesn’t get to see what the kids are up to and stuff” (Trudy, parent, Initial Interview, July, 2013). Trudy felt that there was immense value in being able to share the portfolio at home with Lila and wider family members. By doing this, Trudy said that they not only came to see the teachers’ view of how Lila was developing and learning but were also able to find out how Lila felt about what she had done whilst at the ECE setting. This shows that affect was an important motivator for Trudy in terms of her interest in Lila’s learning (Custers & Aarts, 2005). With the introduction of ePortfolios Trudy felt that she was able to share the contents of Lila’s ePortfolio even more effectively. Her partner was now regularly working out of town and because his email was linked with Lila’s ePortfolio he received notifications when a new story was added and he was able to look at this straight away on his phone. Trudy said that she too was looking at the ePortfolio more now. Again, this was because of the email notifications. Trudy checked her emails regularly so was able to see new stories very soon after they had been written.

This was also true for Jasmine (parent, case study four) and her family. Jasmine and her partner had no family in the same city so what she liked the most about the paper-based portfolios was being able to share them with her extended family, in particular the children’s grandparents, when they came to visit. This meant that Jasmine’s family were able to see what the children had been doing during their time at the ECE setting. When the paper-based portfolios came home Jasmine also made sure that she spent time with her older son, Jack, looking at the contents. She was yet to do this with her younger daughter, Amelia, as Jasmine felt she was still too little to gain any benefits from it. Jack also liked to show his portfolio to his dad when he brought it home. As with Trudy, the way Jasmine’s family interacted with Jack and Amelia’s formative assessment documentation was different after the introduction of ePortfolios.
They were now visible in the children’s learning journey as Mum, Dad and three grandparents regularly contributed to the ePortfolios in a tangible way through comments, something that they had not done in the paper-based portfolios.

Another parent, Sarah (parent, case study six), liked to take the paper-based portfolios home regularly to share with her husband alongside their children. She said that the children loved showing them what they had been doing at the ECE setting and that she and her husband enjoyed talking to Johnny and Kate about the learning experiences documented in their paper-based portfolios. Sarah did not spend any time looking at the children’s paper-based portfolios at the ECE setting as she was always rushing and after settling the children and saying goodbyes she just did not have time. She said “Usually it takes me a good 20 minutes to get out the door anyway without looking at that [paper-based portfolio] as well” (Sarah, parent, Initial Interview, July, 2013). Jasmine (parent, case study four) also admitted to never looking at the portfolio with her children or their teachers at the ECE setting. This was because she was always in a rush when she was at the ECE setting. Jasmine said:

The only reason I don’t look at it here [the ECE setting] is because I have to get to school by a certain time and finish work, and there’s just really not much time to get there. And then I just sort of forget. Once you’ve got a little one and then Jack dragging on and two school bags, I sort of don’t grab it to take it any other time. But I just know that when the grandparents come down they’ve always asked for them [paper-based portfolios] so I think oh yep and take them (Jasmine, parent, Initial Interview, July, 2013).

Sarah also noted some changes in her and her family’s interactions with the children’s formative assessment since the introduction of ePortfolios. She liked the way that ePortfolios were so accessible and this meant that she could look at them when she wanted, not just when her children showed interest in doing so. Consequently Sarah felt that she was putting more of her own time into reviewing the ePortfolios.

You put a bit more time into it with the ePortfolios because it’s right there and you can access it when you’ve got the time to access it as opposed to the kids wanting to bring their portfolio and maybe that night you’ve got other activities on and so you just quickly flick through it then take it back to [the ECE setting]. Yeah, I do think it’s easier to access, and put the time and thought into it (Sarah, parent, Final Interview, August, 2015).
A further change for Sarah was the way she was using the ePortfolios with her children, compared to how the paper-based portfolios were used. With the paper-based portfolios she would spend time with Johnny and Kate looking at the Learning Stories and other contents. She was not using the ePortfolios in this way. She said:

I don’t use the ePortfolio with them. I get the email and check it and read it and think that’s really good, and I talk to them about it but I still bring home the portfolio when they want to bring home the actual paper-based portfolio and do that with them (Sarah, parent, Final Interview, August, 2015).

When asked why she wasn’t using the ePortfolios with her children Sarah said that it was because of a technical issue. She felt that the photos were too small and she hadn’t worked out how to enlarge them so they were easier for the children to view. She did, however, watch the videos with Johnny and Kate. Sarah did note, though, that she would talk with her children about the contents of their ePortfolios. She might mention to the children that she had seen a photo of them doing something at the ECE setting and this was when she thought that she was engaging with their learning.

Changes to sharing after the intervention of ePortfolios

The extent to which the children’s formative assessment was shared between teachers, parents and whānau had changed significantly with the introduction of the ePortfolios. Although the teachers had endeavoured to share the contents of the paper-based portfolios with parents and whānau, this was inhibited by the busy-ness of families leaving little time available for this to occur. Although the sharing of the ePortfolios wasn’t occurring in a physical sense, i.e. sitting down and looking at the portfolio together, the children’s formative assessment documentation was being ‘shared’ in a more effective way. As the Educa system sent out an alert via email or text to anyone who had access to the ePortfolio when something was added, parents and whānau members saw that there was something new to look at. As a result they were accessing their children’s ePortfolios far more frequently than the paper-based portfolios and the teachers knew this was happening, not only through the reports generated by the system, but from the conversations which were
The ePortfolios also enabled parents and whānau to look at and share children’s formative assessment with them and others anywhere at any time.

9.1.4 Contribution

The changes to the ways in which parent and whānau contributed to their children’s learning journeys through formative assessment changed dramatically with the introduction of ePortfolios. These changes are discussed in this section.

Limited contribution to the formative assessment in paper-based portfolios by parents and whānau

A number of parents and whānau indicated that they did not engage with the paper-based portfolios as much as they perhaps could to support their children’s learning in terms of physical contributions to the formative assessment documentation. This view was also shared by several of the teachers. Sandra (teacher, case study one) had seen very little parent engagement with the paper-based portfolios through written contributions. Although the parents and whānau engaged with the portfolio by sharing the contents with their child or children, and indeed the verbal contributions they made were very important and welcomed, they very rarely participated in the actual formative assessment in a written form. In fact, Sandra could recall only one occasion where a parent contributed something material to their child’s portfolio. Sandra considered this was an area which needed strengthening across the ECE setting to support the excellent verbal engagement which already occurred. In support of this view, Joanne (teacher, case study two) noted that the parents and whānau in the under-twos section of the ECE setting did not physically contribute to the paper-based portfolios. She said that she often received verbal feedback which she then included as an extension to the story, but the parents and whānau did not make concrete contributions to the children’s paper-based portfolios. Leslie (teacher, case study five) agreed that more often than not it was the teachers who were adding the parents and whānau voice, recording what they had been told verbally.

We might listen to what they’re saying and write that down and kind of do their voice that way, include it within our stories, the conversations we’ve had
with families. Kind of do it that way to kind of bridge the gap a little bit (Leslie, teacher, Initial Interview, July, 2013).

Leslie felt that it was important to advocate for parents and whānau to contribute to their children’s formative assessment through the paper-based portfolios. The ECE setting had tried to encourage this by providing spaces for parents and whānau to include their thoughts but more often than not it was the teachers who recorded parental and whānau aspirations, commendations and goals. Robin (teacher, case study three) also noted the lack of physical contributions made by parents and whānau to their children’s paper-based portfolios. She commented that the lack of contribution from parents and whānau was very simply because “…they’re not aware that they can. I think that may be all it is” (Robin, teacher, Initial Interview, July, 2013).

Certainly some parents and whānau members were not aware that they could contribute further documentation to the paper-based portfolios. When asked if she knew that she was able to make other contributions such as written comments (parent voice, learning story etc.), not just artwork, Trudy (parent, case study one) said no, she did not know that she was able to do that. Similarly Pauline (parent, case study two) was also unaware that she could contribute. She said “I guess I’m not really sure if we are supposed to, and what we’re supposed to do. They seem like a teacher thing to me” (Pauline, parent, Initial Interview, July, 2013). Seven of the 26 respondents to the Initial Survey reported that they either did not know that they could contribute or that this was something that they had forgotten about.

Contributions from parents and whānau
The value of engaging with the documentation in the children’s paper-based portfolios was clear to parents, whānau and teachers but this engagement was not often followed up in terms of actually contributing to the paper-based portfolios. Three of the case study families noted that they had made contributions to the paper-based portfolios. These were generally supplying photos for the teachers to add. Jasmine (parent, case study four) noted that that
in the past her partner had contributed to Jack’s paper-based portfolio, but neither of them had contributed to Amelia’s as yet. Jack’s father had made a photo montage with comments of the family’s trip to a zoo and this was then taken to the ECE setting to be put in Jack’s portfolio. This was something that he did for special occasions or trips. Megan (parent, case study five) and her partner had also contributed to the paper-based portfolios in the past. They had completed a parent contribution (see Appendix Ten) in Reece’s portfolio and they had also sent photos of family holidays to the ECE setting to be added. Sometimes they would also add artwork that they children had completed at home if they asked for it to be put in. Trudy (parent, case study one) had also added some artwork to Lila’s paper-based portfolio on occasion.

Claire (parent, case study three) felt that there was not adequate space in the paper-based portfolios for her to make contributions. The stories took up most of the space and Claire did not want to “muck up their folders”. She also did not contribute because of lack of time. As she was always in a rush when she came to the ECE setting she did not think that she had enough time to actually write something that would add to the portfolio “I’m in too much of a rush. I’ve really got to actually think about what I want to write and then write it in” (Claire, parent, Initial Interview, July, 2013). Claire did think, however, that she and other members of her family contributed verbally to the children’s learning and that the teachers could add these conversations to the stories in the paper-based portfolios. Sarah (parent, case study six) also felt that she made verbal contributions through her conversations with the teachers. In regards to what she contributed Sarah said “Maybe just ideas and stuff. Like I notice some things, like it [learning story] says Mum said that you were doing this Johnny and so we did that and that sort of thing” (Sarah, parent, Initial Interview, July, 2013). Joanne (teacher, case study two) further noted that the parents and whānau in the ECE setting’s under-twos section did not really contribute to the paper-based portfolios. She said that she often received verbal feedback which she then included as an extension to the story.
It is fair to say, then, that although the parents, whānau and teachers in the ECE setting could articulate the benefits of engaging with the children’s paper-based portfolios in reality this engagement wasn’t occurring as well as it could or as often as it should, in terms of written contributions to formative assessment (see Chapter Five). Whilst parents and whānau were able to investigate the paper-based portfolios with their children, finding the time to truly connect with the content and make meaningful material contributions was often difficult for parents and whānau. The uncertainty around what to contribute, or in fact knowing if they were actually ‘allowed’ to add items, further compounded the paucity of parent and whānau contributions to the children’s paper-based portfolios. This all changed with the introduction of the ePortfolios.

**Changes to contributions after the intervention of ePortfolios**

Only ten out of 26 respondents to the Initial Survey indicated that they had made contributions in way of photos or other content to their children’s paper-based portfolios. This had nearly doubled with the introduction of ePortfolios as 19 out of 28 respondents identified that they had made material contributions to their children’s ePortfolios (comments, Learning Stories and moments, photos and video).

*Graph 9.1 Percentage of parents and whānau who contributed to portfolios*

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23 It is important to reiterate that parents and whānau were contributing verbally to the children’s learning through portfolios in meaningful ways. The teachers felt, and this researcher supports this view, that by including written contributions alongside this the children’s learning journey would be further strengthened.
Parent and whānau contributions to the children’s formative assessment documentation had increased dramatically with the introduction of the ePortfolios. Trudy (parent, case study one) who was unaware that she could contribute to the paper-based portfolio was making very regular contributions to Lila’s ePortfolio. She said:

EPortfolios are cool because I’m able to put stories and photos on. So if stuff happens at home that’s really cool I can include it, like I did a big story for Lila’s third birthday and put all her photos up from that. It’s quite cool being able to add your own stories and photos and stuff (Trudy, parent, Final Interview, August, 2014).

An example of a learning story written for Lila by Trudy features Lila’s birthday and is included on the following pages.
3rd Birthday...

06/09/2013

By Parent

In March of this year turned 3. After looking at what seems like 100 birthday pictures and theme ideas settled on the idea of a Garden Party.

We brought a big white gazebo and decorated it with lanterns and balloons. chose beautiful pastels and bright colours. Then it was time to think about cake??

I showed Naomi a photo I had found on a website, it was bright yellow with buttercream roses all over it was truly amazing loved this cake right from the start so we got in touch with a lady we know and she organised this for us.

I also had a special birthday surprise for , a friend of mine from high school has recently started professional photography and had volunteered to come an take photos of the girls for me.

 and I quickly remembered that we had brought beautiful white parasols for her party so we thought these would be great props for the photos.

Soon enough it was big day and she was so excited. Everyone close to arrived and we shared presents and food. After presents and food it was time for photos. was definitely comfortable in front of the camera and this shows with her amazing photos. Birthdays are such a special part of our lives and photos are a great way to capture these precious moments.
Whānau Voice / Comments

07/09/2013

Teacher

Thank you for sharing this story with us ______ and ______. ______ is very lucky to have parents who have taken so much time and effort to make her birthday so special. Everything looks so stunning, and that cake is amazing. I often see pictures too of these icing roses, and have even tried my hand at creating them (but they don’t look like that). ________ and I have been talking about _______ upcoming birthday and she is very excited about this too, these family rituals and the opportunity to spend time with extended whānau is a very big part of who ______ is.

08/09/2013

Teacher

Thank you for sharing this story ______. It is great to be able to hear about and see the things that are special to you and your family. Your girls have such a creative flair and I can see how this passion reflects in your enjoyment around celebrating and creating special memories around their birthdays.
Trudy’s partner had also become involved in the stories she contributed to Lila’s ePortfolio. Trudy said they would sometimes sit down and write them together. This is an interesting finding as previously the only engagement that Lila’s father had had with her formative assessment was when the paper-based portfolio was brought home and he would look at the contents with Trudy. Now Lila’s father was contributing to her formative assessment in a much more meaningful way, through actually engaging with the contents of the ePortfolio and adding to it alongside his partner and Lila.

Since the introduction of the ePortfolios, Claire (parent, case study three) had begun making comments on Jordan’s Learning Stories. She had not commented in the paper-based portfolios in the past. Claire felt that it was easier to comment in the ePortfolios. Claire shared these comments with Jordan. She was able to make links between what he was doing at the ECE setting and what he was doing at home. Often they would read a story together then talk about how it compared to what he was doing at home. Then Claire would tell Jordan about the comment she was going to make. She said:

We will go through the story and I will go ‘look this is really good Jordan, you’ve been doing this at home. It’s similar to what you have been doing at preschool’ and I will put a little comment like that so he can see the comparison. (Claire, parent, Final Interview, August, 2014).

Case study five showed a remarkable increase in contributions by extended family members. The contributions by Reece and Leo’s out-of-town grandmother (Granny B) were a key feature of this case study. Megan (parent, case study five) noted that she had not contributed to the paper-based portfolios in the past but contributed to the ePortfolios more than Megan and her partner did. Granny B had become part of the community of practice at the ECE setting. She was regularly engaged with Reece and Leo’s learning and she made contributions to this. Megan made the following comments about Granny B’s newfound sense of belonging at the ECE setting:

- “She’s able to view the stories and understand what is happening at the day-care. Because of that she sent through a puzzle for the centre to do”.
“She came to the Christmas party because she felt like she actually knew the kids and the teachers”.

“She talks to the kids about what they are doing, and she has also added photos, cos they’re on an orchard, just to show what the kids do when they’re at the orchard” (Megan, parent, Final Interview, August, 2014).

Granny B’s wonderful involvement in her grandchildren’s learning is illustrated in the learning story example Sounds of the bush in Appendix Ten. Leslie, the key teacher for this family commented on how experiences like this had increased the value of the children’s formative assessment documentation. She felt that the greater interaction by family meant that she was now having a richer written dialogue with parents and whānau through the ePortfolios and this supported the child’s ongoing learning. Indeed, Leslie had seen a marked increase in parent and whānau contributions in the ePortfolios, particularly from grandparents. She provided the following example in relation to Granny B’s contributions:

We did have this one family with grandparents who lived out of town and Grandma’s responses were absolutely awesome to her grandchild’s learning. She ended up sending us this puzzle that linked to our curriculum at that moment. It was absolutely awesome (Leslie, teacher, Final Interview, August, 2014).

Megan and her partner were contributing to the ePortfolios more too. Megan said that they had contributed once or twice to the paper-based portfolios but with the introduction of ePortfolios their contributions were much more frequent. Megan said “We went away for a week to Australia so we put some photos up then, and we’ll try and comment, or we’ll talk to the kids about it” (Megan, parent, Final Interview, August, 2014). This comment recognises that not only had their tangible contributions intensified, but so had their verbal engagement with Reece and Leo’s learning which was being identified in the ePortfolios by their teachers.

Jasmine (parent, case study four) and her partner had made some contributions to Jack’s paper-based portfolio but had not made any to Amelia’s. Now they commented regularly. Sometimes they would just acknowledge the story with something as simple as a smiley face. However, Jasmine suggested
that this was affirming for the teachers. She said “My personal opinion is that the day-care sees that we are actually looking at them and reading them” (Jasmine, parent, Final Interview, August, 2014). Other members of Jasmine’s family were also contributing to the children’s ePortfolios. By being linked to the ePortfolio platform, Educa, and being able to add comments to the Learning Stories Jasmine considered that the way their extended family, particularly the children’s grandparents, engaged with the children’s learning had changed. In the past Jasmine had tried to make sure that the paper-based portfolios were at home when the grandparents came to visit, but because they were only there for the weekend not a lot of time was spent with the books. Now, because they had access to the online ePortfolios the children’s grandparents already knew something about the children’s experiences at the ECE setting before they came to visit. They could also share in these experiences in between visits via phone. Jasmine thought that by allowing her and her partner’s parents access to Amelia and Jack’s ePortfolios, this was affirming their choice to send their children to an early childhood education provider. Jasmine said:

My mum in particular loves it because being away she sees her grandkids enjoying day-care, like we’re not sending them to some black hole and they’re just sitting there while I go to work. So they probably get to look at it with more time and that type of thing rather than just the excitement of they’re in town and kids crazy and shove the book in their face then that’s it (Jasmine, parent, Final Interview, August, 2014).

It was not only Jasmine’s mother who was benefiting from this access but also her parents-in-law. She said her mother-in-law “raves about it, she absolutely loves it” and also that her father-in-law was contributing too which was unexpected – “he’s always putting his two cents worth in the comments, it’s been awesome feedback” (Jasmine, parent, Final Interview, August, 2014).

**What was being contributed to the ePortfolios by parents and whānau?**

The main difference in what was being contributed by the parents and whānau to the ePortfolios was the increase in material feedback through comments, Learning Stories and learning moments. When adding to the paper-based portfolios, parents and whānau had inserted photos, parent voices and artwork. They also felt that they contributed ideas verbally which the teachers
then added. In the ePortfolios parents and whānau were including comments, Learning Stories, learning moments, and photos.

*Graph 8.1 What parents and whānau were physically contributing to the portfolios (data from initial and Midway Surveys, coded responses)*

<table>
<thead>
<tr>
<th></th>
<th>Photos</th>
<th>Parent Voice/comments</th>
<th>Learning Stories/moments</th>
<th>Artwork</th>
<th>Share ideas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper-based portfolios (n=26)</td>
<td>6</td>
<td>3</td>
<td>8</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>ePortfolios (n=28)</td>
<td>6</td>
<td>13</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

The increase in parent and whānau contributions to the children’s ePortfolios had a profound effect on the teachers’ formative assessment practices. For example, Joanne (teacher, case study two) was trying to be thoughtful about how she could take the comment made by the parent or whānau member and build on it within the next part of the story. She said the teachers were “being mindful about the knowledge that the parents are sharing with us and how we actually use that” and that this was important as they wanted parents and whānau to keep contributing. Joanne aimed to encourage deeper comments from the parents and whānau who contributed. She was very hopeful that as time went on the comments would change from something like “oh, that’s a cool story” to more considered thoughts about what the learning might mean at home or what the learning meant for their child.

*Connections between home and the ECE setting*

Clear connections were also being made between home and the ECE setting in the ePortfolios. These connections were utilised by teachers, parents
and whānau and children. It was the comments made by parents and whānau that enabled Sandra (teacher, case study one) to make relevant connections to home. She would know something about the child that she may not have known from just talking to the parent or whānau member. This meant that she could further refine her formative assessment practices around children’s strengths and interests. Stephanie (teacher, case study four) felt that she was using the comments made by parents and whānau in the children’s ePortfolios to extend on the children’s learning experience and make links to what was happening at home. Joanne (teacher, case study two) valued the paper-based portfolios because they increased the connections between the ECE setting and the children’s home. With the introduction of ePortfolios, she felt that her relationships with parents and whānau had been developed even further. She said:

...I think the difference between the ePortfolios is you’ve kind of almost strengthened the relationship with the parents, so it’s also more for them because I’m getting feedback from them and it’s more of a two-way between the parents and me as a teacher as well. Even though it’s still very much for the child, I feel more connected with the parents through that they are responding more, and they’re feeding more in to what the children are doing at home and how that affects what you’re noticing in the centre so it strengthens that relationship as well (Joanne, teacher, Final Interview, August, 2014).

Joanne also noted how the inclusion of videos had impacted on the relationships between the child, their home and the setting. She thought that the children were looking at the videos contained in their ePortfolios at home often. This meant that Joanne was also getting feedback from the children about her stories. Comments like “my mum showed me that” were now a more frequent occurrence in her conversations with children.

Jasmine (parent, cases study four) also made connections between the ECE setting and home through the ePortfolios. She recalled a recent story about Amelia gluing. The teacher wondered if this was something she did at home with her older siblings. Jasmine was able to add a comment to Amelia’s story which shared that they were, in fact, doing this at home too. Being able to reaffirm what was happening at the ECE setting at home, through the ePortfolios, was
also identified as useful by Claire (parent, case study three). By sharing the contents of the ePortfolio with Jordan’s experiences at the ECE setting with his older brothers, Jordan was able to provide concrete evidence that what he had said was happening actually was. Claire provided the example of Jordan regularly building fires with Robin. His older brothers did not believe that this was happening. When Robin included a story accompanied by photos of the event around the same time Jordan was telling his brothers the story, they had to believe it because there was concrete evidence. The benefit of this being in an ePortfolio rather than a paper-based portfolio was that Claire was able to show the story to Jordan’s brothers instantly, while the discussion was occurring, rather than having to remember to bring the paper-based portfolio home, by which time the moment would have passed. Robin (teacher, case study three) was sure that parents and whānau were now more visible in the children’s learning journeys. Parents and whānau were making links between what was happening in the ECE setting and what was happening at home.

