DIGITAL TECHNOLOGIES AND ENGAGING WITH WHĀNAU

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Abstract

The growth of digital technologies as learning tools in education has been one of the most significant changes to modern-day education. Due to the rapid evolution, many parents and whānau members have not had the opportunity to learn how and why their children are using these tools. Research from New Zealand and international sources emphasises the significance of whānau engagement with schools in terms of the effect that home-partnerships have on student learning and; in improving student achievement.

This research aims to explore whether a whānau digital education programme will increase whānau understanding of their child’s learning with the use of digital technologies as a learning tool. Whānau engagement has many definitions, for this study whānau engagement is defined as; when whānau are actively involved with and informed about their children’s learning.

The methodology for this research was teacher-practitioner research that was further informed by kaupapa Maori research approaches, guidelines and principles. This study was conducted as a mixed method single group case study, using a computer assisted self-administered questionnaire and a focus group to collect data.
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Te Reo Glossary

Ako - a reciprocal learning relationship where everybody is a learner.

Hapu - kinship group, clan, tribe, subtribe.

Hui - gathering, meeting, assembly, seminar, conference.

Iwi - extended kinship group, tribe - often refers to a large group of people descended from a common ancestor and associated with a distinct territory.

Karakia - to recite ritual chants, say grace, pray, recite a prayer, chant.

Kaumatua - adult, elder - a person of status within the whānau.

Kaupapa - topic, matter for discussion, plan, purpose, subject, programme, theme, issue, initiative.

Kōrero - to tell, say, speak, read, talk, address.

Mihi - to greet, pay tribute, acknowledge, thank.

Manaakitanga - the process of showing respect, generosity, and care for others

Ngai Tuhoe - tribal group of the Bay of Plenty in the Kutarere-Ruātoki-Waimana-Waikaremoana area.

Pākehā - New Zealander of European descent.

Tamariki – young, youthful, children - normally used only in the plural.
Te Whānau-ā-Apanui - Tribal group from Maraenui to Tihirau on the East Coast, who descend from Apanui-waipapa

Whakatauki - a proverb.

Whakatohea - tribal group in the Ōpōtiki area.

Whānau - extended family, family group, a familiar term of address to a number of people.

Whanaungatanga - establishing relationships in a Māori context based on kinship, common locality, and common interests.
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This thesis would not have been possible without the school whānau participants who gave up their time to be part of the workshops and give open and honest feedback about the workshops and their levels of engagement toward their children’s learning.

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Section 1 - Introduction

Ko Maugaharuru te maunga
Ko Mohaka te awa
Ko Pahauwera te marae
Ko Rongomaiwahine te wharenui
Ko Ngati Pahauwera te hapū
Ko Ngati Kahungunu te Iwi
Ko Takitumu te waka
Ko Jeffrey Dunn tōku ingoa

Ko te manu e kai te miro, nōna te ngahere, ko te manu e kai e te mātauranga, nōnā te ao. The bird that partakes of the Miro berry reigns in the forest: The bird that partakes in education reigns in the world (whakatauki).

The purpose of this study is to explore whānau perspectives of how a digital workshop initiative can assist the school to engage with whānau through the use of digital technologies. This study will explore whānau digital technologies as an opportunity to engage with whānau. The workshops are designed to provide information to support whānau to better use and understand how digital technologies are utilised at school.

Aim: To explore school based engagement with whānau through the implementation of whānau workshops using digital technologies.

Research Questions:

1. How does an initiative to introduce whānau to digital technologies used in the school affect school/whanau relationships?
2. Can the initiative increase links between the school and whānau in terms of student learning?

**Rationale**

This research project was undertaken at a decile one rural primary school with a roll of 270 students. The school currently has a roll consisting of 98% Māori students. The school has one to one devices (Chromebooks) from year four to eight.

A growing challenge for schools is the effective engagement with whānau so as to support, improve and strengthen children’s learning. Engagement as defined by The Education Review Office (2008) is that which “is meaningful, respectful partnerships between schools and their parents, whānau, and communities focused on improving the educational experiences and successes for each child” (p. 1). This study will explore the way that schools engage with the whānau as opposed to the whānau engaging with the school. This research is about creating better partnerships through engaging with whānau to create the best outcome in regards to their child’s learning.

For this proposal, the Māori word for family ‘whānau’ will be used in place of family since the term whānau better reflects the makeup of families at our school. At the participating school 98% of the students identify as Māori. Approximately 20% of the students at our school are not living with their parents, therefore, the term whānau provides a better fit for the diverse makeup of families that attend our school. The Māori Dictionary online describes whānau as the extended family, or family group, a familiar term of address to a number of people. The term whānau is sometimes used to include friends who may not have any direct family ties to other members or have a role as a child’s caregiver (Moorfield, 2017). It also acknowledges that there is a range of family configurations in modern day society.

As the learning environment for students of all ages is progressively becoming more digital, with an increasing number of digital tools being used to engage students with learning tasks, many parents become apprehensive when talking to their child’s teacher
about the learning their child is doing on Chromebooks or with other digital devices. When communicating with whānau at parent hui (meetings) a range of comments are made by parents regarding how they struggle to understand why and how their child is learning using digital technologies. As noted by a colleague; “Parents are open to conversations about their child's learning, but when we start to talk about how the use of chromebooks is used to enhance learning and engagement, parents get nervous” (personal communication, March 8, 2017). In a study conducted by The Education Review Office (2008) called ‘Partners in Learning: Parent Voices it states “Home-school partnerships are strengthened when parents help