**Mutually respectful relationships**

The teachers were overwhelmed by the change in the way parents and whānau were contributing to their children’s formative assessment. Georgina (teacher, case study six) said that the response to the ePortfolios by parents and whānau had been “amazing”, particularly in terms on making physical contributions to their children’s ePortfolios. She noted that parents and whānau were commenting on her stories, which affirmed her work, adding their own stories and putting up photos.

Probably more [parents] are responding than not, and so you know and that’s really more satisfying. You know they are actually reading them and straight away responding very quickly. Whereas the paper based, well I never really knew a lot of the times, sometimes, if they were actually looking at them (Georgina, Teacher, Final Interview, August, 2014).

The ePortfolios had also increased verbal communication between herself and parents and whānau, Georgina thought. She said that they were talking more the about the contents of the ePortfolios than they had done about the paper-based portfolios. Georgina thought that this was because of the
interactive nature of the ePortfolios. It had become clear to Georgina that even parents and whānau who did not contribute to the ePortfolios had read her stories; this was a change from the paper-based portfolios as she said that these were not accessed by all families whereas the ePortfolios were. The other benefit of the ePortfolios that Georgina had noticed in regards to parents and whānau engagement was the accessibility of the ePortfolios to extended family in other areas of New Zealand or overseas. “The other big thing about Educa is the extended family, like grandparents in England that can access it, that’s just fantastic and the responses from families out there and around New Zealand and different places” (Georgina, teacher, Final Interview, August, 2014).

As discussed by many authors, parental engagement with children’s learning can be a key factor for increased educational success, and, in turn, better life experiences (see references in 2.5). This study has demonstrated how a change to a formative assessment system can increase this engagement. The parents and whānau in this study had gone from very rarely, if ever, contributing to their children’s formative assessment portfolios in a tangible way to being regular contributors through comments, stories and conversations.

9.2 What had changed?

There had been significant changes in the way parents and whānau engaged with their young children’s learning with the introduction of ePortfolios to the ECE setting. Although parents and whānau accessed their children’s paper-based portfolios when prompted by their child, they were doing this more often with the ePortfolios, and they were initiating the interactions. The parents and whānau were engaging with the contents of the ePortfolios on a regular basis, and were making physical contributions – something that was very rare with the paper-based portfolios, where verbal contributions were more common. The children’s ePortfolios had been shared with more people, meaning that extended family, and in some cases friends, were also receiving notifications when new Learning Stories or learning moments were added. Some of the extended family members were contributing to the children’s ePortfolios,
from within Aotearoa New Zealand and internationally\textsuperscript{24}. The parents and whānau were also talking more with the teachers about their children’s learning. As they had seen the learning in action in a timely manner it was fresh in their minds when they came to the ECE setting. The teachers, parents, and whānau were making connections between home and the ECE setting. Teachers were able to see first-hand what the children were doing at home or when visiting relatives. They could then extend this learning into the ECE setting if appropriate. This also worked in reverse, where parents and whānau were able to link what the children were doing in the ECE setting to what was happening at home. Another benefit of the ePortfolios which was highlighted by one teacher in particular was that parents and whānau could see what was going on in real-time – particularly around experiences which involved risk and challenge. This meant that rather than hearing ‘stories’ from the children about what had occurred, they were able to see for themselves and this allowed them to understand the learning behind the experience. Children’s experiences were also being validated by the ePortfolios. Other family members, such as siblings, had to believe what they were being told as the evidence was in front of them in a timely manner.

The introduction of ePortfolios had a positive impact on parent and whānau engagement with their young children’s learning. The juvenile community of practice which was evident in the ECE setting at the onset of the research had grown and was beginning to function as a robust community of practice by the end of the data collection period. Not only were parents and whānau working alongside the teachers and contributing to their children’s learning through the ePortfolios, but their sense of belonging in the ECE setting had increased. Out-of-town family members who had never been to the setting felt that they were already part of the setting’s whānau. When they came to the setting they already knew the teachers, understood the philosophy and learning

\textsuperscript{24} ePortfolios had been shared with family in South Africa, Japan, Malaysia, Australia and America. One family had also shared their children’s ePortfolios with their previous ECE teacher in the United Kingdom.
expectations and in several cases had themselves contributed to the community of practice.

**How the introduction of ePortfolios impacted on the changes**

The accessibility of the ePortfolios was the strongest factor in increasing parent and whānau engagement in a written form with their young children’s learning. The notification system which was part of the Educa software meant that parents and whānau were being notified in a more timely way when there was a new addition to their child’s ePortfolio. The system also notified parents and whānau when there was a new message from the ECE setting, meaning that it was more likely that they knew what special events were occurring and this enabled them to plan to attend well in advance. This was assisting in the development of a stronger community of practice within the ECE setting. Parents and whānau were also commenting on the ePortfolio message board about the introduction of ePortfolios and what it meant to them.

*Figure 8.1 Examples of comments from parents and whānau about the value of ePortfolios*

<table>
<thead>
<tr>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grandparent</strong>&lt;br&gt;02/08/2013&lt;br&gt;Thanks you, staff at [redacted], what a great initiative. I have been looking for ways of interacting with my grandies (electronically, we live in [redacted]). This method might just help me pull up my computer skills. GrandDad and I trailed all the way through [redacted] and [redacted] photo gallery! It was great fun. Thank you for including us in this very interesting and valuable means of contact.&lt;br&gt;GrannyB [redacted]</td>
</tr>
</tbody>
</table>

| **Father**<br>10/08/2013<br>Hi there<br>Thanks for putting this together. Because of work I’m unable to come in and see my babies and put names to faces. But this enables me to see them at play.<br>Cheers |

The ease of use of the platform also assisted parents and whānau to engage with their children’s learning through ePortfolios. The format allowed plenty of space to comment and parents and whānau were also able to add their own stories, photos and videos.
9.3 Summary and looking forward

This chapter has discussed the findings of the study in relation to parent and whānau engagement with their young children’s learning through ePortfolios. It shows that easy access to the system was a major factor in the increase in contributions from parents and whānau, and that the type of contribution was beginning to change. The initiators in the interactions with portfolios had also changed. The children were still the main initiators of interactions with the paper-based portfolios but the parents, whānau and teachers had become the main initiators of interactions with the ePortfolios. The chapter also highlighted the value of sharing the contents of portfolios, in whichever format, with parents and whānau.

The following chapter will review and discuss the findings of the study with a focus on recalling, reconnecting with and restarting learning through the use of portfolios.
Chapter Ten – Recalling, Reconnecting and Restarting

10.0 Introduction

This chapter responds to a key requirement of formative assessment – that it contributes to ongoing learning (see 2.1 and 9.0). I have called this formative process recalling, reconnecting and restarting. The possible sequence is as follows. When children are recalling their learning they are able to remember a past event through looking at their formative assessment documentation. They will often share this with an adult or peer. Once they have recalled the event described earlier in the portfolio they may be able to (or be invited to) move onto something else. When children reconnect with learning they may then continue, with support, where they left off. When restarting the learning they will continue the learning process but will expand on the learning by moving in a different direction. Several examples of this process are provided in this thesis. Recalling a learning experience alongside a teacher can be seen in 7.1, where a child has recalled bike day and is encouraged to write about this. An example of reconnecting is provided in I want to paint a tiger! (7.1.8). Michael has reconnected with past learning (drawing a dog) and with the support of a teacher he has explored this further in his drawing of a tiger. Finally, an example of restarting learning is seen in Milly’s party planning (7.1.5), where she moves from planning a dress-up party to planning an event to celebrate Matariki.

Empowering children to recall, reconnect with and restart learning is one of the central functions of a portfolio. Through doing this, children are able to construct their own learning journey, guided by their teachers, parents and whānau. The importance of this was stressed by teachers, parents and whānau alike. This chapter responds to the final research question posed at the onset of this study:

(iii) In what ways do children use and contribute to their ePortfolio?
10.1 How children learn and the role portfolios play in this

In the Initial Surveys the teachers (n=12) and parents and whānau (n=26) were asked to describe how they thought children learned. The participants could identify several different ways that children learned. Learning through play and associated experiences was seen as a vital element of learning for several respondents. Children were also able to learn through imitation – watching others then repeating what they had seen. Doing, meaning allowing children to participate in different activities and experiences, was an important part of learning. It is of interest that the respondents felt that interactions were also a strong driver of learning – with teachers, parents and whānau and with their peers. This shows that the respondents thought that children were active participants in their own learning.

Graph 10.0 How children learn: Parent, whānau and teacher views (percentage of respondents)

This question was followed up in the Initial Interviews with the case study participants, who were further asked to explain what role the paper-based portfolios, and subsequently the ePortfolios, had in supporting children’s learning.
10.1.1 The role of portfolios in supporting children’s learning – parent and whānau observations

The case study parents were invited to discuss the role of portfolios in their children’s learning journeys in their initial and Final Interviews.

Using videos and how these connected to home

In her Initial Interview, Jasmine (parent, case study four) had said that children learnt by watching and doing. She did not think that the documentation in the paper-based portfolios supported this. Her opinions had changed somewhat with the introduction of the ePortfolios, as she now thought that the formative assessment documentation contained in them could support children’s learning, specifically because of the inclusion of videos with some Learning Stories. Jasmine’s children were always keen to watch the videos in their ePortfolios and did this over and over again. Through this revisiting, connections were being made to what the children were trying to do at home. A story written for her son Jack included a video which showed that he had learnt how to ride a bike. Jasmine reflected that she hadn’t been aware that he could do so until she saw that particular story “He learnt to ride a bike there and I did not even know until I read it [the learning story with video] and I was like, oh, okay” (Jasmine, parent, Final Interview, August, 2014). For Jasmine this meant that she could make sense of some of the things Jack had been trying to do at home. In this instance he wanted to build a ramp to ride down. Jasmine was wary of this “I would think oh my God, that’s my baby” but because the evidence in Jack’s ePortfolio showed that he could ride down a ramp she let him do this at home too.

Children are able to review their learning

Claire (parent, case study five), like Jasmine, recognised the different dimension that videos brought to Jordan’s learning. In her first interview Claire had commented that the paper-based portfolio helped Jordan’s learning process because it documented his experiences and showed what he had learnt from these experiences. She did not think that the introduction of ePortfolios had changed this. She did think though, that the inclusion of videos added an extra
facet to her understanding of the learning experiences. She felt that looking at a video was different to looking at a picture and noted that Jordan would replay his videos again and again.

**Conversations about the learning**

Trudy (parent, case study one) had identified in the Initial Interview that she thought that children learnt through play and through revisiting their learning. Although she took the paper-based portfolio home once per week she did not use it with Lila to revisit learning. She thought that Lila liked the ePortfolio better and that this was because they were looking at it a lot more together now. Trudy now talked about revisiting learning with Lila. She said because the ePortfolio was so accessible that this enabled Lila to show her what she had been doing that day and then she could support Lila to continue this learning at home.

**Restarting previous interests**

Two parents, Pauline (case study two) and Sarah (case study six) noted the importance of portfolios in aiding children to recall, reconnect or restart their learning. In her Initial Interview Pauline stated that she considered that children learnt by doing and watching. She thought that the paper-based portfolios helped children to learn because they enabled children to revisit and restart previous interests. Pauline thought that the ePortfolios would still allow this to happen, particularly through the videos. For this family though, this was impacted on by the fact that the children very rarely looked at their ePortfolios at home. Pauline said:

I guess when they do look at them; the videos probably are a better way of reminding them and showing them what they’ve done. If I do actually let them look at them or if they’re around when I’m looking at them I think they are enjoying looking at the videos and that is a bit more of a cue than just looking at the pictures (Pauline, parent, Final Interview, August, 2014).

Sarah considered that children learn through their interests, and that to achieve optimum learning they would need support to follow the experience through.
I just believe that they learn by finding an interest and getting support to follow it through and get some outcomes. Just believe in providing support really for them to sort of do it themselves almost. I’m not a teacher so I don’t know how to say it (Sarah, parent, Initial Interview, July, 2013).

The paper-based portfolio had an important role to play in learning, Sarah said. She felt that the Learning Stories contained in the portfolio allowed children to revisit learning and from this they could restart an interest. She said “...it restarts interests. Like going back to things that they had done before and remembering and trying again, maybe if they were not successful the first time” (Sarah, parent, Initial Interview, July, 2013). Like Pauline, Sarah indicated that she was not following this learning through with the ePortfolios as fully as she could. She did use the videos with the children but very rarely looked at the other contents of the ePortfolio with them.

**Recognising and affirming strengths**

Megan (parent, case study five) commented that children learn by trying new things and from playing with and interacting with other children. In the Initial Interview she said that the paper-based portfolio helped in the learning process because she could see their strengths and this enabled her to carry on their learning at home. Megan felt that the ePortfolios still did this, but she was now more involved. She said “I feel I’m more involved day to day or week to week, so I can consolidate that learning at home or talk about it...there’s ideas that come through that are really good that we can then use at home” (Megan, parent, Final Interview, August, 2014).

**Analysis**

The responses from the case study parents clearly show that they thought that children learn through experiences, and that portfolios, in particular ePortfolios, can support learning. The inclusion of videos that the ePortfolios afforded was an important aspect of supporting and extending the children’s learning and several parents referred to these as being useful for them. The parents appeared to be more involved in their children’s learning through the ePortfolios and were looking at them with their children far more regularly than
they were with the paper-based portfolios. By using the documentation contained in their children’s portfolios (paper-based and online), the case study parents were enabling their children, when they were at home, to recall, reconnect with and restart learning experiences which had occurred at the setting.

10.1.2 The role of portfolios in supporting children’s learning – teacher observations

Like the case study parents, the key teachers for each case study family were also invited to share their thoughts through their initial and Final Interviews on the role portfolios play in children’s learning.

**Connecting and strengthening relationships between teachers and parents/whānau in ways that benefit the children**

Joanne (teacher, case study two) felt strongly that children learn through relationships. The paper-based portfolio aided in developing these relationships, she thought. Through revisiting the documentation in the paper-based portfolios, the children were able to recognise relationships they had in the past, or were currently involved in, and could further connect with these. The paper-based portfolios also allowed Joanne to strengthen her relationships with parents and whānau and this in turn increased her ability to support the children to learn. Joanne felt that the relationships had become stronger with the introduction of the ePortfolios. An important aspect of the impact that the ePortfolios had on relationships with parents and whānau that Joanne had noticed was the way they encouraged extended family to be part of the ECE setting. She talked about one child in particular whose grandmother was in the United States of America. Through reading the stories on Educa the grandmother felt that she had got to know the teachers, children and the ECE setting’s wider community before ever coming to visit. When the family had a new baby and the grandmother came to New Zealand for a month to support them, it was no problem for her to drop off and pick up her grandson from the setting. Joanne said “she got to share his stories from half way across the world, and now she’s here and she knew us, she knew the room and the environment he was in” (Joanne, teacher, Final Interview, August, 2014).
**Improving teachers’ planning**

Stephanie (teacher, case study four) considered that children learn best when they feel safe and secure. She thought learning could be built on when children were allowed to follow their own interests and passions, particularly if they were given the time and space to do so. Stephanie felt that there was potential for the paper-based portfolios to support this learning but she wasn’t really sure how. She said “I haven’t seen it in action though, not yet” (Stephanie, teacher, Initial Interview, July, 2013). Since the introduction of the ePortfolios Stephanie’s thoughts around how portfolios could support children’s learning had changed somewhat. She considered that the implementation of ePortfolios had improved teachers planning. She felt that because it was easier to review stories it was also easier to expand on them. Through doing this children’s learning experiences were being extended. Stephanie thought being able to easily see what other teachers were writing also made planning for learning experiences simpler.

**Involving the children in their assessment**

Leslie (teacher, case study five) thought that children learned through play, interactions and exploration. She felt that their interests and passions played an important role in how they learn. Leslie noted that some children were hands-on learners whilst others were observers. In Leslie’s view the paper-based portfolios definitely supported children’s learning through teachers noticing, recognising and responding.

In our documentation we write our stories based upon what we notice in children in that moment of whatever it is they are doing. We write down what we noticed and what we recognised as their learning. And then how we might respond. So we’re noticing that a child might be exploring with their hands through texture and those things, and then responding how we might further develop that in the literature and all that supports the way that the child explores. That supports what the child has explored and learned (Leslie, teacher, Initial Interview, July, 2013).

Leslie regularly used the ePortfolios to support children’s learning. She was also involving the children in the writing of their formative assessment documentation using the ePortfolios, something which she had not done with
the paper-based portfolios. Leslie had found the tablets that the setting provided for the teachers to use to document children’s learning “a bit scary at first” but over the year she had worked out a strategy to become more familiar with them. She made sure that whenever she was an inside teacher she would use the tablets to document her Learning Stories. This was when Leslie was writing her Learning Stories alongside children; this meant that their voice was captured in the story as it was evolving.

When I am inside teacher for sure I will only use the tablet to document my stories and I often sit beside the children writing their voices as they are involved in their learning. So then I will repeat back to them and share it with them to build on it along the way (Leslie, teacher, Final Interview, August, 2014).

Like Leslie, Georgina was also using the ePortfolios to involve children in their learning documentation. When the ePortfolios were introduced Georgina embraced the new concept. She was regularly using the ePortfolios on the floor with the children to support or extend their learning and, like Leslie, she was writing Learning Stories alongside the children. She also empowered children to be involved in their formative assessment documentation through photo selection, and near the end of the research period she was teaching the children how to upload their own photos.

Analysis

Like the case study parents, the key teachers could articulate the value of portfolios in supporting and extending children’s learning. The introduction of the ePortfolios strengthened the way the teachers were already using the children’s formative assessment documentation. Through using ePortfolios, relationships with parents and whānau had been further developed, the teachers’ planning had become more robust and connected, and the children were being involved in their own formative assessment documentation.

Summary

It was clear that portfolios, paper-based and online, were an important part of supporting and extending children’s learning in this ECE setting and its
community. Parents and whānau were able to recognise the ways in which paper-based portfolios could enhance their children’s learning experiences, but as the previous chapter shows, they were not actively contributing to these. The introduction of ePortfolios saw a change in parent and whānau contribution, so their awareness of the support they could give to their children’s learning in this way had increased. The inclusion of videos in the ePortfolios affected the way parents and whānau were involved in their children’s learning and this was mentioned by a significant number of the participants as one of the most beneficial additions to the portfolio system. Most of the teachers were using the paper-based portfolios effectively to support children’s learning and this continued with the introduction of ePortfolios.

10.2 Revisiting learning – recall, reconnect and restart

The teachers in the ECE setting were regularly using the paper-based portfolios to revisit children’s learning with them. As mentioned previously, these interactions were usually initiated by the children. When the ePortfolios were introduced there was a shift here. The teachers were still regularly revisiting learning with the children, but now they were initiating these interactions more often than not using the children’s ePortfolios. So, one of the key purposes of using portfolios on the floor of the ECE setting with the children was to revisit their learning. In turn, this enabled children to recall, reconnect with and restart learning. It also meant that children were becoming involved in learning conversations with the teachers more often than in the past.

The value of photos and videos

Sandra (teacher, case study one) would revisit the children’s paper-based portfolios but admitted that she hadn’t done this much in the months leading up to the research period. When she did look at stories she had written for the children with them, she felt that her writing style was at a level that made it difficult for the children to follow the story. Instead, she said, they would generally look at the pictures together and talk about what was happening in them. Sandra thought that the photos in the portfolios also helped children to feel a sense of belonging at the ECE setting. It was through the continual
revisiting of the portfolios that children are “knowing their environment well” (Sandra, teacher, Initial Interview, July, 2013). For Sandra, revisiting the contents of the ePortfolio was still just as important to children’s learning as it was through using the paper-based portfolio. She noted that the children often asked to see their ePortfolios and this was when the revisiting occurred, as well as on the occasions that she was initiating the interaction with the ePortfolios. Sandra said that the children most enjoyed looking at and discussing the videos contained in the ePortfolios:

…looking at the videos, the children are most interested in that. If you’ve [teacher] got a tablet and you might be taking some photos...they’ll often come along and that’s how it opens up the opportunity to revisit [the learning] on the tablet. (Sandra, teacher, Final Interview, August, 2014).

Joanne (teacher, case study two) also used the paper-based portfolios to revisit children’s past learning experiences. In the setting’s under-twos area, where she was located at the start of the project, the paper-based portfolios were either kept in a basket which the children could reach or in a low rack on the wall. This, Joanne said, meant that the children could access the portfolios whenever they wanted to. She had noticed a difference in the way the children in the under-twos used the portfolios depending on their age. The children closer to one year of age were more interested in the feel and enjoyed crinkling the pages, but she pointed out that the older children were definitely interested in going through the portfolio with a teacher or another child. It was for these older children that revisiting learning occurred the most. Of particular interest to this group of children were any photos which included teachers. I definitely noticed this in my observations in the under-twos area. There were several interactions between children and teachers when they were looking at these photos in particular. Joanne noted that the children in the under-twos were not particularly interested in the stories. She said “Sometimes I find when I do start reading the story, then often it doesn’t reside with them too much, they like to turn the page, they want to see what’s on the other page, and talk about those photos” (Joanne, teacher, Initial Interview, July, 2013).
Shortly after the introduction of ePortfolios, Joanne moved to the over-twos section of the ECE setting. She continued to use the ePortfolios to revisit children’s learning with them on a regular basis. As Sandra had mentioned, Joanne also found the videos contained in the ePortfolios to be beneficial when assisting a child to recall learning experiences. When thinking about the videos, Joanne noted that they brought an extra dimension to planning for the children’s strengths and interests. This was because teachers could view them again and again and each time they would notice things that they hadn’t noticed before. They were also helpful for encouraging a child who was adamant that they couldn’t do something, when the teachers knew that they could. Joanne provided a lovely example of this and the fact that the video was posted by a whānau member made the revisiting of the learning even more powerful.

Recently I had a child telling me that they needed a push on the swing and that they can’t. So I actually accessed the tablet, because there is a video of her, that her mother has put up, of her [the child] at the park, on the swing, pushing herself high, as high as high can be. So I sat down with her and said, look your mum shared this video with us and then she was like, oh yeah, that’s me. Being able to share how your mum shared this with me, so now I know this about you, can you show me how you can do that? I think it was quite cool for her. Revisiting in that time and space, so again that video form is really powerful for them as well, because it’s not just a photo and to see the way they react to their own accomplishments and knowing that mum put that there. “Oh okay, so now you know so I will have to push myself [child] every day now” (Joanne, teacher, Final Interview, August, 2014).

**Children’s sense of ownership and extending learning**

Robin (teacher, case study three) saw the paper-based portfolios as an artefact to extend the child’s learning. She noted the assessment for learning documentation contained in the portfolios allowed teachers to:

...extend on what they’re [children] doing and help them on their learning journey. And sharing their love of learning is another way of thinking about it too. When a teacher is excited about what a child’s doing, parents soon pick up on that excitement, so yeah, I find them [portfolios] a very, very, valuable tool (Robin, teacher, Initial Interview, July 2013).

She supposed that the most important function of the paper-based portfolios was that they allowed the children to remember what experiences they had had in the past. She felt that the portfolios were a personal record of a child’s journey and that the children felt a sense of ownership of their paper-based
portfolios. For this to be achieved, Robin considered that it was essential that the contents of the portfolio were shared with the children. She said “...the most important thing for me is that the stories are shared with the child. And that the child is aware that they’ve been recorded and shared” (Robin, teacher, Initial Interview, July 2014). After the introduction of the ePortfolios Robin still felt that they enabled children to remember past learning experiences. However, she thought that this was now a more timely occurrence. As the formative assessment documentation was uploaded and available for children to look at very quickly, they were able to recall learning, and perhaps reconnect with or restart the learning, within a much shorter time frame.

**A way to provide high quality early childhood education**

Paper-based portfolios and the included documentation were something that Leslie (teacher, case study five) valued very highly. She was confident in her ability to contribute worthwhile and effective documentation to the paper-based portfolios. Leslie thought that formative assessment documentation, such as Learning Stories, supported everything that they were doing at the ECE setting; in fact she felt that it was important for ECE in general. Leslie said that through using formative assessment documentation teachers became advocates for high quality early childhood education. They were able to confirm to parents and whānau that they were providing an excellent environment in which their children could grow, develop and learn. She said:

> I think the documentation in the paper format of portfolios is hugely, hugely important to what we do. And I spend lots of time, I don’t mind spending time to write my stories for children because I believe that the portfolio should show the growth of the child and all the things that make that child that child, photos of their family, or Learning Stories, and their interests and their passions and their artwork, all their growth and development (Leslie, teacher, Initial Interview, July, 2013).

As with the paper-based portfolios, Leslie was using the ePortfolios as a tool to revisit learning with children. As her confidence with the technology increased she was doing this more and more. Leslie was one of the teachers whom I observed using the ECE settings tablets to access the children’s ePortfolios on a
daily basis (see examples in 7.1.8 – I want to paint a tiger and I don’t feel very well).

**Analysis**

It is evident that portfolios, in whatever format, are an important tool to help children to revisit their learning while in the ECE setting and when at home. By revisiting their learning children are able to recall past experiences and share these with a significant other or others. They are able to reconnect with the learning and perhaps pick up where they left off, or they are able to restart the learning and take this in a new direction if they desire. The additions of videos to the ePortfolios were an important aspect for this study. Inclusion of supporting evidence in this format enhanced the quality of the stories and children, parents, whānau and teachers could see the learning happening. Videos, as well as photos, captured the children’s interest and encouraged them to participate in their own formative assessment documentation, increasing their sense of ownership (which was already strong in terms of the paper-based portfolios). The ePortfolios also allowed teachers to revisit past stories more easily, so that the stories were more connected. This meant that the written documentation showed growth and development over time. Each medium contained in the portfolios has different possibilities for communication and the inclusion of videos particularly strengthened this.

**10.3 Portfolios as a teaching resource – supporting recalling, reconnecting and restarting**

In the Initial Survey all of the teachers identified that paper-based portfolios were extremely valuable as a teaching tool (12/12). The Final Survey showed that the teachers also felt this was the case with ePortfolios, with all nine respondents agreeing that they were extremely valuable in this respect.

**Communication as a team about all the children’s learning progress**

All of the teachers stated that their communication as a team had improved since the introduction of the ePortfolios. They were having rich conversations whilst on the floor about children’s learning and how they could
extend and support it. This was something that previously had only really been discussed during specific planning meetings. The teachers were showing each other their stories with more excitement and enthusiasm, and this was something that had been noticed by the management of the ECE setting. The ECE setting’s supervisor had noticed her teaching team working together as peer learners. She said that the teaching team was becoming involved in “peer coaching like around documenting. So we’re looking at each other’s and going I really like the way they wrote it that way, and then having a go” (Erica, Interview, March, 2015). The administration team leader who was heavily involved in setting up the ePortfolios system also noted that the ePortfolios were assisting the supervisor when she was mentoring her team. She said:

   The other thing I think it’s really helped Erica in her role for mentoring and coaching staff by having it online, because it’s much easier to provide that feedback. Or if she’s approving a story it’s sent to her, she can suggest changes and staff can quickly edit it with Erica, not having to go through paperwork. It just seems streamlined (Toni, Interview, March, 2015).

**Planning for teaching and experiences**

Robin (teacher, case study three) reflected that paper-based portfolios were a valuable resource for many reasons; one of these was their usefulness as a teaching tool. She said it gave teachers something to look back on and to be used in planning meetings. From these discussions with other teachers, Robin considered that the teachers could find common interests amongst the children and then extend on these interests as a group. Robin also used the paper-based portfolios as a tool to help her write new Learning Stories. She would reflect on what had been written and make links which she could then use to strengthen the story she was currently working on. Since the introduction of the ePortfolios, Robin said she still believed that portfolios were a most valuable teaching resource; however, she was now even more enthusiastic about the possibilities afforded by the ePortfolios. It was the things that could be added through the ePortfolio platform that had increased Robin’s excitement and enthusiasm. Of particular merit was the ability to add videos to the Learning Stories and learning moments she was contributing. As noted previously, Robin thought that she
taught in a different way to most of the members of the team, particularly
around risky and challenging activities. She said:

But that’s probably the other thing about Educa that I think is happening,
teachers while not seeing what I’m doing are seeing the stories and
understanding what I’m doing and why I’m doing it. In the last six months I
suppose I’ve seen a bit of a change in the teachers too. They are starting to go,
okay let’s just see if we can step into this and follow the same journey (Robin,
teacher, Final Interview, August, 2014).

Looking to the past for the future

Stephanie (teacher, case study five), who liked writing learning stories for
the children in the under-twos section, thought that the formative assessment
documentation contained in portfolios showed the children’s learning journey
over time. The paper-based portfolios allowed her, as a teacher, to look back on
past learning events to assist with planning future experiences. She was of the
opinion that the implementation of ePortfolios had improved teachers’ planning.
Because teachers were able to easily review the learning stories contained in the
ePortfolios, Stephanie thought that the process of expanding on or supporting
the learning had become simpler.

Georgina (teacher, case study six) also valued the paper-based portfolios
as a teaching tool. Like Stephanie, Georgina used the formative assessment
documentation in the paper-based portfolios to plan for the future. At the start
of the data collection period Georgina thought that she was still learning how to
best use formative assessment, this had shifted significantly for Georgina since
the introduction of ePortfolios. She said:

Educa is way easier for planning. It’s been fantastic in that respect because it’s
so easy to access previous stories for a child and it’s always there, whereas the
portfolios go out of the centre. They’re not always available, or if I’m outside
and I want to access stories I can do it on the spot, rather than having to come
and find a portfolio. Also, it’s really easy to read what other teachers are
writing so you can see, make links and then build up the planning from there.
It’s just having it all in one place that’s so easily accessible and just easy to
scroll back through and find a story that you might want to link the learning to
(Georgina, teacher, Final Interview, August, 2014).

Leslie (teacher, case study five) had similar views to Georgina. She said:

I would say Educa ePortfolios was easier for planning, because I think that you
can look at individual children and identify their learning and their dispositions
for learning far quicker and easier than paper based. Because it’s all electronic you can just tap into it and pull out what you need and go. Whereas sometimes with paper based, stories might fall out and then they get put back into the wrong place, so it can be a bit harder to follow (Leslie, teacher, Final Interview, August, 2014).

**Analysis**

The way in which the teachers were using the ePortfolios as a teaching resource closely links to the increase in collaboration discussed in Chapter Eight (8.1.3). The teachers were talking more about the ways in which they could use the children’s formative assessment documentation to extend and support learning. From these discussions they were making connections to experiences they had witnessed and had thought of recording, sometimes leading to Learning Stories which were contributed to by two or more teachers. The teachers considered that through the introduction of ePortfolios their planning had become more effective, and a lot of this was because of the platform’s ease of use.

**10.4 What had changed?**

The teachers, parents and whānau involved in this study recognised that the way children learn is multi-faceted, and this can be different for each child. However, they acknowledged the important role that portfolios, paper-based or online, can have in assisting a child to get the most out of their learning experiences. Through the formative assessment contained in a portfolio children are able to recall learning from past experiences. They are able to share this learning with others who are important to them. Portfolios allow children to recall experiences that they may not remember — for example something that occurred when they were a baby. Furthermore, portfolios allow children to extend on their previous learning experience. By reconnecting with past learning children can ‘pick up where they left off’. They are able to return to an experience and try again — particularly if they were not successful the first time. Lastly, children are able to restart learning experiences through portfolios. They can take an interest and expand on it. An interest in dogs may extend to an interest in tigers, as demonstrated in Michael’s *I want to paint a tiger!* example (7.1.8). The way these experiences have changed with ePortfolios is twofold. By
using electronic technology children are able to quickly access their learning at home with their parents and whānau. Their learning is affirmed and supported, and connections are made in a timely manner between the ECE setting and home. The technology also means that teachers can quickly and easily extend on and support children’s interests by accessing the internet, as Leslie did in the example mentioned above.

The increased collaboration amongst the teachers evident in their planning is a direct result of the introduction of ePortfolios. The teachers were using the ePortfolios far more effectively as a teaching resource than they were using the paper-based portfolios. The ease of use and ease of access were the main contributing factors to this. It should also be mentioned that the responsiveness of the ePortfolio provider to changing or adding things to meet the teachers’ needs, such as allowing larger video files to be uploaded, aided in this.

Nevertheless, even though the introduction of ePortfolios has been very successful for this ECE setting, it is essential to reinforce my previous statement that ECE settings need to ensure that the children’s portfolios are accessible to them, to their whānau and to teachers. ePortfolios allow adults to easily access children’s formative assessment at any time they choose, and anywhere (provided they have access to the technology which allows them to do so). This is not necessarily the case for children. Whilst it is a strong finding of this study that ePortfolios are beneficial for children’s learning, if they are not accessible to children some of these benefits are lost.

**How the introduction of ePortfolios impacted on the changes**

The contents and ease of use of the ePortfolios contributed substantially to the changes identified in this chapter. The parents and whānau particularly liked the inclusion of videos in the ePortfolios, something that was not supported in the paper-based format. They enjoyed looking at the videos with their children (and this was often prompted by the children) and through this medium
they could make connections to home. Through the multi-modal communication tools in the ePortfolios parents and whānau were assisting their children to recall, reconnect with and restart learning alongside the teachers.

The teachers felt that the ePortfolios were easier to use than their paper-based counterparts. They found that they were able to review the contents easily and that this meant that more robust connections to past learning were being made. The teachers were using the ePortfolios more effectively to plan for future experiences; in effect they were becoming skilled at using the past to plan for the future.

10.5 Summary and looking forward

This chapter has explored the prominent role portfolios have, in whatever format, in supporting children to recall, reconnect with and restart learning. It has described how these learning experiences were supported and extended on through portfolios by parents, whānau, teachers and children. The changes made to the way children were supported to recall, reconnect and restart after the introduction of ePortfolios were also discussed.

The final chapter of this thesis follows. It will develop the findings into conclusions and implications for practice. It will also introduce the evaluative tool which has been designed to assist ECE settings in selecting which portfolio format suits their community and to find an ePortfolios programme which is educationally sound.
Chapter Eleven – Conclusion and Implications for Practice

11.0 Introduction

The concluding chapter of this thesis revisits the key components of the study, brings together and synthesises the findings, and discusses the main thesis arguments. The main purpose of this study was to make a valid and worthwhile contribution theoretically and practically to the areas of formative assessment in relation to portfolios (paper-based and online) and parent and whānau engagement with children’s learning and communities of practice in early childhood education practice, especially in Aotearoa New Zealand. Each of these key themes will be discussed, highlighting the findings from the study. From these findings an evaluative tool has been developed to help early childhood education settings decide what is important to them in terms of formative assessment practices and parent and whānau engagement, and therefore determine which portfolio system would suit their setting (paper-based, online or both). The tool will also assist teachers and the ECE community to understand what is important for a sound, educationally based ePortfolio platform. This will also be included in this final chapter. The chapter closes with a discussion of the limitations of the study, recommendations for further research and a concluding statement. The following research questions were posed at the onset of research in one early childhood education setting and community (see Chapters Two and Three for an explanation of the purposeful nature of this choice):

(i) How does the introduction of an ePortfolio programme change teachers’ formative assessments?
(ii) Does an ePortfolio programme assist parents and whānau in an early childhood education setting to engage with their children’s learning? If so, in what ways?
(iii) In what ways do children use and contribute to their ePortfolio?

These research questions and subsequent findings are crucial to inform policy around assessment for children’s learning, engagement of parents and whānau and teachers’ formative assessment practices. Globally, ePortfolios
have been used for some time in primary, secondary and higher education. They are also being utilised more in these sectors nationally (see 2.0 for references). Technological developments are inevitable and there is a need to ask whether and in what ways ePortfolios can assist in building strong educational communities, and, what aspects might impede this building. As suggested by Facer (2011):

...if we see education as having a role in mitigating inequalities and in contributing to the creation of fairer and democratic futures, we have a responsibility to ask whether socio-technical developments will contribute to or impede that role. We need to ask, ‘who benefits?’ in any of the visions of the future we are offered or that we are working towards. And we need to examine where educational institutions might productively play a role in helping to ensure that the least advantaged communities are equipped with a fair chance to shape socio-technical developments in ways that will not see them even further disadvantaged (p. 9).

Furthermore, there is very little documented research, either nationally or internationally, into the use of ePortfolios as a tool to engage parents and whānau, to support teachers’ formative assessment practices and to establish authentic learning journeys for children in early childhood education. In Aotearoa New Zealand a number of ePortfolio formats have recently been introduced to early childhood education settings, many of them from private providers with little educational knowledge and/or support. Privatisation of the early childhood education sector is expanding; and the same holds for providers of services which are designed to support early childhood education. It is a danger, then, that the ePortfolio systems that are being promoted may not be fit for purpose – questions need to be asked about whether they support the desired learning outcomes espoused by Te Whāriki (Ministry of Education, 1996) and whether they foster equitable opportunities for children to engage in learning, and indeed for parents and whānau to become contributors to this learning (Cowie & Mitchell, 2015). Therefore, the findings of this thesis make an important contribution to the early childhood education sector for policy and practice.
Theoretical Framework

The concept of communities of practice was the theoretical framework used for this study. A community of practice is made up of a group of people who share a practice (Lave & Wenger, 1991; Wenger, 1998, 2011, 2015a; Wenger et al., 2002). In some cases the participants in a community of practice are passionate about and want to improve the practice. For this study the practice was supporting and enhancing children’s learning through interaction and engagement with formative assessment documentation, such as Learning Stories (Carr & Lee, 2012; Carr et al., 1998; Carr et al., 2002), contained in portfolios.

Key findings

Several key findings have emerged from this study. Firstly, the analysis of the data, and subsequent discussion, highlighted opportunities for assessments using a portfolio to be effectively formative. This is evidenced in the changes in the ways parents and whānau engaged with children’s learning following the introduction of ePortfolios to the setting. It is also apparent in the changes to the ways the teachers were writing formative assessments for the children: with the introduction of the ePortfolios they took a more critical and collaborative approach. The findings show that a portfolio, in whichever form (paper-based or online), can be a vital artefact in children’s authentic learning journeys in an ECE setting that includes the children’s parents and whānau. These findings all suggest that the introduction of ePortfolios has implications for the following:

(i) Supporting teachers’ formative assessment practices
(ii) Engaging parents and whānau in their young children’s learning
(iii) Establishing authentic learning journeys for children in early childhood education

Furthermore, the introduction of a new tool for formative assessment in an educational setting also will significantly change the community of practice within that setting; this chapter will discuss this implication as well.
11.1 How did the introduction of an ePortfolio programme change teachers’ formative assessment practices?

In Chapter Two the following passage from Black et al. (2004) was introduced to explain how assessment can become formative assessment. They noted:

Assessment for learning is any assessment for which the first priority in its design and practice is to serve the purpose of promoting students’ learning. It thus differs from assessment designed primarily to serve the purposes of accountability, or of ranking, or of certifying competence. An assessment activity can help learning if it provides information that teachers and their students can use as feedback in assessing themselves and one another and in modifying the teaching and learning activities in which they are engaged. Such assessment becomes “formative assessment” when the evidence is actually used to adapt the teaching work to meet the learning needs. (p. 10)

This study found that co-operation between teachers and teachers, and between teachers and parents/whānau impacted strongly on the formative assessment practices of the teachers (Mitchell & Furness, 2015). Changes to the way the teachers in this study carried out formative assessment were noted by parents and whānau and by the teachers themselves. Two significant changes were evident.

The first change observed was to do with the consistency and frequency of the additions to the children’s portfolios following the introduction of ePortfolios. The study found that additions to the paper-based portfolios were irregular and inconsistent. There was often a significant length of time between additions; for some children this was up to several months. Also, each teacher’s writing and formatting style was different and while this allowed for the individual personalities of the teachers to be evident in the portfolios it meant that important aspects of learning were not always being recorded (see Chapter Five). The inconsistency in the teachers’ writing styles highlighted that what they were calling “Learning Stories” were in fact contrary to the expectations of this tool and what it was designed to do. After ePortfolios were introduced the frequency of additions increased markedly, with the children’s ePortfolios at least doubling in size over the year of data collection from what was contained in the paper-based portfolios. The format of the documentation was also more
consistent after the introduction of ePortfolios, supported by the template provided for the Learning Stories, which all the teachers who contributed to the ePortfolios used. The provision of a template is a salient feature of a quality ePortfolio system – but only if it is designed and updated regularly in collaboration with the early childhood education profession and current research. There are dangers in using an ePortfolio system that is not informed by sound theoretical, research based and practical ideas on teaching and learning, as the key factors of formative assessment may be compromised (Black & Wiliam, 1998a, 1998b; Carr et al., 2015; Clarke et al., 2003; Crooks, 2002; Crooks, 1988; Hattie, 2010).

The second change noted was in the formative aspects of the assessment that the teachers were producing. The main formative assessment tools used by this ECE setting were Learning Stories and learning moments (see Chapter Two). The initial findings showed that before the introduction of ePortfolios there was not a great deal of difference between the two formats, as the stories that the teachers were writing as Learning Stories did not always contain all the necessary components. The introduction of ePortfolios prompted a noticeable change here, and this is where collaboration (as mentioned above) was important. The formative assessment documentation the teachers were writing for the children’s ePortfolios had become a much more frequent and more considered reflection on what learning was occurring. The teachers’ stories noticed learning; they were no longer just a moment in time. They almost always included recognition of what learning was happening and then made suggestions for future possibilities to extend and support that learning. Furthermore, the teachers were using research to strengthen the Learning Stories. They were making links to relevant theory and literature (see the Learning Stories in Appendix Ten for examples), and in particular were making links to the early childhood curriculum, Te Whāriki (Ministry of Education, 1996). Additions of media, such as photos and videos, complemented the stories, rather than

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25 Learning was not always identified and ways to support and extend learning were not always included (see Carr, 2001; Carr & Lee, 2012).
Learning Stories being based only on a photo that had been taken, as had occurred in the past (when stories were written about photos, rather than photos being used to highlight the learning). Parents and whānau felt that this added an extra dimension to their children’s learning journeys and seemed more inclined to add their own comments and contributions (see Chapter Seven). This produced a cycle of enhanced learning as teachers, encouraged and affirmed by the comments from parents and whānau, took the children’s learning to the next level, as discussed by the teachers in Chapter Seven.

Figure 11.0 Cycle of collaboration between teachers, parents and whānau using ePortfolios

Conversations about children’s learning and how to support and extend this between teachers had become more collaborative, and were no longer limited to staff meetings. Several teachers noted that they were reflecting on what their colleagues had written prior to completing a new learning story. This meant that there was no longer a ‘doubling up’ of documentation; more joint Learning Stories were being written (by two or more teachers) and teachers
were seeing children’s learning through each other’s different lenses. A further cycle of co-operation had developed amongst the teachers.

Figure 11.1 Cycle of collaboration between teachers using ePortfolios

These changes had implications for the ECE setting. As the teachers’ passion for writing formative assessment documentation was further encouraged by using the ePortfolio platform, several noted that they were working on the documentation at home. While the teachers in this study all identified that this was absolutely their choice and was something that they wanted to do, the possibility of ‘work creep’ into home life needs to be acknowledged.

A further implication is the need for regular professional development to enable the teachers to continue to use ePortfolios effectively. Advances in technology are rapid and therefore teachers need to remain current with these to make sure that the ePortfolio system continues to reflect the aspirations of
children, parents and whānau, as well as those of the teachers and the ECE setting’s pedagogy and national curriculum requirements.

Although the ePortfolio platform allowed for creative additions and responses from the teachers, some of the participants in this study noted that the introduction of ePortfolios saw a reduction in the way the personalities of the teachers came through in the children’s formative assessment documentation (see Chapter Seven). However, creativity and individuality could be retained and indeed expanded on in ePortfolios through the ability to add videos and voice recordings, maintaining the visibility of the personalities of all who contribute to them.

There was a noteworthy trend towards the end of the study for teachers in the ECE setting to more often include children in their assessment documentation in ePortfolios (see Figure 11.3) was noteworthy. By enabling children to become part of their learning journey through becoming co-constructors of that learning, that is, engaging in self-assessment, the fundamental tenets of formative assessment are achieved (Black & Wiliam, 1998a, 1998b).

If ECE settings consider having only ePortfolios then they must ensure that the technology is available to allow the children to access their portfolio whenever they want to, and that children are encouraged and invited to be co-constructors of their learning alongside the teachers, parents and whānau (see Chapters Nine and Ten). If this is not something that the ECE setting can provide then it is imperative that they either remain with only paper-based portfolios or have both systems operating.

11.2 How did an ePortfolio Programme assist parents and whānau to engage with their young children’s learning?

This study has clearly demonstrated the benefits of parent and whānau engagement in their young children’s learning through formative assessment documentation, and this increased significantly with the introduction of
Although there was interaction with the paper-based portfolios, parents and whānau were not actively contributing to them at the start of the research period. The introduction of ePortfolios resulted in a dramatic change in parent contributions. These contributions included comments, stories, photographs, videos and effective conversations with their children and with teachers. Who was contributing to the children’s formative assessment portfolios had also changed, with an increase in extended family (whānau) participation. Grandparents, aunts, uncles, siblings and friends had become visible in the children’s learning journeys and many were added as recipients of the digital Learning Stories and other assessment documentation.

Changes were also seen in who was initiating the interactions with the children’s portfolios. ePortfolios saw an increase in parent and whānau initiation, whereas the children continued to be the initiators of interactions with their paper-based portfolios. This again highlights the importance of ECE settings thinking about how children, parents and whānau are able to access their formative assessment documentation. Access to technology must be considered here. For some families there may not be the same availability of technology to allow them to be involved in the children’s ePortfolios outside of the ECE setting. Other families may not wish to use technology for other reasons, such as religious beliefs. It is imperative that when thinking about implementing an ePortfolio system ECE settings take individual family situations and personal preferences into consideration, so that an inequitable divide between families does not occur (Cowie & Mitchell, 2015). ECE settings must ensure that all families are supported to access their children’s formative assessment documentation if it is contained solely within an ePortfolio. If this cannot be achieved then settings need to reflect on whether this is the right platform to use for their community.

**Children’s access to technology at home**

It is important to note here that a number of the children at the ECE setting during the course of the study were not encouraged to use, or allowed
access to, the technology required to view their ePortfolios at home. This was because the parents in these families had the perception that the children would be distracted from traditional forms of play (such as playing outdoors) by the digital ICT tools, or that they were too young to use them. This reality for some of the children in the present study could have contributed to the fact that they were not initiating interactions with the ePortfolios as often as they were with their paper-based portfolios.

11.3 In what ways do children use and contribute to their ePortfolios: Building authentic learning journeys for children

From the findings it is very clear that portfolios can be a vital artefact to aid children, teachers, parents and whānau to construct authentic learning journeys. My definition of the way that children use their portfolios is recalling, reconnecting and restarting (see Chapter 10). Through portfolios children can recall their learning. This includes ‘recalling’ an experience that they couldn’t originally remember, for example from when they were an infant. During my observations it was evident in the ECE setting that the children regularly used their paper-based portfolios as a prompt for this, remembering experiences with a significant other, then going on to use the portfolio as a prop in further conversations. While some literature discusses the use of portfolios for conversations between parents and teachers (Cohen, 1999; Weldin & Tumarkin, 1998/1999), there appears to be little mention of the use of portfolios as a conversation starter between children. The value of portfolios to encourage communication and for children to engage in thinking about their learning was a new finding in my study and one that is worthy of further exploration. Through portfolios, children were able to reconnect with learning experiences. They would recall the experience then pick up where they left off; this could be finishing a task or attempting something again. Portfolios also encouraged, supported and extended children to restart learning. From recalling and reconnecting with the learning experience children were invited or encouraged to take it further, moving in a new direction or expanding their original intent. This is the essence of formative assessment. For all of this to happen, children
must be able to access their portfolios wherever and whenever they choose. *Being unable to do so would be the biggest failing of an ECE setting which relies solely on an ePortfolio system.* Within ECE settings, paper-based portfolios are usually placed where children, teachers, parents and whānau can easily access them. This study found this not to be the case with ePortfolios. In the ECE setting where the study was based, children could only access ePortfolios with the help of a teacher, and as limited technology was available only a few children could look at their ePortfolio at any given time. The parents and whānau reported similar problems at home. Many of the parents accessed the ePortfolios on their Smartphones or other mobile devices, and their children were often not allowed to use these. For some families, interactions with their children and their portfolios had actually decreased with the introduction of the ePortfolios.

**Children’s access to portfolios (paper-based and online)**

Children’s access to their formative assessment documentation is not only physical. The formats used for formative assessment must also be accessible for children. The contents of children’s portfolios need to be open to children’s ‘reading’ and contribution; therefore the nature of the documentation contained in any portfolio is a critical issue. While it is possible with paper-based portfolios for children to easily add their own documentation, such as artwork, this may not be so with ePortfolios. For this reason the platform of the ePortfolio must be educationally sound and must support purposeful assessment. By providing a template, as Educa did in this study (see 1.4), teachers, parents and whānau can be guided to include the essential components of formative assessment – what is happening, identifying learning, and providing feedback and ideas to support and extend learning. By enabling multi-modal aspects, such as video and voice recording, to be included ePortfolios can further strengthen formative assessment documentation which promotes recalling, reconnecting with and restarting learning. The ePortfolio platform also needs to be ‘user friendly’ – for teachers, parents and whānau and children. Children should be able to add their own documentation, such as
uploading a photo or video, or indeed even recording their own Learning Stories and moments.

This thesis therefore raises ten questions that early childhood education settings must consider before implementing ePortfolios.

(i) Does the ECE setting have the required internet access to support ePortfolios (i.e. wireless and sufficient data allowance)?

(ii) Will the setting have sufficient technology available for children to access their ePortfolios whenever and wherever they want to, unassisted?

(iii) Will the technology available allow several children to access their ePortfolios at the same time?

(iv) Will the ECE setting involve children in selecting the documentation to be uploaded to their ePortfolios, as the teachers in the ECE setting in this study were beginning to do?

(v) Will children, parents and whānau be supported to add documentation which contributes to an authentic learning journey?

(vi) Is the ePortfolio platform based on sound educational research which promotes the essential aspects of formative assessment and is framed around key learning outcomes and opportunities to learn?

(vii) How will parents and whānau be supported to interact with the ePortfolios alongside their children and the teachers?

(viii) Will the ECE setting provide opportunities and equipment for parents and whānau who do not have the required technology to access their children’s ePortfolio on an equitable basis?

(ix) Will the ECE setting provide sufficient technology for the teachers to access ePortfolios wherever they are in the setting, or allow them to use their own devices utilising the service’s internet?

(x) Will the teachers be supported with relevant and worthwhile professional development so that they can implement ePortfolios to their full potential?
These questions require serious consideration when contemplating whether to implement an ePortfolio system into an ECE setting. The evaluative tool described in 11.7 below will support ECE settings to decide which format or formats of portfolio will be appropriate for them. It will also enable educational communities to understand what is important to look for in an ePortfolio programme.

11.4 Fostering a strong community of practice

At the onset of this research I believed that the community of practice in the ECE setting was only just beginning to develop and termed it a juvenile community of practice. Teachers were directly involved in children’s learning through producing the assessment documentation for their paper-based portfolios. Children, parents and whānau were involved but their contributions to the portfolios were limited. At the start of the research there were few tangible artefacts in the children’s portfolios that had been added by themselves or by their parents and whānau. Again, significant changes were noticed with the introduction of ePortfolios. These changes were evident in parent and whānau contributions to the ePortfolios. The artefacts they were adding contributed directly to the children’s learning journeys, adding to their authenticity. There were also changes to the conversations that parents and whānau were having with the teachers about their children’s learning (as noted in 11.4 above, see also Chapters Seven and Eight), so that connections between the ECE setting and home had become explicit. There was an increased sense of belonging within the ECE setting, particularly for extended family who lived in different locations. This could be described as a community who had a shared practice (children’s learning) and who sought ways to improve this practice (support and extend children’s learning).

Through these changes the three key tenets of a community of practice (CoP) as defined by Lave and Wenger (1991) are evident. The members of this CoP had a domain (alternatively termed mutual engagement) – they shared a common aim and interest, engaging in children’s learning. Through the strengthening relationships (teachers, parent and whānau), which developed
from the introduction of ePortfolios, the members of the CoP had gained a better understanding of each other as they pursued the aims of the group, thus establishing the community (alternatively termed joint enterprise). Finally, the CoP had developed a shared practice (alternatively termed repertoire) as they contributed and shared tangible artefacts to the children’s ePortfolios.

Figure 11.2 Changes to the community of practice

Several other aspects of being a member of a community of practice in terms of membership, participation and belonging were further developed during the course of this study in the CoP within the ECE setting.

Membership and participation

As the community of practice in the ECE setting became more established, the membership and participation changed and developed. The teachers, parents and whānau who engaged with the ePortfolios became committed members of the CoP. For the children this was just beginning to change towards the end of the research, as they began to make their own contributions to their ePortfolios.

Modes of belonging

Wenger’s (1998, 2000) three modes of belonging - engagement, imagination and alignment - all became apparent as the CoP in this study grew. The teachers, parents and whānau were all in the engagement phase as they worked together to produce formative assessment artefacts. To some extent the
children were also in this phase, as with membership and participation this was beginning to increase towards the end of the study. Teachers, parents and whānau also contributed to the imagination phase as they began to introduce new ways to interact with the practice (children’s learning) through the multi-modal technology that the ePortfolios afforded (for example videos and voice recording). The final phase, alignment, wasn’t evident in this study but had the potential to develop as members of the CoP look outside of the group to align their practice with the wider ECE community.

Identity

Through involvement in the CoP the members’ identity can change. Those who were newcomers can become established members who make regular contribution to the shared practice. In this study this was true for the parents and whānau. As they became more engaged with their children’s learning through ePortfolios the parents and whānau were establishing a stronger identity in the CoP, and were therefore becoming more confident in their participation.

Leadership

While the CoP in this setting had very strong leadership at the beginning of the research, this leadership was becoming dispersed. Wenger (2000) noted that while a CoP depends on central leadership (in this case the setting’s supervisor), new leaders were emerging. These leaders took various roles, as suggested by Wenger (2000). There were “thought leaders” – teachers, parents and whānau who regularly engaged in conversation about children’s learning and collaborated around this (see figures 11.0 and 11.1). There were also “pioneers” – teachers, parents and whānau, who were finding new ways of contributing to children’s authentic learning journeys through technology and research.

Children’s contributions to their ePortfolios

During the study there was little movement in the way the children were contributing to their ePortfolios, but this was beginning to change near the end
of the research period (see 10.1.2). Several of the teachers had begun actively including the children in decisions around what should be uploaded to their ePortfolios. They had also begun to write Learning Stories alongside the children, so that their voices were captured in the formative assessment. Something to consider here is increasing the children’s engagement and involvement through a curriculum similar to the one described by Schallhart and Wieden-Bischof (2010) from their research in an Austrian kindergarten (see 2.4.3). By being active participants in selecting what is to be added to their ePortfolios, children are empowered to become co-constructers of their learning journey alongside their teachers, parents and whānau. They would also become fully functioning members in the community of practice, in terms of contributions to their formative assessment portfolio, rather than sitting on the periphery.

*Figure 21.3 Cycle of collaboration between teachers including consultation with children using ePortfolios*
11.5 Evaluative tool for use in ECE settings

I have devised an evaluative tool for ECE settings to use when considering implementing ePortfolios as a formative assessment documentation platform. The tool is designed to enable settings to think about some of the necessary things that they will be required to have or do to make ePortfolios a successful learning artefact for children. The tool requires settings to consider the following aspects, building on the ten questions raised in this thesis (see 11.3):

(i) Internet availability and access;
(ii) Technological resources available to children, teachers, parents and whānau;
(iii) Contributions from children, parents and whānau are allowed and encouraged;
(iv) Professional development available for teachers.

Furthermore, the tool emphasises the essential features required in an ePortfolio platform to ensure that it is “fit for purpose”, that is, it supports parents and whānau to be actively engaged in their children’s learning, it encourages sound formative assessment practices, and it allows children to recall, reconnect with and restart learning.

By utilising this tool ECE settings will be able to determine which type of portfolio is right for them and their community. It will also assist them to identify the critical features of an educationally sound ePortfolio platform. The tool is available in paper-based format as a flow chart (see Appendix Eleven) or online:

https://sites.google.com/site/ePortfoliosinece/home

11.6 Limitations of the study

It is important to acknowledge the limitations of this study. The success of the ePortfolio system can be largely credited to the professionalism and commitment of the teaching team, and in particular the setting supervisor, within this particular ECE setting. The ECE setting was also committed to employing 100% qualified early childhood education teachers. Similar results
may not be obtained within settings with a significantly different pedagogy. A further limitation is that all of the families within this setting had access to electronic technology, either in their own homes or in their places of work. Again, this may not be true of all ECE settings, particularly those that work within low socio-economic communities or with different philosophies, therefore the results may be different if a similar study was to be implemented within these settings. However, many aspects of quality formative assessment using portfolios also apply to paper-based portfolios, and indeed the study suggests that the children may have better access to the latter.

11.7 Areas for further research

There are several areas for possible future research related to portfolios, and in particular ePortfolios. First and foremost, the effectiveness of ePortfolios as a standalone platform without paper-based portfolios, as a resource for children and their families to access, warrants further investigation. The majority of the participants in this study identified that they would choose an ePortfolio system over a paper-based one; however, little is known about what impact this would have on children and their learning journeys. This study has clearly shown that the children’s access to formative assessment documentation plays a key part in maintaining the authenticity of their learning journeys. Therefore if access is limited, the question “How will children’s learning be affected?” needs to be asked.

Secondly, the ways in which children contribute to their learning journeys through formative assessment documentation needs more exploration. ePortfolios unlock the capacity for this to occur. Children could become active participants in their own ePortfolios and those of their peers. Although the ECE setting in this research had begun to include children in selecting what was uploaded to their ePortfolios, there are further opportunities to expand this. The incorporation of children’s voices which are clearly visible in their learning journeys could have immense potential. By utilising various forms of media, such as video and voice recording, children would be able to record their own stories. They would also be able to record stories for their peers, adding another
dimension to authentic learning journeys, particularly as children learn alongside others.

Another area for consideration is the way portfolios are used with infants. The teachers in this study noted that the parents and whānau of the children in the under-twos section were less inclined to engage with the formative assessment documentation. It also appeared that the teachers had a different view as to what the very youngest children were capable of in terms of being extended and supported through formative assessment documentation. In light of the recent report on infants and toddler for Aotearoa New Zealand’s Education Review Office, which discovered that almost half of the ECE settings in this country do not have a strong enough focus on exploration and communication (Education Review Office, 2015), this area needs to be explored.

Finally, the degree to which parents and whānau could become involved in their children’s formative assessment could be explored in some way. More discussion on how to encourage parents and whānau to add effective learning documentation to ePortfolios is needed. The parents and whānau in this study had begun the journey using the platform much as they would use a social media platform, adding ‘likes’ and limited comments such as “well done”. However, this had already changed markedly for some families as they began adding comments which reflected how the learning was continuing at home or how they had encouraged their children to extend the learning. Some parents and whānau had even begun adding learning moments and Learning Stories. What was it about these families that made them begin to change the way they contributed to their children’s learning journeys? Furthermore, how can parents and whānau be supported to use ePortfolios effectively alongside their children? EPortfolios have the power and potential for supporting parents and whānau to effectively become co-educators alongside the ECE setting’s teachers, as suggested by Mitchell (2003). Why, and indeed if, they choose to do this needs further investigation.
11.8 Concluding statement

Educational portfolios, in whatever format, are vital artefacts which can support and extend children’s learning through empowering them to recall, reconnect with, and restart learning experiences. The limitations of practice using paper-based portfolios can be addressed through the use of ePortfolios as a platform for children’s formative assessment documentation. This will happen if, and only if, the platform is thoughtfully and meaningfully constructed using a sound theoretical base and evidence from practice. EPortfolios can allow learning to be documented in ways beyond the affordances of a paper-based portfolio. The addition of video and voice recording adds another dimension and was indeed one of the key beneficial features of ePortfolios found by this study. EPortfolios also allow for increased parent and whānau engagement as they can access the platform whenever and wherever they want to and are consequently more likely to contribute. However, ePortfolios come with their own dangers if not used correctly. If an ePortfolio system is the only place in which children’s formative assessment documentation is stored then the portfolios must be available for children to access whenever, wherever they want, unassisted. If children are not able to do this then the formative benefits of being able to revisit their learning experiences are minimised.

While I consider that ePortfolios are an excellent tool for documenting formative assessment and have limitless potential, the findings in this study would warn ECE settings to proceed with caution about choosing to use only this platform. One of the key purposes of early childhood education is to assist teachers and children to construct authentic learning journeys together, and formative assessment documentation is a key component of such journeys. Hence, practices will need to ensure that children’s ability to effectively access their portfolios and to contribute to them is not lost.
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Appendix One – Ethics application and approval

THE UNIVERSITY OF WAIKATO
FACULTY OF EDUCATION RESEARCH ETHICS COMMITTEE

APPLICATION FOR ETHICAL APPROVAL OF
SUPERVISED GRADUATE/POSTGRADUATE RESEARCH PROJECTS

The purpose of this form is to give the Faculty of Education Research Ethics Committee sufficient information to make an informed judgment about the ethics of your application.

Date of Submission: 15th May 2013
Name of applicant: Tracey Ann Hooker
Contact address: 414 Matangi Road, RD4, Hamilton 3284
Contact phone number: wk: 0785687559, hm: 078295944, cell: 0274295945
Email address: tracey.hooker@wintec.ac.nz
Programme of study: PhD
Department/centre/unit: Wilf Malcolm Research Institute in Education/Human Development and Counselling/Professional Studies in Education
Principal supervisor: Professor Margaret Carr
Current qualifications: Master of Education; Postgraduate Diploma in Education; Bachelor of Education; Diploma of Education (ECE); Certificate in Adult Tertiary Education.
Current employment: Principal Academic Staff Member/ECE Academic Leader employed by Wintec
Title of project: Adults and children engaging with ePortfolios in an early childhood education setting.

Interest in topic
As an early childhood education teacher first and foremost I have always had a strong interest in young children’s learning and assessment. During my time teaching I discovered that it was often difficult to engage parents and whānau in their young children’s learning. Many factors contribute to this, but most often it seems to be time that constrains this engagement. As a tertiary lecturer teaching on a field-based initial teacher education qualification students often report to me that this is still the case. Over the last couple of years there has been a real drive at Wintec for staff to incorporate blended learning tools in their teaching. As part of this we are offered professional development in ICT skills. In 2011 I undertook professional development in the use of ePortfolios. The ePortfolios presented in this session were the intended platform for the Ministry of Education’s pilot ePortfolio project with schools. As I discovered more about the benefits of ePortfolios I wondered about the possibilities of utilising them in an early childhood education setting. I am interested in making comparisons between documenting children’s learning and assessment in this way against the traditional paper based model, if using an ePortfolio makes any difference to the ways that teacher’s document learning and...
how parents, whānau and children engage with ePortfolios as opposed to traditional paper-based portfolios.

Other personnel: ePortfolio provider - Educa

1. Details of the Project

a) Research question(s)

1. Does an ePortfolio programme assist parents and whānau in an early childhood education setting to engage with their children’s learning? If so, in what ways?
2. How does the introduction of this programme change teacher’s formative assessments?
3. In what ways do children use and contribute to their ePortfolio?

b) Justification

Children of the 21st century are being continually exposed to an array of ever evolving technology (Carr & Claxton, 2002; Carter-Ching, Wang, Shih, & Kedem, 2006; Dooley, Flint, Holbrook, May, & Albers, 2011; Grey, 2011; Kankaanranta, 2001). In 2007 Morgan noted that although children are familiar with new technologies in the home they tended to be slow to filter into early childhood education settings. However, other research indicates that this is no longer the case as children are being exposed to more and more technology within such settings (Fleer, 2000, 2011; Grey, 2011). I would argue that there are still a significant number of early childhood education settings, both nationally and internationally, who do not use high levels of technology in their programmes. This could be for varying reasons such as demographics, location, age of teaching teams and financial implications. The centre that is to be involved in this study is in this situation. They are yet to have access to the internet and the computers already in the centre are used for educational games only. I believe that it is important in today’s educational environment that children are able to access technology (if they choose to) alongside traditional methods of learning. It is also important that parents and whānau are given the opportunity to engage with and support their children’s learning. Research has shown that children whose close family are interested in and involved with their learning from a young age are more likely to do better in more formal educational settings and later life than those whose parents and/or whānau are not engaged with their learning (Halgunseth, 2009; Hango, 2007; Waanders, Mendex, & Downer, 2007). As Douglass (2011) further notes parent and whānau engagement is also a widely acknowledged indicator of quality in early childhood education.

This proposed research is therefore significant for several reasons. It aims to give parents and whānau another way to interact with and contribute to their children’s learning through accessing ePortfolios. This will enable more time to be spent with the children and their ePortfolios by parents and whānau and also will also allow contributions to be made from remote locations with ease. Secondly, it is bringing this particular early childhood education setting into the 21st century in terms of technology use. This will in turn demonstrate to other environments that are yet to embrace high levels
of technology that such technology can be beneficial for all involved, that being children, parents, whānau and teachers and can contribute significantly to children's learning. It is important to note here that the intention or this research is not to replace traditional paper-based portfolios with ePortfolios as they are extremely important as a learning tool, particularly for children to revisit their learning with others. It is envisaged that the two systems will complement each other. Finally, although some research has been carried out which explores children's use of computers and the Internet (Dodge, Husain, & Duke, 2011; Grey, 2011; Wood, Specht, Willoughby, & Mueller, 2008; Yurt & Cevher-Kalburan, 2011); there is sparse literature which investigates the use of ePortfolios in early childhood education so this research will make a significant contribution to this field.

c) Procedure for recruiting participants and obtaining informed consent

An early childhood education setting in Hamilton will be the location for this research. [Type text here] has been approached by the researcher and management has confirmed that they would like to participate in the research study. The parents, whānau and staff from [Type text here] will initially be invited to participate through a letter introducing them to the project (appendix A), at this point they will be able to sign an 'expression of interest' form. All potential participants will be invited to an information meeting where the research will be described more fully. They will be able to ask questions of the researcher at this time. Once the participants have agreed to be part of the study they will be given a consent form (appendix B) to sign. In regards to the children this consent will be given by their parent/caregiver.

This research will contain case studies of six individual children, their parents and/or whānau and their key teachers (the teacher assigned to the family in terms of pastoral care and assessment). The case study families will be chosen based on the following criteria:

- All will have had an older child attend (or still attending if a close in age older sibling) [Type text here] This will give the parents/whānau the opportunity to compare assessment practices over time.
- Two case studies from each age group: infants (under two), toddlers (two – three) and pre-schoolers (three – five). By having children from different age groups the research will be able to identify if there are any differences in the way assessment practices occur for children of different ages.
- If more than six families meet the criteria for the case study then the six required will be selected randomly.

d) Procedures in which research participants will be involved

i) An initial survey will be undertaken with parents, whānau and the teachers to document use of and engagement with traditional paper-based portfolios. This will be available online or in a paper-based format depending on the participant's preference.
ii) Initial semi-structured interviews with parents and/or whānau, key teachers and children of the six case studies will be undertaken to form the basis of the case studies. The semi-structured interviews will use the children’s existing portfolios as props to inform the conversations. These will be audio recorded.

iii) The early childhood education staff will be invited to undertake training on ePortfolios. It is envisaged that this will be during a regularly scheduled staff meeting. On-going support will be provided by the ePortfolio provider.

iv) After the implementation of the ePortfolio system a further survey will be given to all participants to document initial feelings and use of the ePortfolio system.

v) After a year of implementation of the ePortfolio system final individual semi-structured interviews will be undertaken with the parents and/or whānau, key teachers and children of the six case studies to document the use of and engagement with the ePortfolio system. The semi-structured interviews will use the children’s new ePortfolios, alongside the paper-based portfolios, as props to inform the conversations. These will be audio recorded.

vi) A final survey will be undertaken with parents, whānau and the teachers to document use of and engagement with ePortfolios. This will be available online or in a paper-based format depending on the participant’s preference.

vii) The portfolios (both paper-based and ePortfolio) of the case study children will be analysed in terms of the nature of the assessments in each, frequency and nature of the contributions, who the contributions are made by, and any links to learning which are identified by the contributors.

e) Procedures for handling information and materials produced in the course of the research

The interviews will be recorded on audio tape. These will be transcribed and the tapes will be labelled (using pseudonyms) and stored in a locked drawer in the researcher’s office at her home. The data will be held securely for five years and then will be destroyed. The surveys will be offered in both digital and paper-based formats. The responses will be kept with the interview transcripts for five years and then destroyed. Access to the data will be restricted to the researcher and her supervisors.

2. Ethical Issues

a) Access to participants

The researcher has an already established relationship with as she was previously employed by the umbrella organisation the centre falls under) as a Home-based Childcare Co-ordinator. As the home-based offices are located next door to the centre the researcher is familiar with the layout and teaching philosophy of the centre.
Informal discussions have been held with management and senior staff and they are very interested in the project and for the centre's community to be involved.

b) Informed consent
The participants will be asked to sign a consent form (appendix B) giving their informed consent to be involved in the research. In regards to the children this consent will be given by their parents or caregivers who will sign a consent form on their behalf. The children who will be involved in the case studies will be told about the study and asked for their assent if they are verbally able.

c) Confidentiality
To protect the participants against possible risk, the participants will be informed of their right to anonymity. Participants will be invited to choose a pseudonym for themselves. These pseudonyms will replace the real names of the participants in the thesis and any associated publications. All of the information and materials produced in the course of this research will be treated in a manner that respects the privacy rights of the participants.

When digital recording is used, if the recordings are not transcribed by the researcher the person doing the transcribing will be asked to sign a confidentiality agreement.

Participants will also member check their transcripts and be able to suggest areas for possible omission and/or amendment.

d) Potential harm to participants
At the information session all participants will be asked to submit an expression of interest indicating their acceptance or decline of the invitation to be involved. This will eliminate any potential harm to potential participants who decide not to be involved from the start.

Participants are encouraged to be open and to express all their thoughts, positive and negative. All of their input is valued and confidential. If a participant makes a negative comment it will not be shared with the management and employees of or

If at any stage during the research project participants have concerns that the researcher does not address they will be asked to contact the researcher's supervisors whose contact details will be on the information sheet.

e) Participants' right to decline to participate and right to withdraw
All parents, families and staff of the early childhood education setting will be invited to participate in the research project by letter. There will be no expectation that they participate and they are therefore able to decline involvement. Participants have the right to withdraw from the study up until the end of the data collection phase, being the 30th June 2014. Throughout the project they will have the opportunity to amend or withdraw any information they have provided through access to the transcribed interviews.
The analysis will be on-going, so once the participants have given approval for the data to be used this data will become part of the project, even if they later withdraw. To withdraw participants will be asked to discuss this with the researcher, and then put their withdrawal in writing.

i) Indicate what activities you require participants to do in your study

All participants will be required to undertake an initial survey, either online or in a paper-based format, whichever they prefer. They will also be required to undertake a final survey near the conclusion of the data collection phase. The participants selected for the six case studies will participate in two semi-structured interviews, one initial and one final. The early childhood education setting teaching staff will be required to complete ePortfolio training. This will be provided by the ePortfolio provider. All participants will be required to complete a small mid-way survey within two – three months after the implementation of ePortfolios; this will again be available both online and in a paper-based format.

ii) Indicate how much participants’ time will be required

The surveys will be carried out in the participants own time and should take no longer than 15 minutes to complete (appendix C). Participants will have two weeks from receiving the survey links or paper-based copy to complete the surveys. Therefore the expected time required of the participants who complete the surveys will be no more than 30 minutes.

It is expected that the individual unstructured interviews (initial and final) will take between half to one hour in the case of the adult participants. The interviews with the children will take no longer than fifteen minutes. In regards to the adult participants who are part of the case studies the estimated time that they will be required to give to the study would be no longer than two hours. For the children it will be no longer that half an hour.

The ePortfolio training will up to four hours in length and will be held in either the weekend or an evening which is acceptable to the participants (staff) and their employer. The time that staff are required to complete the assessment tasks for the portfolios will not be more than what is expected of them by their employer.

f) Arrangements for participants to receive information

Participants will receive information outlining the study prior to volunteering to participate. This will be in the form of the researcher providing the potential participants with a letter. An information morning will also be offered for parents and whānau. This will be held at the centre and will be a drop in session for those who are wanting further information. The researcher will present the research to the early childhood setting staff during a regularly scheduled staff meeting. Further information regarding the surveys and questionnaire will be sent via email, or given out in a paper-based format if necessary. Email and/or paper-based notices, on a needs basis, will also be used as a tool for sharing information with the participants.

An electronic copy of the thesis will become widely available, as PhD Theses are required to be lodged in the University of Waikato Research Commons.
Use of the information
The information gained from this research will be used in the following ways:

- Completion of PhD Thesis;
- Inform the researcher’s own work;
- Presentations at Conferences;
- Workshops;
- Journal articles in relevant academic publications.

Conflicts of interest

has a professional relationship with The Waikato Institute of Technology (Wintec), who is the researcher’s employer, as student’s undertaking their Bachelor of Teaching (ECE) complete their practicum or teaching experience there. It is not part of the researcher’s role to make student placements. For the duration of the research the researcher will ensure that she is not allocated any students to visit at the centre.

The researcher has previously worked for (the umbrella organisation for Lintolts) as a Home-based Childcare Coordinator. She has not worked at .

As the study focusses on how ePortfolios are used and the engagement of parents, whānau and children with learning, not individual assessments, it will therefore not impact on staff appraisals or reviews. It will also not directly impact on individual children’s learning needs. Because of this the researcher does not envisage any conflict of interest between the research and the participants in this study.

Procedure for resolution of disputes
Participants will be able to contact the researcher’s supervisors for assistance in resolving disputes. The supervisors contact details are provided on the information sheet.

Other ethical concerns relevant to the research
None envisaged.

Cultural and Social considerations
The researcher will continue to act with sensitivity to any cultural or social issues which arise during the course of the study, as part of her normal practice. Wintec’s School of Education has a Pūkenga Awhina, Rose Marsters, who provides pastoral care for students and support for staff. She has agreed to support the researcher in relation to any cultural issues which may arise.

3. Legal Issues
a) Copyright

The researcher will hold copyright over the thesis report.

b) Ownership of data or materials produced

The raw field data supplied by the research participants will belong to the individual participants. The research findings will be used in such a way that it respects the rights of the research participants.

The researcher will own the interpretations of the data and the final thesis.

c) Any other legal issue relevant to the research

None anticipated at this stage.

d) Place in which the research will be conducted

Interviews will take place at [blank] or at another mutually agreed venue.

Participants will complete the surveys at a venue convenient to them.

e) Has this application in whole or part previously been declined or approved by another ethics committee?

No

f) For research to be undertaken at other facilities under the control of another ethics committee, has an application also been made to that committee?

No

g) Is any of this work being used in a thesis to be submitted for a degree at the University of Waikato?

Yes, as part of Doctoral study.

The information given to participants will state that an electronic copy of the thesis will become widely available, as the University of Waikato requires that a digital copy of Doctoral theses will be lodged permanently in the University’s digital repository: Research Commons.

h) Further conditions

None

4. Research Timetable

a) Proposed date of commencement of data collection

1st July 2013

b) Expected date of completion of data collection

30th June 2014
5. Applicant Agreement

I agree

a) to ensure that the above-mentioned procedures concerning the ethical conduct of this project will be followed by all those involved in the collection and handling of data.

b) in the event of this application being approved, the researcher agrees to inform the FOE Ethics Committee of any change subsequently proposed.

c) to submit for approval any amendments made to the research procedures outlined in this application which affect the ethical appraisal of the project.

Signature of applicant: ...................................................... Date: .................

d) that this application has been developed with my supervision and has my support. I have checked that all the information requested in the checklist below is included

e) I agree to support the student to follow the above mentioned procedures concerning the ethical conduct of this project.

Signature of supervisor: ...................................................... Date: .................

Signature of supervisor: ...................................................... Date: .................

Signature of supervisor: ...................................................... Date: .................

6. Check List

Before sending this form to the FOE Ethics Committee Administrator please ensure that you have completed the following and attached these as appendices:

☐ Letter(s) to: participants, e.g. children, caregivers, principal, BOT, teachers.
☐ Information sheet, introductory letter for each type of participant
☐ Consent form(s) for each type of participant
☐ Questionnaire/survey questions/interview questions
☐ Reference list
☐ Every page of your ethics application form has been numbered

Please provide six signed copies of your completed application to the Academic Administrator by the following dates in 2013:
4 Feb, 4 March, 1 April, six May, 3 June, 8 July, 5 Aug, 9 Sept, 7 Oct, 4 Nov, 2 Dec.

References


MEMORANDUM

To: Tracey Ann Hooker
cc: Professor Margaret Carr
    Dr Nicola Daly

From: Associate Professor Linda Mitchell
Chairperson, Research Ethics Committee

Date: 5 June 2013

Subject: Supervised Postgraduate Research – Application for Ethical Approval (EDU060/13)

Thank you for submitting the amendments to your application for ethical approval for the research project:
Adults and children engaging with ePortfolios in an early childhood education setting.

I am pleased to advise that your application has received ethical approval.

Please note that researchers are asked to consult with the Faculty’s Research Ethics Committee in the first instance if any changes to the approved research design are proposed.

The Committee wishes you all the best with your research.

[Signature]

Associate Professor Linda Mitchell
Chairperson
Research Ethics Committee
Appendix Two – Addition to ethics application and approval

414 Matangi Road
RD4
Hamilton

Associate Professor Linda Mitchell
Chairperson
Research Ethics Committee
Faculty of Education
The University of Waikato
Private Bag 3105
Hamilton

1st July 2013

Kia ora Linda,

RE: Ethics application EDE606/13

I am writing in regards to the above ethics application which was approved in June. Further to the proposal I would also like to include observations as a form of data collection. I would like to take a number of observations of children, parents/whānau and teachers engaging with their portfolios (both paper based and online). By observing the children, parents/whānau and teachers actually working with, and perhaps contributing to, the portfolios ‘live’ data will be able to be collected from a situation which is not unnatural to them. These observations will be recorded as both running records and anecdotal observations.

I have updated the consent form accordingly (attached) to include observations as a data collection method.

I hope that this addition meets with the committees approval and I look forward to receiving your response.

Kind regards,
Na,

Tracey Hooker
PhD Student
Email: bthooker@wintec.ac.nz
CONSENT FORM FOR PARTICIPATION

Adults and children engaging with ePortfolios in an early childhood education setting

I (please print your name) ___________________________ have read all the information and fully understand what it means to be involved in this research project.

- I understand that my participation in this research project is voluntary and I may withdraw, totally, or partially, at any time.
- I accept that my participation will have minimal impact on my time and that confidentiality will be safeguarded.
- I understand that I will be required to participate in three surveys.
- I understand that if I am part of the individual case studies that I will also be required to participate in two interviews. If my child is verbally able I also consent to them being interviewed, if applicable. Accordingly I agree to have my interviews digitally recorded.
- I understand that observations of children and adults interacting with portfolios will be undertaken and give consent for myself and/or my child to be observed by the researcher.
- I give permission for the researcher to have access to my child’s documentation portfolios.
- I accept that information generated during this project will belong to Tracey Hooker as researcher, and will be retained securely and anonymously after the research is completed and archived for 5 years as per the University of Waikato Ethical Conduct in Human Research and Related Activities Regulations 2008.
- Accordingly, I am willing to participate in this research project.

Signed ___________________________      Date ___________________________

I wish to complete the surveys (please tick):

☐ In paper format
☐ By accessing it online. Please provide your email address: ___________________________
Dear Tracery
This looks fine and I will execute and approve it so you don’t need to wait for a meeting. Yes we need a hard copy for the file when you are ready and can you check the information sheet – it may also need to refer to observations.
Sorry for the delay in replying,
Cheers, Linda

Dr Linda Mitchell
Associate Professor
Faculty of Education
The University of Waikato
Private Bag 3105
Hamilton

Phone: +64 7 838 4400 Ext 7794
Appendix Three – Letter of invitation

Kia ora,

My name is Tracey Hooker and this year I am beginning a research study for my PhD Thesis. I am excited to be embarking on this research as I believe the content of the study will be relevant and of interest to early childhood education professionals, parents, families and whānau.

The research project is entitled Adults and children engaging with ePortfolios in an early childhood education setting. In this project I intend to focus on comparing traditional paper based portfolios with online ePortfolios to discover how adults (parents, whānau and teachers) and children engage with and use both forms of assessment documentation.

This research aims to explore (i) the extent to which children, parents and whānau in an early childhood education context contribute to learning at the centre and (ii) to identify if there are any changes to teacher’s formative assessment practices with the introduction of an ePortfolio system for documenting children’s assessment for learning.

I am thrilled to be finally at the point where I am able to carry out this research and hope that you will share my enthusiasm. Please return the enclosed expression of interest slip indicating if you would like to accept or decline the invitation to take part in this study. Returning the slip does not commit you to being a participant. If you have any further questions please do not hesitate to give me a call.

Warm regards,
Na,

Tracey Hooker
PhD Student
Faculty of Education
University of Waikato
Phone: (07) 8384466 ext. 7736
Email: jthooier@xtra.co.nz

Other contacts:
Research Supervisors
Chief Supervisor
Associate Professor Linda Mitchell: 8384466 ext. 7736 lindamir@waikato.ac.nz
Second Supervisor
Associate Professor Sally Peters: 8384466 ext. 8386 speters@waikato.ac.nz
IMPORTANT INFORMATION

- Your participation in this research is voluntary;
- The information that is collected will only be used for the purpose of the research study;
- Participants will be given a pseudonym (different name) to protect their anonymity in publications resulting from this research;
- Participants will be interviewed and will be able to read their transcripts enabling them to amend or withdraw any information collected;
- Extracts from the data (using pseudonyms) will be used in the thesis and associated publications such as conference proceedings, journal articles and lectures;
- An electronic copy of the thesis will become widely available, as Doctoral Theses are lodged in the University of Waikato’s Research Commons;
- Data with pseudonyms will be stored securely for five years after completion of the project then destroyed;
- You can withdraw from the study at any time up until the completion of the data collection phase, being the 30th June 2014. However, any interview transcripts already seen and amended by you will be used before you withdraw will still be used as data.
- You can ask further questions at any time.

If you have any concerns about the study that cannot be answered by the researcher please one of the following research supervisors:

Chief Supervisor
Associate Professor Linda Mitchell: 8384466 ext. 7736  lindamitch@waikato.ac.nz

Second Supervisor
Associate Professor Sally Peters: 8384466 ext. 8386  speters@waikato.ac.nz

EXPRESSION OF INTEREST TO PARTICIPATE IN THE RESEARCH STUDY:

Adults and children engaging with ePortfolios in an early childhood education setting

I ___________________________ am interested in being a participant in the above study and would like to received further information.

Signed: _________________________ Date: _________________________

Please detach and return to Lintott Community Childcare Centre.
Appendix Four – Consent form

CONSENT FORM FOR PARTICIPATION

Adults and children engaging with ePortfolios in an early childhood education setting

I (please print your name) __________________________________ have read all the information and fully understand what it means to be involved in this research project.

- I understand that my participation in this research project is voluntary and I may withdraw, totally, or partially, at any time.
- I accept that my participation will have minimal impact on my time and that confidentiality will be safeguarded.
- I understand that I will be required to participate in three surveys.
- I understand that if I am part of the individual case studies that I will also be required to participate in two interviews. If my child is verbally able I also consent to them being interviewed, if applicable. Accordingly I agree to have my interviews digitally recorded.
- I understand that observations of children and adults interacting with portfolios will be undertaken and give consent for myself and/or my child to be observed by the researcher.
- I give permission for the researcher to have access to my child’s documentation portfolios.
- I accept that information generated during this project will belong to Tracey Hooker as researcher, and will be retained securely and anonymously after the research is completed and archived for 5 years as per the University of Waikato Ethical Conduct in Human Research and Related Activities Regulations 2008.
- Accordingly, I am willing to participate in this research project.

Signed ______________________ Date ______________________

I wish to complete the survey (please tick):

☐ In paper format
☐ By accessing it online. Please provide your email address: ______________________
15 July 2013

Kia ora,

Thank you for your willingness to be part of my PhD research:

*Adults and children engaging with ePortfolios in an early childhood education setting.*

Your child meets the criteria for being part of the nested case studies. This will involve you participating in two interviews (one at the start of the research period, July 2013, and one at the end, June 2014) as per the consent form that you have returned. The interviews will take approximately half an hour.

I am hoping to conduct these interviews over the next week (16 July – 23 July). I will be available at _______ on Wednesday, Thursday and Friday this week if this suits you, otherwise please let me know a day, time and venue that is convenient for you. I am happy to travel to you.

Thank you once again for your support of this important research project and I look forward to hearing from you.

Warm regards,

Na,

Tracey Hooker
Med (Hons), PGDipEd, BEd, DipT(ECE)
bhooker@waikato.ac.nz
0274295945
Kia ora,

My name is Tracey Hooker and I am a PhD student from the University of Waikato.

During 2013 and 2014 I will be undertaking research here at [ ]

I look forward to getting to know you and your children. If you have any questions please feel free to ask.

Tracey Hooker

MEd (Hons), PGDipEd, BEd, DipT (ECE)

Email: bthooker@xtra.co.nz
13 December 2013

Kia ora,

**Adults and children engaging with ePortfolios in an early childhood education setting**

This letter is to advise you that the survey planned for December will now be sent out late January/early February. I believe that due to the busyness of this time of year that the response rate will be much better in the New Year.

I wish you all a very merry Christmas and relaxing summer.

Warm regards,

Na,

Tracey Hooker
PhD Candidate
MEd (Hons), PGDipEd, BEd, DipT(ECE)
bhooker@xtra.co.nz
0274296945
## Appendix Eight - Surveys

### Initial Survey – parents and whānau

### Portfolios - initial parent and whanau survey

Thank you for taking the time to complete this survey. The purpose of the survey is to discover how you engage with and use your child's portfolio. Your responses are anonymous.

1. **Do you know where your child’s portfolio is located?**
   - [ ] Yes
   - [ ] No

2. **How often do you access your child’s portfolio?**
   - [ ] Daily
   - [ ] Weekly
   - [ ] Monthly
   - Other (please specify):

3. **How often does your child’s portfolio come home?**
   - [ ] Daily
   - [ ] Weekly
   - [ ] Monthly
   - Other (please specify):

4. **Can you tell us about how you use the portfolio at home?**

5. **Who do you share your child’s portfolio with?**

6. **In what ways do you contribute to your child’s portfolio?**

7. **If you don’t contribute to your child’s portfolio can you tell us why not?**

8. **What do you like best about your child’s portfolio?**
<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. What do you like least about your child’s portfolio?</td>
<td></td>
</tr>
<tr>
<td>10. Is there anything else you would like to see included in your child’s portfolio?</td>
<td></td>
</tr>
<tr>
<td>11. How do you think that children learn?</td>
<td></td>
</tr>
<tr>
<td>12. In what ways do you contribute to your children’s learning?</td>
<td></td>
</tr>
</tbody>
</table>
### Portfolios - initial parent and whanau survey

#### Now a bit about you

13. How long have you been using [ ] as your childcare provider?

14. How many children do you currently have attending?
   - [ ] 1
   - [ ] 2
   - [ ] 3
   - [ ] 4
   - Other (please specify): [ ]

15. Have you had children attend who have now left and gone to kindergarten or school?
   - [ ] Yes
   - [ ] No

16. What are the ages of your children?

17. What is your occupation?

18. Please choose a pseudonym (false name). This is so your responses can be matched to subsequent surveys.

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Initial Survey – Teachers

The purpose of this survey is to discover how you engage with and use the portfolio system currently used at [ ] Thank you for taking the time to answer this survey, your responses are most appreciated.

1. Do you regularly contribute to the children’s portfolios?
   - Yes
   - No

2. Is this an expectation of your job?
   - Yes
   - No

3. Are you responsible for a certain number of portfolios? If so how many?

4. If you answered yes to the previous question what does this entail?

5. Do you contribute to portfolios of children other than those you are responsible for?
   - Yes
   - No

6. How often are you required to contribute to children’s portfolios?
   - Weekly
   - Fortnightly
   - Monthly
   - Other (please specify)

7. What do you contribute to the portfolios?

8. Do you refer to the children’s portfolios during the day? If so how often and what for?
9. Do you look at the children’s portfolio with the children? If so, how often and what is the purpose of doing this?

10. Do you look at the portfolios with parents and whanau? If so how often and what is the purpose of doing this?

11. How do you feel about contributing to children’s portfolios?

12. How valuable do you think portfolios are for:

<table>
<thead>
<tr>
<th></th>
<th>Extremely valuable</th>
<th>Somewhat valuable</th>
<th>Little value</th>
<th>Not valuable at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children’s learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>As a teaching tool</td>
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<tr>
<td>As an assessment tool</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Parent and whanau</td>
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<tr>
<td>engagement</td>
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<tr>
<td>Accountability</td>
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</table>

13. How do you believe that children learn?

14. How do you think that you contribute to children’s learning?

15. Do you have any further comments about portfolios that you wish to make?
### Now a bit about you

16. How long have you been teaching for?

17. What is your highest qualification?

18. Please choose a pseudonym (false name). This is so that the data collected in each of the surveys can be matched.
### ePortfolios - midway parent and whanau survey

This survey is to document your engagement with and use of the ePortfolio system to date. It will also ask you to make some comparisons between the two portfolios systems. It should take around 10-15 minutes to complete. Thank you for your time.

1. **Have you accessed your child's ePortfolio?**
   - [ ] Yes
   - [ ] No [go to question 5]

2. **If yes, how often have you accessed their ePortfolios?**
   - [ ] Daily
   - [ ] Weekly
   - [ ] Fortnightly
   - [ ] Monthly
   - [ ] Every two months
   - [ ] Every six months
   - [ ] Other (please specify)

3. **Where have you accessed the ePortfolios from? (e.g. home, work etc.)**

4. **How do you use the ePortfolio at home?**

5. **If no, why not?**

6. **Which portfolio do you access more often?**
   - [ ] Paper-based portfolio
   - [ ] ePortfolio
   - [ ] I access both the same amount

7. **How do you use the paper-based portfolio?**
8. Is this the same as before the ePortfolios were introduced?

9. In the initial survey a number of parents commented that they would read stories from the paper-based portfolio to their child, often before bed. Do you read the stories now in the ePortfolio with your child/children?
   - Yes
   - No [go to question 11]

10. If yes, how do you do this?

11. If no, why not?

12. Have you contributed to your child’s ePortfolio?
   - Yes
   - No [go to question 15]

13. If yes, about how often? (tick the one which most applies)
   - Daily
   - Weekly
   - Fortnightly
   - Monthly
   - Every two months
   - Six monthly
   - Other (please specify)

14. What have you contributed to the ePortfolio?

15. If no, why not?
16. Has anyone else in your whanau or circle of friends accessed your child’s ePortfolio? Who?

17. Have they contributed anything? If so what have they contributed?

18. Have you and your child viewed their ePortfolio together?
   - Yes
   - No [go to question 21]

19. If yes, about how often? (tick the one which most applies)
   - Daily
   - Weekly
   - Fortnightly
   - Monthly
   - Every two months
   - Six monthly
   - Other (please specify)

20. How do you use the ePortfolio with your child/children?

21. If no, why not?

22. Have you viewed your child’s ePortfolio with a teacher?
   - Yes
   - No [go to question 25]
ePortfolios - midway parent and whanau survey

23. If yes, how often?
- Daily
- Weekly
- Fortnightly
- Monthly
- Every two months
- Six monthly
- Other (please specify): 

24. What has been the purpose of looking at the ePortfolio with a teacher?

25. If no, why do you think this is?

26. Are you still accessing the paper based portfolio?
- Yes
- No (go to question 29)

27. If yes, in what ways?

28. If no, why not?

29. Has the way you contribute to the paper-based portfolio changed since the introduction of the ePortfolio? If so, how?

30. Please describe any differences in the ways your child interacts with the paper-based portfolio and e-portfolio.
31. Do you have anything else you would like to add?

32. Please enter your pseudonym (false name) below
Midway Survey - Teachers

### ePortfolios - Midway Teachers Survey

This survey has two purposes. Firstly there will be some questions relating to the previous survey you completed. Secondly it will document your engagement with and use of the ePortfolio system to date. It should take approximately 10 minutes to complete. Thank you for your time.

1. **In the initial survey a number of teachers commented that the paper-based portfolios are useful for ‘revisiting learning’ with children. Can you explain what is meant by this?**

2. **How is the information gained from 'revisiting children's learning' used?**

3. **Another common theme was that the portfolios were useful for capturing 'magic moments' or 'learning moments' and 'teachable moments'. Can you explain what is meant by these terms?**
ePortfolios - midway teachers survey

<table>
<thead>
<tr>
<th>ePortfolios</th>
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<tbody>
<tr>
<td>The following questions relate to the ePortfolio system that has been in place over the last 6 months.</td>
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</table>

4. Have you accessed the ePortfolio system?  
   - Yes  
   - No [go to question 6]

5. If yes, how many ePortfolios have you contributed to and what have you contributed?  
   [Blank space]

6. If no, why not?  
   [Blank space]

7. Have you shared the ePortfolio with children?  
   - Yes  
   - No [go to question 10]

8. If yes, about how often? (tick the one which most applies)  
   - Daily  
   - Weekly  
   - Fortnightly  
   - Monthly  
   - Other (please specify) [Blank space]

9. In what ways do you use the ePortfolio with the children?  
   [Blank space]

10. If no, why not?  
    [Blank space]

11. Have you shared or discussed the children’s ePortfolios with parents and/or whanau?  
    - Yes  
    - No [go to question 17]
12. Who specifically have you shared the ePortfolio with? (tick all that apply)
- Mother
- Father
- Grandparent
- Aunt/Uncle
- Sister/Brother
- Family Friend
- Other (please specify)

13. If yes, about how often? (tick the one which most applies)
- Daily
- Weekly
- Fortnightly
- Monthly
- Other (please specify)

14. If yes, what have you shared with parents/whanau?

15. Have you done this in a face to face conversation or through comments added to the ePortfolio?
- Face to face conversation
- Comments on ePortfolio
- Both

16. How often would you do this?

17. If no, why not?
### ePortfolios - midway teachers survey

**18. From your experiences with ePortfolios so far how valuable do you think they are for:**

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<tr>
<th></th>
<th>Extremely valuable</th>
<th>Somewhat valuable</th>
<th>Little value</th>
<th>Not valuable at all</th>
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<tbody>
<tr>
<td>Children's learning</td>
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<tr>
<td>As a teaching tool</td>
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<td>As an assessment tool</td>
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<tr>
<td>Parent and/or whanau engagement</td>
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<tr>
<td>Accountability</td>
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**19. Are you still accessing the paper based portfolios?**

- [ ] Yes
- [ ] No (go to question 21)

**20. If yes, how are you using the paper based portfolios?**

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**21. If no, why not?**

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**22. Have you noticed any differences in the way the children are interacting with the portfolios (both online and paper based)?**

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**23. Please enter your pseudonym (fiase name) below**

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ePortfolios - final parent and whanau survey

This is the final survey for the research study "Adults and children engaging with ePortfolios in an early childhood education setting." I would like to take this opportunity to thank you for your participation over the last year.

1. If you had to choose between the paper-based portfolio system and the ePortfolio system which would you choose?
   - [ ] Paper-based
   - [ ] ePortfolio

2. Why would you choose that particular portfolio system?

3. What do you see as the positives of a paper-based portfolio system?

4. What do you see as the negatives of a paper-based portfolio system?

5. What do you see as the positives of an ePortfolio system?

6. What do you see as the negatives of an ePortfolio system?

7. Do you ever engage with the ePortfolio with your child/children while at the centre?
   - [ ] Yes [go to question 8]
   - [ ] No [go to question 10]

8. What do you use to do this?
   - [ ] iPad/tablet
   - [ ] Mobile Phone
   - [ ] Computer
   - Other (please specify)

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<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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<tbody>
<tr>
<td>9. Why do you do this?</td>
<td></td>
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<tr>
<td>10. Why not?</td>
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</tr>
<tr>
<td>11. In your opinion what impact have ePortfolios had so far on your child’s learning?</td>
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<tr>
<td>12. Do you think there has been any change in the way the teachers provide information and learning stories since the introduction of ePortfolios?</td>
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<td>□ Yes [go to question 13]</td>
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<td>□ No [go to question 14]</td>
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<tr>
<td>13. What has changed?</td>
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<tr>
<td>14. Why don’t you think there has been a change?</td>
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<tr>
<td>15. In the midway survey several parents indicated that they or a member of their family had contributed to their child’s ePortfolio. What do you think the benefits of such contributions are (whether you have made them or not)?</td>
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<tr>
<td>16. In the last survey a number of parents indicated that they do not look at the ePortfolios with their children, why do you think this is?</td>
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<td>□ Yes [go to question 18]</td>
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<tr>
<td>□ No [go to question 18]</td>
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<tr>
<td>17. Do you look at your child’s ePortfolio with them?</td>
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</table>
18. Do you add comments to your child’s ePortfolio?
   - Yes [go to question 19]
   - No [go to question 21]

19. Who are the comments for?
   - My child
   - Teachers
   - Other (please specify)

20. Who looks at your comments with your child?
   - I do
   - The teachers
   - Other (please specify)

21. Why don’t you add comments?

22. Are you still looking at the paper-based portfolio with your child/children?
   - Yes [go to question 23]
   - No [go to question 24]

23. Who initiates this?
   - I do
   - My child/children
   - Teachers
   - Other (please specify)

24. If you don’t look at the ePortfolio with your child/children but are still looking at the paper-based portfolio with them, why do you choose not to use the ePortfolio?
25. In the midway survey most teachers indicated that they regularly share children's ePortfolios with parents/whanau. However in the parent/whanau survey the majority of respondents said that teachers had not shared the ePortfolios with them. What do you think 'sharing' is?

26. What advice do you have for in regards to children's portfolios (both paper-based and ePortfolio)?

27. Are there any other comments which you think will be valuable for this research project that you would like to make?
**Final Survey – Teachers**

<table>
<thead>
<tr>
<th>ePortfolios - final teachers survey</th>
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This is the final survey for the research study “Adults and children engaging with ePortfolios in an early childhood education setting”. I would like to take this opportunity to thank you for your participation over the last year.

1. If you had to choose between the paper-based portfolio system and the ePortfolio system which would you choose?
   - Paper-based
   - ePortfolio

2. Why would you choose that particular portfolio system?

3. What do you see as the positives of a paper-based system?

4. What do you see as the negatives of a paper-based system?

5. What do you see as the positives of an ePortfolio system?

6. What do you see as the negatives of an ePortfolio system?

7. In the midway survey several teachers stated that they regularly shared the ePortfolio with children's parents and whanau. What do you specifically share?

8. How do you do this?
ePortfolios - final teachers survey

9. How often you do this?
   - Daily
   - Weekly
   - Monthly
   Other (please specify)

10. Would this be the same for all families?
   - Yes [go to question 11]
   - No [go to question 12]

11. Why?

12. Why not?

13. If you are a key teacher which of your families have you shared the ePortfolio with?
   - All
   - Most
   - About half
   - Some
   - None

14. In the midway parent/whanau survey the majority of respondents said that teachers had not shared the ePortfolios with them, why do you think this is?

15. What is your definition of 'sharing' (in regards to the ePortfolios)?

16. Do you think the introduction of ePortfolios has changed the way your formative assessment of the children’s learning?
   - Yes [go to question 17]
   - No [go to question 16]
17. In what ways do you believe your formative assessment practices have changed?

18. Why don't you think your formative assessment practices have changed?

19. Has what you contribute to the ePortfolio changed from what you used to contribute to the paper-based portfolio?
   - Yes [go to question 20]
   - No [go to question 21]

20. What has changed?

21. Why don't you think your contributions have changed?

22. Has the frequency of your contributions changed?

23. Thinking about your experiences with ePortfolios over the last year. How valuable do you think they are for:

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<tr>
<td>Accountability (ERO etc.)</td>
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24. In your opinion what impact has the introduction of ePortfolios had on the children's learning?

25. Do you engage with the ePortfolio during the day at the centre?
   - Yes [go to question 26]
   - No [go to question 26]
26. What do you use to do this?

- iPad/Tablet
- Mobile phone
- Computer

Other (please specify)

27. Why do you do this?

28. Why not?

29. In your opinion what impact have ePortfolios had so far on parent/whanau engagement with their children’s learning?

30. Do you think that ePortfolios will be more or less effective for transition to school than the paper-based portfolios?

- More effective
- Less effective

31. Why do you think that?

32. In regards to the format of the ePortfolio system you are using (Educa) is there anything you would change or add?

33. Are there any other comments which you think will be valuable for this research project that you would like to make?
34. Below are a list of pseudonyms provided in the last two surveys, please indicate yours (select all that apply).

- Hunny
- Gracie
- Lucy
- Emily
- Learde
- Barbnar
- Claire
- Richard Castle
- Renae
- Delta Goddren
- Eleanor
- Hanks
- Lily-Rose
- Meg

35. If you are new and have not completed a survey previously, or if none of the above names relate to previous responses, please provide a pseudonym (false name) here:
Appendix Nine - Draft Interview Questions (semi-structured interviews)

Initial Interview - parents and whānau

Parents/Whānau

Can you tell me what you like most about your child’s portfolio?

Can you tell me what you like the least about your child’s portfolio?

Are you able to take time to look at the portfolio with your child? Can you explain why/why not?

Where would you normally do this?

Could anything be done to enable you to spend more time with the portfolio?

Who else do you share your child’s portfolio with?

Do you or anyone else in your family contribute to your child’s portfolio? What do you (or members of your family) contribute?

Can you show me your favourite assessment in your child’s portfolio? Why is it your favourite? Which one does your child like best?

How do you believe children learn?

Do you think the portfolio aids in your children’s learning?
Initial Interview – teachers

Teachers

How do you feel about contributing to children’s portfolios?
What value do you see in portfolios?
How often do you contribute to portfolios? What do you contribute?
Do you feel that you have enough time to contribute what you would like to to the portfolios? Why/why not?
Do you revisit the assessment in the portfolios with children?
How about with their parents/whānau?
How often would you do this?
What value do you see in doing this?
What do you think is the most important function of a portfolio?
How valuable do you think the portfolio is for: Why?

Children’s Learning
As a teaching tool
As an assessment tool

Parent and/or whānau engagement

Accountability

How do you think children learn?
Do you think the portfolio aids in children’s learning?
Conversations with children

Adults and children engaging with ePortfolios in an early childhood education setting

Interview Questions – Initial Interviews

Children

What’s the best thing about your portfolio?

Who looks at your portfolio with you?

What do you like to use your portfolio for?

Where do you like to look at your portfolio?

Can you show me your favourite story? Why is it your favourite?

Would you like to put anything else into your portfolio?

Do you learn when you are at [ ]?

How?

Does your portfolio help with your learning?
Final Interview – parent and whānau

**Final Interview Questions - Generic**

1. In the initial interview you said that you liked the paper-based portfolios because they [insert specific comment from initial interview]. How do you feel that the ePortfolios do this?

2. When thinking about what you didn’t like about the paper-based portfolios you mentioned that [insert specific comment from initial interview]. Do you find that this is still the same for the ePortfolios?

3. In regards to the paper-based portfolio you mentioned that you only looked [insert specific comment from initial interview]. Is there any difference with the ways you use the ePortfolios with [child’s name]?

4. You mentioned that you [insert specific comment from initial interview]. at [ ] has this changed at all with the introduction of the ePortfolio?

5. In the initial interview you stated that you shared the paper-based portfolios [insert specific comment from initial interview], how are the ePortfolios shared now?

6. Is there any change to the way your family members interact with or engage with the ePortfolios compared with how they engaged with the paper-based portfolios?

7. Who have you shared the ePortfolios with?

8. Have they contributed to the ePortfolio?

9. If no – why do you think this is?/ If yes – what have they contributed? How often do they contribute.

10. How about you – do you contribute?
11. In the initial interview you said that you didn’t think that the paper-based portfolio was [insert specific comment from initial interview]. How do you think the ePortfolio compares?

12. In the initial interview we talked about the benefits you could see about the paper-based portfolio going to school with [child’s name]. Would you consider sharing the ePortfolio with his new entrant teacher either prior to him starting school or when he started?

13. How do you feel about ePortfolios now that they have been in use for a year at [ ]?

14. What about the paper-based portfolios?

15. Which would you prefer and why?

16. When the midway survey asked the question “have the teachers shared the ePortfolio with you” most parents stated that they hadn’t, however the teachers felt that they had. What is your understanding of “sharing the ePortfolio?”

17. In the midway survey a number of parents indicated that they do not look at the ePortfolio with their children, do you?

18. If no – why not? / If yes – why and when?

19. How do you access the ePortfolio and where do you do this?

20. Do you think there has been a change in the way the teachers write the learning stories in the ePortfolio compared to how they were written for the paper-based portfolio?

21. If yes, what has changed?

22. Do you have any advice for [ ] about assessment portfolios?

23. Do you have any further comments?
Final Interview – teachers

Final Interview Questions – Generic

1. In the initial interview I asked you about how you felt about contributing to the paper-based portfolio and you said that you felt [insert comment form initial interview]. Has this changed with the introduction of the ePortfolio system?

2. You noted that you valued the paper-based portfolios because you believed [insert comment form initial interview]. Is this the same for the ePortfolios?

3. Would you say that either was easier to use for planning? Why?

4. In the initial interview you said that you contributed to the paper-based portfolios [insert comment form initial interview]. Has this changed at all with the ePortfolios?

5. You also noted that you contribute [insert comment form initial interview]. Is this the same for the ePortfolios?

6. In the initial issue you noted that [insert comment form initial interview]. How about on the online system?

7. Has the way you use the paper-based portfolio changed?

8. You mentioned that when you write a story you will sometimes share this with the parents/whanau; do you still do this with the ePortfolio?

9. When the midway survey asked the question “have the teachers shared the ePortfolio with you” most parents stated that they hadn’t, however the teachers felt that they had. What is your understanding of “sharing the ePortfolio?”

10. Last time we talked I asked you what you thought the most important function of a portfolio was. You thought [insert comment form initial interview]. Is this still the same for the ePortfolios? Why/why not?

11. Do you use the ePortfolio in the same way that you use the paper-based portfolio?

12. Do you think there has been a change in the way the teachers write the learning stories in the ePortfolio compared to how they were written for the paper-based portfolio?

13. If yes, what has changed?
14. Have you noticed a change in the way parents/whānau engage with their children’s learning since the introduction of the ePortfolios?

15. If yes, what has changed?

16. If no, why do you think there has been no change?

17. If you had to choose between a paper-based portfolio system and an ePortfolio system which would you choose?

18. Why?

19. Do you think the ePortfolio system makes it easier for you to record children’s assessment or harder?

20. Why?

21. Do you ever contribute to the ePortfolio system away from the early childhood setting?

22. Do you use the ePortfolio system during the day to write stories while you are on the floor?

23. If yes, what do you use to do this?

24. Do you feel that you have enough time to contribute to this system as much as you would like?

25. Do you have any advice for Educa about assessment portfolios?

26. Do you have any further comments?
Final Interview Questions – Supervisor

1. How have you found the ePortfolio journey over the last year?

2. Do you think the ePortfolio system makes it easier for you to record children’s assessment or harder?

3. Why?

4. Would you say that either was easier to use for planning? Why?

5. Do you use the ePortfolio in the same way that you use the paper-based portfolio?

6. Do you use the ePortfolios to revisit the learning stories with children? How about on the paper-based portfolios?

7. Has the way you use the paper-based portfolio changed?

8. In regards to sharing a story or something in the portfolios with parents/whanau did you do this with the paper-based portfolios? Do you still do this with the ePortfolio?

9. When the midway survey asked the question “have the teachers shared the ePortfolio with you” most parents stated that they hadn’t, however the teachers felt that they had. What is your understanding of “sharing the ePortfolio?”

10. What do you think the most important function of an ePortfolio is?

11. What about a paper-based portfolio?

12. Do you think there has been a change in the way the teachers write the learning stories in the ePortfolio compared to how they were written for the paper-based portfolio?
13. If yes, what has changed? If no, why not?

14. Have you noticed a change in the way parents/whanau engage with their children's learning since the introduction of the ePortfolios?

15. If yes, what has changed?

16. If no, why do you think there has been no change?

17. If you had to choose between a paper-based portfolio system and an ePortfolio system which would you choose?

18. Why?

19. I have noticed that some teachers have their own devices but are not allowed to connect to the internet, why is this?

20. What are your thoughts on having ipads/tablets available for children's use all the time?

21. You mentioned that the other centre is now using Educa too. What has their journey been like?

22. Do you have any advice for Educa about assessment portfolios?

23. Do you have any further comments?
Final Interview – ECE setting Management

Adults and children engaging with ePortfolios in an early childhood setting

Interview questions for Management

Thank you for agreeing to answer these questions for the above PhD research study.

1. Please describe the journey to ePortfolios over the last year.

2. What do you think the benefits of an online ePortfolio are from a management perspective?

3. Do you think there are any negatives of an online ePortfolio? If yes, can you identify them?

4. Do you think there are any benefits of a paper-based portfolio that can’t be captured in an ePortfolio?

5. Do you think there are any benefits of an ePortfolio that can’t be captured in paper-based portfolio?

6. Do you think it is important for parents to be engaged in their young children’s learning? Why/why not?

7. Which form of portfolio (paper or online) do you think is better for parent engagement? Why?

8. Do you think parents and whanau have become more engaged in their children’s learning through the ePortfolio system?

9. Do you think that teachers formative assessment practices have changed?

10. Is there anything else you would like to add?
Final Interview – ePortfolio provider

*Adults and children engaging with ePortfolios in an early childhood setting*

*Interview questions for Nathan Li*

Thank you for agreeing to answer these questions for the above PhD research study.

1. Please tell me about your background
2. What made you decide to start Educa?
3. What is the philosophy behind Educa?
4. What do you think the benefits of an online ePortfolio are?
5. Do you think there are any negatives of an online ePortfolio? If yes, can you identify them.
6. Have you ever experienced a paper-based portfolio for your children?
7. Do you think there are any benefits of a paper-based portfolio that can’t be captured in an ePortfolio?
8. Do you think there are any benefits of an ePortfolio that can’t be captured in a paper-based portfolio?
9. Do you think it is important for parents to be engaged in their young children’s learning? Why/why not?
10. Which form of portfolio (paper or online) do you think is better for parent engagement? Why?
11. Can you share any of the feedback you have had about Educa from ECE settings who are using the product?
12. Is there anything else you would like to add?
Appendix Ten – Learning story examples

Lila's paper-based portfolio

boots came off!

Child: [blank]  Date: 22 September 2011  Teacher: [blank]

This morning there was a piece of sprouting in the sandpit with a slow trickle of water running down it from the hose. At the bottom of the sprouting was a puddle of water. I watched as [blank] and [blank] discovered the water and started jumping in it. [blank] decided to take her boots off, and I watched as [blank] watched [blank], then tried to take her own boots off. [blank] had some difficulty with her socks, so [blank] helped out, pulling so hard she ended up on her bottom with the sock in hand. Both girls then explored what the water felt like in their bare feet.

what learning is happening here?

There is nothing like the feeling of sand and water between your toes. I think [blank] and [blank] know this too! I have noticed [blank] and [blank] blossoming friendship. Recently [blank] came to say goodbye to [blank] at the end of the day. Today [blank] knew [blank] well enough to know that she needed her help and [blank] was more than happy to receive it.
I noticed how you were eager to participate in the roller painting. You are comfortable with trying new things—especially when it allows you to be creative and expressive through art media.

You looked relaxed, but absorbed as you explored how to use the rollers. We talked about the colors you were using— I noticed you know the names of many colors. You express your feelings of delight through your words and body language—a big smile of pleasure? Let's paint again soon.

—From [Teacher's Name]
Kia ora

Child: [Blank]  Date: May 2012  Teacher: [Blank]

This morning I was on the telephone and I heard a gentle knock at the door. I saw [Blank] standing there with her mum. As I finished my phone call I could hear that [Blank] was upset. When I found [Blank] she proudly presented me with these muffins “for my teachers”. It is really difficult to have to wait when you have a surprise for someone, and what a wonderful surprise, and an awesome act of kindness.

I suggested to [Blank] that we take the muffins into the teachers' break room, and we left a note so that all the teachers knew who had made these delicious muffins, [Blank] signed the note herself. Thank you [Blank]!

What does this mean for [Blank]? What a wonderful example of role modelling and imitation. “Research carried out by psychologists Robert Ornstein and Dr David Sobel describe the outcomes of what happens when people help others. It is what they call ‘helpers high’. The euphoria they experience when they help others close to themselves translates in a feeling of warmth, a frisson, the feeling you are full of energy but very calm at the same time” Wendy Lee, 2012.
Ralf and Ali’s cat book.

By: 08/11/2013

Ever since we had a conversation about our interests, the one reoccurring topic has been your pet cat Ralf. After many discussions about Ralf and also my cat Ali, you requested to see pictures of my cat. I went away that night and compiled some pictures of Ali and made them into a flip book for you. When I showed you this book, you were ecstatic, giggling at each picture as you flipped the page. You became the expert of this book explaining each picture with the story I had told you to your peers.

After pondering this book carefully, you decided; "we should get pictures of Ralfy!" This idea sparkled in your eyes as I asked you how you thought we should do that. That weekend gave you the camera to take home so you could practice your photography skills on Ralf. You returned on Monday, with three beautiful photographs of Ralf, two showing his whole body, and one close up of his fur, to show his unique markings and colour. We discussed for a few days what you wanted to do with the pictures you had taken, and you decided upon making a book out of them to put with my pictures of Ali. Printed your pictures of Ralf off the computer, enlarging them onto an A4 sheet of paper. When you saw the new size of your photos, you were excited, clapping your hands and grinning at me. "We could make a bigger, bigger book," you suggested, "and make your photos big, big too!" With this your inner artist took the wheel, sparking ideas of how you wanted to form your big book. Sorting through the card bin, I helped you find 3 pieces of card similar in size, your creativity blossomed when you got to work, deciding you would use both glue and cello tape to stick the pictures onto the card.
Your creation expanded when I asked if you wanted to add anymore to your work. You decided upon decorating the pages, so I gathered glitter, ribbons, crayons and anything else I could get my hands onto in the crafts area. Your tools of choice were the ribbons and glitter, gluin both resources onto the pictures, creating a series of abstract collages out of your own photography.

Once you were finished decorating your pictures, you requested to choose three photos of my cat Ali for your book. Remembering back to my pictures I had brought in you inquired; "I want the one of her pretending to be a toilet roll! That's my favourite." I was delighted that you had remembered that picture, and it showed me how engaged you were in my stories and pictures of Ali. The next day I brought in the three photos of your choice, printed in A4 size, for you to work on. You got straight to work with them, but with a different approach this time. you changed your tactic when it came to the cellotape, deciding only to use glue to stick the pictures down. Remembering the activity from yesterday, you didn't wait to begin your abstract art one each picture, before moving onto the next.

I asked you what you wanted to do with the pages of the picture book when you had finished decorating them. Your eyes flickered up to the ceiling in thought as you replied "stick it together. Get some glue and string so it can open and cover the pictures." Unsure of what you were meaning by the last part I inquired; "What would we cover the pictures with?" You jumped up and grabbed a piece of paper, fitting it neatly over the last picture you decorated. I clicked onto your idea and replied; "Oh do you want to make a cover for the book?" You seemed pleased with me when I understood your plan, nodding and grinning at me. I brought a book from the bookshelf over so you could see what a cover for a book would entail.
You mentioned to me that you would need to draw pictures and write words. We discussed that the cover needed to tell the reader what was inside the book. With this you were on your way, beginning with a picture of Ralf. After this you drew my cat Ali, then wrote their names at the top of the page. Once you had finished the cover I wrote the word ‘By’ and you wrote your name next to it, showing the reader who had created the book.

After this, we punched holes in the pages, threaded string through the holes and tied the book together. This made the spine for the book and a way to open, close and keep the book together.

I loved watching your creativity blossom during this project. We worked on it for over a week, I could tell that this meant a lot to you because you kept coming back and persisting with it until the very end. I hope you will enjoy reading and sharing this book with your family and friends as much as we enjoyed making it! Amazing work!

**What learning do I think is happening here?**

As well as building on artistic side, this project also demonstrated her high level of dedication and persistence when working on her creations. She was able to take pictures from her home and mine, collaborate these two elements and produce a personalised, abstract piece of art work. We worked on this project for over a week but this whole topic began 5 weeks ago! was incredibly focused on her creation each time she added to it and I could see her enjoyment beaming out of her. She showed an on-going interest in her project when she asked me to work on them again and would always talk me through what she was doing. I noticed she would hum, smile and giggle during the process. I am pleasantly surprised in how focused and persistent was and her hard work was evident through the final product.
Opportunities and possibilities?

Artistic skills are constantly growing and by making this book it showed her dedication and persistence to her creations. I think it would be valuable for her to be involved in another on-going project and give her the opportunities to be constantly progressing and evolving her own ideas and work over time.

**Link to Te Whāriki**

| **BELONGING** | Children and their families experience an environment where connecting links with the family and the wider world are affirmed and extended. |
| **CONTRIBUTION** | Children experience an environment where they are affirmed as individuals. |
| **EXPLORATION** | Children experience an environment where they learn strategies for active exploration, thinking, and reasoning. |

**Whānau Voice / Comments**

14/11/2013

This is such an awesome story you have done such a good job capturing the moments of work and wonder and I love how the photos match the parts of the story. Naomi was so excited to show everyone her book she had worked so hard on.
Like the Bush Hut

20/03/2014

By [Teacher]

Today when you arrived you joined in building this hut. It became a peaceful, kind of secluded place where you and drew and created all morning, with the coloured pencils, paper and scissors. I heard you reflecting with on your own experience of huts “This is like the bush hut” you said. After lunch I shared the story your Mum wrote in your portfolio about the bush hut with you and many other children who joined us. Afterwards you invited to come and look at yours and hut you made.

The idea of huts in nature has become very exciting, I wonder what else we could make a hut out of in our garden and what experience of huts might continue to offer?

Whānau Voice / Comments

20/03/2014

This is awesome. I could see when I first brought her over she was a bit wary and didn’t want to interact but once you included her in the experience by asking her if she wanted to help get some fabric she was keen.

I am ever grateful that she gets these kinds of experiences at as I have worked at a few different centres and have never experienced anything like this. The children’s ideas are truly nurtured and there is not a lot of boundaries or restrictions which I love is truly able to explore things and experience a lot of different activities is truly a magical and exciting place.
Experimenting with hair styles.

03/04/2014

By: Parent

Lately___ and I have been watching youtube clips of hair styles and braids.
___ has grown quite fascinated by plaits and braids especially the "Elsa braid" which is a new Disney movie, Frozen. Today we tried two new hairstyles. This afternoon when I came to pick up___, ___ told me that she is excited to try out the fishtail plait on her daughter.
She also told me that really liked plait.
So this afternoon asked if we could watch some more videos as she has been wanting me to try the waterfall braid. We found a very good video and watched it as we did the braid ourselves. We were so happy when it turned out.
asked me to take photos and put them on here so you could all see it.
Especially you. She said Mummy maybe would like this one.
So yeah here is the waterfall braid.
Very cute :)

This is referring to a teacher.
Exploring the world through all your senses!

March-April 2013

While at [_____] you are engaged in a world of sensory delight, pleasure and sometimes uncertainty as you explore new and exciting (sometimes strange) textures and tastes such as gloop, sand, water play and playdough. [_____] you are learning through your whole body and as your brain receives information from your senses it creates thousands of connections in the brain fusing neurons together. I love your strong sense of curiosity, always exploring, investigating and discovering.

I love the way you share your experiences with those around you and how happy you are here to explore so confidently.

Possibilities and opportunities:

We will continue to scaffold your learning through providing you with rich sensory experiences and lots of time and space to investigate using your whole body.

With Love from your friend and teacher [_____] xoxox
looking back on some of your learning stories [Teacher] has written about your posting, enveloping, enclosing this is a very strong interest for you. What are you learning, and why are you doing it? [Teacher] you have a strong interest in repeating these skills. I noticed it is these schemas that interest you no matter what area you are playing.

Here you found a bag of small boxes and they were filled with paper. You pulled each box out of the bag then looked inside of the small boxes and pulled out the paper and put it back in. I could see you focusing on pulling the paper out and also concentrating as you put the paper back inside of the boxes.

In previous stories you have put yourself inside of boxes and got yourself out, in the sand pit you fill up containers and then tip it out. You have posted shapes and now using the paper to fit inside of the box, another form of posting, enveloping and enclosing, but a lot more complex. as paper changes shape to fit the box.

What learning do I think is happening here?
"Making play make sense.
Schemas draw attention to patterns across childrens play that would not otherwise be obvious or seem to be linked in anyway. Using schema learning theory as a frame work we can notice these patterns in our children play and make some sense of them. When we recognise schema it helps make our childrens learning visible and we can respond in ways that support their exploration."

(Getting started with Schemas by Nikoliem van Wijk pg 3)
Schemas build cognitive structures, [Teacher] is revisiting the same experience many times and this allows him to deepen his understand of his working theories and his persistence. This process creates deeper, wider and more complex learning that otherwise is not seen.

Opportunities and possibilities?
I will watch with great interest to see where you take these schemas in your learning journery. I will be watching for opportunities and possibilities to build on what you are all ready practicing.
| **Link to Te Whāriki** | WELL-BEING | Children experience an environment where their emotional well-being is nurtured. |
| | WELL-BEING | Children experience an environment where they are kept safe from harm. |
| | BELONGING | Children and their families experience an environment where connecting links with the family and the wider world are affirmed and extended. |
| | BELONGING | Children and their families experience an environment where they know that they have a place. |
| | BELONGING | Children and their families experience an environment where they feel comfortable with the routines, customs, and regular events. |
| | CONTRIBUTION | Children experience an environment where there are equitable opportunities for learning, irrespective of gender, ability, age, ethnicity, or background. |
| | CONTRIBUTION | Children experience an environment where they are affirmed as individuals. |
| | CONTRIBUTION | Children experience an environment where they are encouraged to learn with and alongside others. |
| | COMMUNICATION | Children experience an environment where they develop non-verbal communication skills for a range of purposes. |
| | COMMUNICATION | Children experience an environment where they experience the stories and symbols of their own and other cultures. |
| | COMMUNICATION | Children experience an environment where they discover and develop different ways to be creative and expressive. |
| | EXPLORATION | Children experience an environment where their play is valued as meaningful learning and the importance of spontaneous play is recognised. |
| | EXPLORATION | Children experience an environment where they gain confidence in and control of their bodies. |
| | EXPLORATION | Children experience an environment where they learn strategies for active exploration, thinking, and reasoning. |
and learning alongside of each other

11/02/2014
By:

I have noticed playing alongside . you are often watching and looking at what is doing.

Today I made some playdough for our table, and I were playing with it when arrived. We were rolling the playdough out and then pushing shapes into it. Neve got involved straight away, she patted out her dough then chose the star shape to press into the dough. You both repeated the process of pressing the dough with your hands and also pressing the cutter shapes into the dough. During this time I talked about what you were doing and encouraged you both the press the dough and choose a shape another shape.

I could see that , wanted cutter and asking for the cutter she had by pointing and looking at me and say "eh eh" I supported you by asking if you could have a turn with the star cutter, she kindly passed you the cutter.

I see that you are starting to expand on your relationships with the other children and I often see you and playing alongside of each other.

The photo below is another moment that I captured you working along side of .
What learning do I think is happening here?

[ ] is learning about sharing his space with others. This makes him aware of others and the start of him developing a relationship with the other children. Playing alongside or parallel play allows [ ] to see what [ ] is doing and giving her ideas ago. It provides a new way for him to gather information and learn new skills.

Opportunities and possibilities?
Supporting [ ] to interact with other children as he discovers that there are lots of new and exciting things that other children explore.

Link to Te Whāriki

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The great outdoors - fire

19/06/2014

By: [Teacher]

At the moment you attend _______ on Fridays ________, a day in which ____ and I are outside teachers. ______ has been strengthening children’s interest in fires and I have noticed your curiosity in this concept. I know as a family you often go camping ________, I wonder if you have camp fires too? I wonder if you have experiences to share with us - do you cook with the fire?

This morning [Teacher] has used the axe to cut up the wood for the fire and I noticed you observing this process. Later in the morning, you began holding a piece of wood on the stump and using your stick, just like an axe. When the fire was alight, you closely inspected the fire, seeing what was happening and you closely watched the other children putting wood on. You then decided to help too by placing some sticks into the fire.
We have been using our fires to cook - pikelets, potatoes, eggs, damper and soon some lemon muffins. I wonder if you would like to try one too?

Link to Te Whāriki

**EXPLORATION**
Children experience an environment where their play is valued as meaningful learning and the importance of spontaneous play is recognised.

**EXPLORATION**
Children experience an environment where they gain confidence in and control of their bodies.
Jordan’s paper-based portfolio

Outdoor Fires

05/06/2013

By [Blank]

With the celebrations of Matariki (the Maori New year) looming it has inspired us to get the outdoor fires going. This is a new experience in the centre for some of our children and a very familiar one for others. Over lunch the fire smoldered away, with no flames to be seen [Blank] quietly pondered on the side of it. “Where has the fire gone?” he asked out loudly.

[Image of child and outdoor fire]

We had a discussion about what we could see and what we could hear. There was smoke pouring up out of the wood and we could hear cracking. But where had the fire gone?

[Blank] then began thinking about other experiences he has had with fire and began talking about smoke going up the chimney. Bringing this knowledge together with the fire in front of him [Blank] came to his own conclusion announcing that the fire had gone up into the smoke up there (pointing to the sky).
What learning do I think is happening here?
I can see that the fire has taken your interest.

The fires will continue to be lit including during our Matariki feast. Offering this experience over many occasions gives children the opportunity to make meaning and develop their working theories around fire over time, like [insert character name] is doing in this story. It also gives children the opportunity to become familiar with and respectful of fire.

Opportunities and possibilities?
I am also very keen to share a favourite story of mine with you "How Maui found the Secret of Fire" perhaps this will see more sparks flying...

Last year we got so enthusiastic with fire we cooked homemade pizza's on it for our lunch! I wonder what learning journeys the fires may take us on this year?
My name is [REDACTED], a third year student from the University of Waikato, completing my Bachelor of Teaching. I will be at [REDACTED] for 7 weeks as I explore this learning environment. Yesterday, I was over in the block corner with you [REDACTED] tidying up the blocks from earlier this morning. You looked up and said "we don't have to put them all away because I can build a tower instead." What a good idea! I let you pick which blocks you wanted to use for your tower and which blocks we needed to put away. As I was busy stacking the larger blocks on the shelf, I hear your laughter from behind me. I turned to find you already begun working on a creation of your own. "Look [REDACTED], watch this one, look!" You exclaimed beaming with pride. You had joined 4 quarter circles together to form one big circle of blocks. Inside you placed a golf ball down and proceeded to spin it in the circle. You smiled with glee and...

However, construction did not stop there. You then placed some rectangular blocks over the top of this circle, hiding the golf ball from sight. After you played a game of guess-who's-in-the-circle with one of your peers, you began adding more blocks on top of the circle, forming a roof-like structure. I noticed the ball was still inside so I asked, "What are you making there [REDACTED]?" You paused, deep in thought about the direction you wanted to take. "Umm, its a golf ball garage" you stated.

"Why does your golf ball need a garage, [REDACTED]?$ I inquired curious as to where you were going with this. "Um because he is scared," you stated. "Oh dear," I replied, "what is he scared of?" I wondered. "He's scared of the thunder," you decided, "an when he's in his garage he can't hear the thunder." "Well that's good then," "But, but except when I do this!" with this you picked up two longer blocks and began to bang on the roof of the golf ball garage.
After the thunder demonstration, you moved on to expand the construction. You began by piling small blocks, one on top of the other, at the far end of the golfball garage. I asked you, what this part was and you stated "It's a tower. Let's see how high it can go before falling." You seemed excited by your suggestion and before I knew it you were focused on your new part of the plan. Each time you built the tower higher you requested I take another picture, kneeling up you said "Look how tall! Take a picture!"

You excitedly piled the blocks higher and higher until the tower was so tall, you had to stand up to place a block on top of the next. Still you requested I document the entire construction, each block asking me for a photo and occasionally peaking over my shoulder on the tablet, making sure I was doing as you instructed. You placed a block on the top of the tower and giggled with excitement as it wobbled, unsteady under the weight. Your anticipation of a sign like this was building and we knew it would not be long now until the tower fell. The last block you placed made the tower wobble again, there was a pause, and then... CRASH!

The tower was no more but the golfball garage was surprisingly still intact. You showed great persistence and focus throughout the entire construction of your golfball garage Ka Pai!

What learning do I think is happening here?

not only showed skills of persistence and focus, but also the skill to elaborate on his ideas as his play progressed. This entire construction began with a golf ball being in the block corner. This seemingly out of place object caught my eye and he was able to incorporate it into his play. construction did not stop once he had built his golf ball garage and he instead decided to expand on this creation as a foundation for more exploration with blocks. showed me that he was capable of evolving the garage to hold a tower. Although the aim of the tower was rather separate to that of the golf ball garage, he did not forget about that part of his play, just used it for a different purpose. aim with the tower was to see how high he could build it before it fell over. This meant that he was not upset when it did fall over for two reasons: one, it was the climax of his experience, and two, the foundation of the golf ball garage was unharmed. was focused on the construction of the golf ball garage and did become upset when he knocked a plank out of place with his arm; showing his hard work and dedication to the construction. Even though he had those feelings towards the garage construction, was still happy to elaborate on this as his play progressed. This showed me that he is open to new ideas and wants to keep setting challenges and goals for himself to continue his play and exploration.

Opportunities and possibilities?

I would really like to see how can expand and elaborate in other areas of his play. Maybe not in the block corner, but see how he might want to expand in the art area or in the sand pit. I personally think that would benefit from exploring with how he can and would like to elaborate on his own creations. I hope this might promote reflective thinking and help him to develop working theories about his own creations and the world around him.
On our recent bike day you stood out to me as you were confidently riding the bike round and round the playground. As I wrote your learning story, I was contemplating another bike day as it was such a hit with all the children and teachers. Responding to this, I decided you were my helper for writing the sign as I also know you have been exploring letter formation and understanding the world of words. I noticed you totally engaged in making this sign, wondering what the letter is, how it feels to write and what it looks like. You then proudly placed the sign on the door, so everyone could read it and remember to bring their bikes to.

What learning do I think is happening here?

, you are developing your knowledge and understanding towards the world of words and letters. You have sound knowledge in that words can be read by others and each letter you write represents meaning. This sign was significant to you as you got to practice letters different to the ones in your name and you also showed me the letters to know confidently creating this into a meaningful moment for us both.

“Children experience an environment where they experience the stories and symbols of their own and other cultures - familiarity with print and its uses by exploring and observing the use of print in activities that have meaning and purpose for children” (Te Wairiki, 1996).

Opportunities and possibilities?

I know that recently went to school and your older brother also goes to school. I wonder if they are inspiring you as they share their ideas around words and letters and their homework with you?
Taking it further

Today I thought I would make a 'Rainmaker' for our outside music area, many of the children were curious about the process, including you. We started with a tube and banged in some nails.

As the photo shows, this was a team effort. You were part of the initial crew and when other children showed an interest in what we were doing you offered your hammer and support to . Thank you.

After we had put in enough nails we put in some beads for sound, capped the ends and began the bit you really enjoyed, covering the tube in paper mashie. No photos sorry, my hands were covered in glue. We had so much fun that I made a smaller one to keep us busy while we waited for the glue to dry on the big one.
Then I went for my lunch, when I returned you were busy at the art table making your own paper mache creation. When you finished you put in the sun to dry and at the end of the day you shared your finished product with me.

Tu Meke

What learning do I think is happening here?

New skills come through practice, and we certainly practiced today and you took it a little further by making your own creation.

Added to this is your support of , learning is a process:

- Practice a skill
- Master a skill
- Teach that skill to others

Teacher and learner all in one day, thank you for making my day.

Opportunities and possibilities?

We still have more paper mache to do and I think that you might explore this medium and lead us in so many different directions.

Comments:

That's great!!! I can see that your talent for Art is making things. You have patience with others and helpful to everyone like you are at home. Kai Pai

Written By: Parent  4/08/2014 10:25:36 p.m.
Date: 29th April 2013

Kia ora! And another BIG warm welcome to you and your whanau from all of us here in the under two’s.

Your Mum and I have shared lots of korero about what your days may look like at home and through those discussions Mum has shared with me lots of really important information about you to help me care for you during your time here at . Together Mum and I have made some notes to remind us and help others learn more about your care routines such as eating/ feeding, sleeping and your general well-being so other teachers such as , and all know where you are at if ever we need their support.

On the next page are our notes..... ☺
you are becoming a very busy girl, rolling here and there, kicking your legs and waving your arms all about. You are chatting and making several noises throughout each day. Your smile never fades and as I spend time with you I am learning about your needs and during your play I am learning about your interests and cheeky personality. Your favorite thing to do at the moment is hide yourself away under a cloth or your play mat. I’ve noticed this about you and often engage with you by dangling a piece of material above you and by also allowing you to interact with it. I recognise that this brings you pleasure and excitement, stimulating your senses and delighting them! I wonder if it’s the feel of the cloth that you find comforting as you hide away and snuggle in? or are you enjoying a game of peek-a-boo? Often once you have rolled onto your tummy you lay your head down on the cloth and seem relaxed and contented. I’m enjoying spending time with you and getting to know you well. I love interacting with you in these ways as I see your joy and discovery unfold.
What learning do I think is happening here?
"Every experience that a baby has occurs within a physical experience, a feeling state and, generally, information from the environment that both inspires the moment and forms it" (Wittmer & Petersen, 2013, pg.120). Allowing you time to engage with soft, comforting, stimulating materials supports your sense of belonging here and allows you time to explore with your body and surroundings as we engage in meaningful interactions.

Opportunities and possibilities?
Continuing to evaluate the environment and resources available to you will ensure you have all the time, resources and space you need to move freely, discover and learn with and alongside myself, other teachers and your peers.

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A new time of life- making movement

17/10/2013
By:

you are forever changing and growing, lately I have recognised the ways in which you are communicating with myself and with others, you are shaking your head, waving, clapping and grooving to the beats of the guitar. You are entering another new stage in your life as you enter your ninth month, your body is coming to life, you have discovered your fingers and toes, your ability to manipulate your body to create fascinating movement and have an effect on people and objects around you "It is through movement, muscular coordination, and the organisation of perceptions that young children find out about, and make sense of their world" (Gonzalez-Mena & Eyer, 2001, pg.103).

I am seeing you move in more complex ways as you discover new positions and ways to move yourself forward. Yesterday (31/10/13) I watched you as you manipulated your body in a semi-crawl position you move yourself forward.

What learning do I think is happening here?
You are persisting and practicing over time which will lead to mastery of skills such as crawling.

Opportunities and possibilities?
I will support your endeavours by providing you with plenty of space to practice your movement and master skills.

Link to Te Whāriki

| EXPLORATION | Children experience an environment where they gain confidence in and control of their bodies. |
| EXPLORATION | Children experience an environment where they learn strategies for active exploration, thinking, and reasoning. |
Mastering the stairs!!

19/02/2014
By:

Wow you have mastered the stairs. With one foot after another, you walk down the stairs. I have been watching you practice and today was able to catch you in the act. All that practicing has paid off. You are one persistent person, this disposition will take you far in life. Well-done.

Whānau Voice / Comments

13/03/2014
Hi thats awesome. Well done moko

Grandparent one

13/03/2014
Clever girl, well done!!

Grandparent two

14/03/2014
You are growing up far to fast. Love you little one.

Grandparent three
what I know about you it that you enjoy puzzles and posting objects. Here you sitting quietly concentrating on putting the rings on and off the stick. This was the first time that I had seen you playing with the ring stacker.

Here you were focusing on the hole in the middle of the disc and carefully lining the hole in the discs up with the stick and successfully sliding it on. This particular piece of equipment gives you opportunity to strengthen your eye hand coordination and discover colours, sorting from biggest to smallest. as you successfully put on each disc you looked for another one until all the discs you could see were on the stick.

As I closely look at the photos I took, I noticed you supporting your body with one hand and you are leaning back and as you are looking you are lining up the hole in the disc with the top of the stick. Another photo shows you balancing as you hold the stick in one hand and the disc in the other one which you were again lining it up and placing it on. Amazing you had such balance and concentration to achieve getting the disc on the stick.

Wow, ! what an achievement, you were able to balance yourself while completing putting the rings on to the stick. This took a lot of concentration and perseverance, I so proud of you.

Opportunities and possibilities?
activities

interest in puzzles and this particular equipment provides opportunity to scaffold her in learning colours and biggest to smallest as the disc are all different sizes.

Whānau Voice / Comments

24/03/2014

So gorgeous, she is obviously quite at home there!! Thanks for the up dates on my grand daughter [much appreciated!!]
Reece’s paper-based portfolio

Parent contribution...

Please feel free to share your thoughts and feelings about coming through to the over taws...
Add photos of your family.

We were a little worried about the transition to the over taws as enjoyed the under taws with . However, has taken it in her stride and relished her shift up. She was lucky to have great support from and to find teaching up here too. Thanks so much to the teachers for finding a fun, secure, friendly place to care! was especially pleased to meet up with her friends .

We love hearing stories from the teachers of the funny things you do. You love playing outside in the playground and playing with the baby dolls. The paintings you are bringing home are great and take pride of place on our wall. We cant believe how much of a big girl you have become and are so happy that gives you a great place to play, learn, grow and be happy.

Once up the Over taws, you became interested in the toilet and being a big girl. Thank goodness you like the food at and eat really well there – you don’t eat like that at home so must be a great cook. Thanks to all the teachers for becoming a...
Coffee Anyone?

Today made a connection between some of our lids available to the children for making creations, and the takeaway coffee's her Mum gets.

She took the lid and found a cup that fit and poured herself a drink.

Soon all her friends joined her with their coffees at the kai table too, inspired by what she had done.

Dramatic play is a strong vehicle for learning here at . Through dramatic play children act out, re-create experiences and things that happen throughout their world.

I believe that this was an extension of dramatic play as she saw something that was familiar to her (the coffee lid) and ran with that, re-creating and re-enacting her experience with this object.

It was neat to see her make this connection and the other children join in on her idea, everybody had coffee with their afternoon tea on this day.

Child: Date: 22.3.12 Teacher:
Dressing For Success

Today I set out to make skirts with the tamariki. When mum dropped you off this morning you were not that keen, but by morning tea time I had moved my stall in the hope to get more punters and you came along, determined as "I want to make a skirt" you said to me as you chose your fabric and sat about making it.

Soon followed and slipped into the role of your helper. I showed him how to cut a small bit of the fabric with scissors, then grab both sides and tear it to make a strip.

I admired the way you both worked individually and together.

You enjoyed the fact that you were helping your sister make a skirt. I admired how you worked away with me cutting the strips happily chatting as you went. You were positive about your skills to help in this project and showed great initiative to keep the project going to completion. For example recognising that we needed more fabric and hunting out more of the same type when we needed it.

I admired your ability to stick to a task that you had set out to do, holding in your mind an image of what it was you were working towards.

Tina poi and your team work and creating was enjoyable and harmonious to be a part of and what a styley skirt you made!
Creative Inspiration
Created on 6/09/2013 3:11:41 p.m. By [Redacted]

I captured these photos because I was impressed with your level of concentration and intention around what you were doing.

While drawing pictures I mentioned that some of what you were drawing reminded me of what I had seen at the Wearable Arts Exhibition at the Waikato Museum. I found the book for you showing casing what I was talking about and you intently perused through it, finding this image of a person in a printed body suit. Inspired by this you continued on with your picture, frequently taking note of the image and adding more to your drawing.

I never got to see your completed drawing, knowing you I’m sure it would have been tucked away somewhere special. I look forward to getting out that book again and seeing what else may inspire you.
Wow what a great picture and wonderful inspiration. There ended up being two pictures in this series and has proudly blue-tacked them on her wall beside her bed. She did this herself so these pictures do seem to be very special for her.

Written By: Parent 14/08/2013 9:25:04 p.m.

Hello, this is just amazing. Who knows where talents will lie in the future, but given so much opportunity to explore her potential at such a young age, the world is her oyster. I just love the concentration captured in the photo. Thanks so much for taking the time to share the photos and the inspiration behind the activity.

Would ‘sharing’ finished artwork, either electronically or by posting (to us) be a possible learning tool for? Whatever you do, you can be sure we would respond.

In case you choose to use ‘snail mail’ we are

, aka GrannyB

Written By: Grandparent 15/08/2013 10:36:22 a.m.

Thank you for your feedback. Your comments confirm to me how takes pride in and responsibility for her work. It was very awesome to hear that she had treasured this picture, that she had worked so thoughtfully and hard on.

GrannyB in profile there is a photo gallery perhaps we could take photos of her finished pieces and upload them there for you to see. I am also interested in the artistic ventures she may get up to at home and at your house!

Written By: Teacher 28/08/2013 10:18:07 a.m.

Comments:

Hello

Thanks for taking the time to respond to my comment. I am the ‘sporty/tramping/conservation minded’ granny!!!! I am in awe of her Gran (maternal granny) and her mum artistic talents. When and I get together we often look at patterns in nature (and I introduce native tree names/birds etc as we go.) She may tell you about the ‘little green stars’ (the tiny green plants found on stagnant water) we find along the Waikato river walk way.

I am sure you have lots to do, so I am not expecting a reply, but it is lovely to have a forum to interact with and learning.

Written By: Grandparent 28/08/2013 11:13:06 a.m.
Sounds of the Bush

Created on: 13/09/2013 5:05:16 p.m.
By: 

I noticed you paying very close attention to the actions ___ was demonstrating to the Kiwi Bird song as part of the Sounds of the Bush puppet show on Wednesday.

To stand up and perform in front of a big group takes a lot of courage ____ , you played the part of the sun, and the moon in the legend about how the kiwi lost its wings. What a fabulous performance.

Mum tells me that Granny B helps protect our native birds ___.

From ___

To ___ from ___

___, you don’t normally come to ____ on a Wednesday but today your Mum brought you and ____ in especially to see the puppet show before you headed off to swimming. I know recently your Granny B shared with us how the two of you enjoy searching for patterns in nature and talking through the names of the different birds and trees you find along the way. As I noticed you watching intently to the show I reflected upon these thoughts your Granny B had shared with us and I wondered what was going through your mind as you listened to the different sounds of the forest. We heard the noise of a tui, a morepork, a kiwi, a tuatara, a bat, a possum and more. I wonder if you will share this with Granny B when you see her next?

In the puppet show you also got to participate by holding up the sun and moon to the sky in your hand like ____ has noted. ____ did lots of talking when you were the sun and I noticed you holding your arm up high but then it began to lose feeling. I really liked how you persisted with this role you had been given and stuck to it till the end by finding ways to keep your arm up to be the bright sun. Like ____ has said, we admired your courage in performing in front of others and how you took ownership towards the part you played.

What learning do I think is happening here?

The sharing of stories and documentation through Educa has opened the doors of communication by allowing us to share children’s learning through both home life and the centre too. Whilst I was listening to the show, I was reflective upon your time with Granny B ___ and wondered if you had heard of these creatures in the forest before. We are working together to help you have knowledge about the world around you ___ and develop a strong interest in the natural world of animals and living things.

Opportunities and possibilities?

We shall continue to explore the natural world with you ____ . I wonder if you have any photos or thoughts to share about your adventures with Granny B when you go into the natural world.

Video Included
Whow, Cool! What a great part you played in the puppet show. The sun is so important to keep all plants (and animals) growing big and strong. You had to be strong to hold up the sun for so long!!!

There are lots of birds nesting amongst the branches of the avocado trees at the moment. Next time you come to see me, we will go on a bird nest hunt.

Written By: [Grandparent]  18/09/2013 12:12:44 p.m.

Your long kiwi beak was excellent!

Written By: [Grandparent]  18/09/2013 12:15:28 p.m.

Hello: [_________] and all the [________] staff.

I have sent a wooden puzzle 'Native Birds of NZ' to [_________] by mail today. I would like the Centre to have the puzzle. It goes well with the theme 'Sounds of the Bush'. I hope the children enjoy the puzzle, and perhaps enjoy learning both the English and Maori names. Piwakawaka, the fantail, was always the favourite of my Papamoa Grandchildren.

GrannyB

Written By: [Grandparent]  19/09/2013 7:54:10 p.m.

Comments:

Thank you so much GrannyB for your act of kindness, we were all very excited to receive your parcel. [_________] is in the process of writing a story about it.

[Teacher] and all the [_______] staff :) 

Written By: [_________]  21/09/2013 11:58:43 a.m.
A present from GrannyB and Grandad

Created on 20/09/2013 12:54:53 p.m. By

[Image 114x253 to 510x785]

[Image 113x128 to 510x247]

[494x65]440

[Image 114x253 to 510x785]

[Image 113x128 to 510x247]

[494x65]440

[] and [ ], [ ] has informed me that your GrannyB and Grandad have sent us a present for Lintotts and we gathered around the table to see what is inside. Together, you slowly unwrapped it with anticipation, curiosity and wonderment as you pull the wrapper off. When you reach the puzzle, some of the pieces have fallen out and together you begin to put the pieces back into the correct place. We then talked through the names of the birds on the puzzle and we get involved in discussion of how you go out with GrannyB and listen for the birds. We also discussed how this was a gift from your Grandparents to [ ] and you both wanted to take the puzzle home. We then discovered that GrannyB had written us a message on Educa to go along with the puzzle and I read this to you, this written word allowed you to understand what GrannyB had intended with her gift, for you to share it with all your friends at [ ], and for us to learn from doing it.

At lunch time, I showed all the children our new puzzle and how your Grandparents had sent us this special gift. After lunch I noticed a number of children exploring this new puzzle and working with the teachers to talk through the names of the birds.
What learning do I think is happening here?

To GrannyB and Grandad, we appreciate your act of kindness and sending us a special puzzle which I have noticed already being popular with not only your grandchildren but also the other children within the centre. We value how you have been reflective upon our current interests in the centre and provide resources which continues to support the children’s learning.

[ ] and [ ], I noticed the way the two of you worked closely together in completing this puzzle showing cooperation and understanding of this topic.

Opportunities and possibilities?

[ ] and [ ], we shall continue to support, value and encourage your family to be part of our [ ] Community.

[Video included]
Kate's paper-based portfolio

Date: 13th June 2012

Strike a pose!

Fashion profile:

Name: 
Age: 16 months
Currently situated in the Under Two's room at Childcare Centre.

Interests and hobbies: Music, dancing, art including painting, baby dolls, sandpit, slides, magnets, hands on activities.

Skills and attributes: A creative explorer, keen observer, independent and responsible, enthusiastic learner, not to afraid to think outside the box...

_______ specialises in bold and colourful knitwear pieces.

I had to share this scrummy photo with you and your whanau because it just so genuinely reflects the smiley, funny, humorous being that you are! You didn’t stop smiling after this photo was taken, you were so proud and wanted to show all your friends this new piece of knitwear you were modelling! Strike a pose! ☺️
As I watched from a distance I noticed [redacted] and [redacted] looking intently at you [redacted]. As I moved closer I noticed a book perched in your hands, you were deep in conversations as you were retelling the story hidden within those pages. [redacted] was responding as she shared her thoughts and then there was a moment of laughter shared between you all. As I reflect upon this photo it reminds of being a teacher whereby we hold up a book and we read loveable stories - with the attention of [redacted] and [redacted] I would say you are having a teachable moment [redacted].

I think you are showing confidence in speaking in front of others, developing your story telling skills and sharing in the enjoyment of literature with others. I wonder if we can find some more books for you to share with others and hold your interest....

Date: September 2012
Teacher: [redacted]
Welcome to the over twos

we set up a transitioning programme from the under twos for you but already by the second week you were ahead on our timetable!

You have fitted into the pattern of our day so easily and smoothly and already show a strong sense of belonging and well-being with us. I see you taking an interest and observing the people, places and things around you and confidently joining in and exploring with the other children. You show a sense of fun and adventure as you take on new challenges.

As your key teacher [_____] I am enjoying reconnecting with you again and excited about being on this learning journey with you - getting to know your needs, interests and strengths as we explore together.

14.02.13 Kailako: [_____]
The children and myself have been exploring chalk outside on the concrete and today on the fence. [ ] you were captured by this idea of drawing on the fence and you began drawing shapes and lines. These turned into drawings of your family. "This is Daddy - a head, a body, legs, arms and bones" you began saying to me. Then you continued to say "this is Mummy - long hair and long legs. My Mummy is funny. This is my brother [ ], he funny, I am funny". I was really captured by your thoughts on bones as I remembered recently I wrote a story around you learning about the body and that we have bones inside our skin. I wonder if you are connecting this knowledge you have and sharing it through your drawings [ ]?

The next day, you drew this picture [ ] with [ ] and again it showed your strong understanding of the body as you included ears, eyes, and a mouth. "My Nana got legs and ears, two ears". (Dad was on the other side of the paper).
What learning do I think is happening here?
"It starts with the joy of making marks and lines. Gradually lines begin to speak to the imagination. Children become aware that lines can represent things - people and objects" (Ursula koble, 2001). After reading this in a children's art development book and reflecting back to story in August of the picture you had drawn, I can see how you have developed your artistic side over time. You have learnt about drawing shapes and lines and now you are extending upon this by pulling them together to show your ideas and creating purpose to you work as you draw the meaningful people to you. Over time you have gathered new knowledge and understandings, like bones and can include them into your drawings as you piece together the world you live in. Ursula koble (2001) continues to say "of all the visual arts, drawing is the quickest and most direct way of making ideas visible. It is an incredibly powerful tool - a language - that enables children to explain things to themselves and to others." in the moments I have been with you in drawing you are sharing your voice and explaining the ideas behind your work.

Opportunities and possibilities?
I observe with interest as you learn more about drawing through working with others and in practice. I look forward to seeing where your creativity takes you in your learning journey and I will endeavour to find more materials for you to explore and strengthen this creative disposition.

Whānau Voice / Comments

22/10/2013
Lovely drawings - thank you for drawing Nannie too :-)

Grandparent
Caring for baby

By: [Name]

20/11/2013

...we have recently shifted the family play area and with this I have noticed a growing interest in this area. This morning I found you lost in your play as you spent time caring for your baby.

"Baby is having a meal" you say looking at me, "baby is drinking milk, I am drinking my drink, a coffee." "What is baby having to eat?" I ask you, "she is eating egg, she likes eggs" you say with a smile. I then noticed the way you gently began feeding baby and making sure she got her drink too. Once baby had finished her kai you said "baby is going to bed, she is sleeping by... blanket on."
Once baby had finished sleeping you said "she needs to get in the bath. I get her bath." You found this small basket which baby had grown out of, so I gathered up this big black bucket for you which was perfect for your baby. "I wash babies hair, I will get soap, that is soap, new soap." you say as I noticed how carefully you washed babies head and legs. "I put his hoody on, I get a towel on, I want to dress up like the mum" you say as we search through the dress up clothes together finding something you might like. Once you were dressed you went back to your baby and knelt down beside her and said "baby up arms in there, arm in there, my baby has a skirt on, she did it by herself."

What learning do I think is happening here?

______, you were deeply engaged with caring for your baby, thinking through each of the steps to care for your baby like feeding baby, sleeping baby and making sure baby was clean. You took on the role of Mum as you played out your understanding of this role and developed your ideas as you became more involved in your play. You spent most of your morning here ______, which tells me you have a long attention span for playing with babies as it shines through as an interest for you. I look forward to seeing how this evolves over time ______ and capturing more of your thoughts.

Opportunities and possibilities?
Next week ______ I am going on holiday but when I get back I would like to fill that black bucket with water so you can wash your baby. I wonder what you will think about that.

Whānau Voice / Comments

<table>
<thead>
<tr>
<th>04/12/2013</th>
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</thead>
<tbody>
<tr>
<td>What a wonderful Mum ______ so caring as usual</td>
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</table>

Grantsparents
In quiet time outside, you found me on the concrete playing with the chalk and you came down beside me and began creating. "A for [blank]" you said to me. "And a s" you continued, "writing my name". You then asked me about the other letters in your name and also the letters in [blank] name. We talked about how your name and [blank] name both have a 'y' and a 'n' as I wrote them on the concrete.

"I write my Mummy's name, does it start with that" you say. "It does.. This says Mummy" you inform me.

What learning do I think is happening here?
Today [blank] you were sharing your knowledge with me around the letters of your name. You know that your name starts with an 'A' and has an 's'. You are showing awareness of letters and you know that letters put together create words and words can have meaning and be read by others.
"The programme fosters the development of concepts about print, such as the knowledge that print conveys a message that can be revisited, that spoken words can be written down and read back, and that written names represent a person" (Ministry of Education, 1997, p.79)

**Opportunities and possibilities?**
The learning of letters is implemented within a meaningful context for you so you can continue to be excited about writing. I will continue to document your journey in literacy with excitement as you develop these skills over time.

**Link to Te Whāriki**
**COMMUNICATION**
Children experience an environment where they experience the stories and symbols of their own and other cultures.
Appendix Eleven – Evaluative Tool for ECE Settings

Choosing a portfolio format

EVALUATIVE TOOL FOR PORTFOLIOS

1. ECE Setting has wireless internet and sufficient data allowance (unlimited is desirable)
   - NO → PAPER-BASED PORTFOLIOS
   - YES

2. ECE Setting has sufficient technological resources for children, teachers, parents and whānau to access ePortfolios whenever and wherever they want
   - NO → PAPER-BASED PORTFOLIOS and EPORTFOLIOS
   - YES

3. ECE Setting allows contributions to the portfolio from children, parents and whānau for an authentic learning journey
   - NO → PAPER-BASED PORTFOLIOS and EPORTFOLIOS
   - YES

4. Teachers are supported to undertake worthwhile and relevant Professional Development in relation to ePortfolios and formative assessment practices
   - NO
   - YES → EPORTFOLIOS
Choosing an ePortfolio programme

As more ePortfolio programmes specifically focussed on early childhood education settings come on to the market it is essential that ECE settings ensure that the following features are included when selecting a platform for their service:

- The programme has been developed with input from ECE practitioners, researchers and ICT experts (and this input is ongoing).
  - This means that the platform will be based on sound educational knowledge which will enable teachers, parents, whānau and children to contribute to an authentic journey of learning and development.

- The programme developers are responsive to industry needs.
  - This means that the platform will reflect current thinking in early childhood education. The programme should be fluid and evolving to meet the principles of specific philosophies within the early childhood education sector, as well as individual service needs.

- Ongoing professional development is provided through the programme for teachers, not only in terms of using the platform (advances in technology) but also in sound formative assessment practices.
  - As the programme responds to changes in the early childhood education sector it must also provide a rationale for doing so and professional development opportunities for teachers to enable them to understand and work with such changes.

- The ePortfolio platform has a template which is not only ‘user friendly’ but provides a guide for recording learning based on educational knowledge about formative assessment.
  - The template should include an section for writing the learning story, followed by an area where the learning that is happening is identified. It also needs a section which focuses on where to next – how can the learning be supported, expanded on or extended?
• The ePortfolio platform also needs to be easy to use – for teachers, parents and whānau and children. Children should be able to add their own documentation, such as uploading a photo or video, or indeed even recording their own Learning Stories and moments.

• The platform needs to invite parent and whānau engagement. It must allow not only for comments but also for parents and whānau to contribute Learning Stories, learning moments, photos, videos and any other documentation they choose. It should also allow parents, whānau and children to become part of the ECE setting’s ‘everyday life’ by allowing comments and feedback on notices and other reminders posted by the ECE setting – this will strengthen the ECE setting’s community of practice.

Link to online tool:
https://sites.google.com/site/ePortfoliosinece/home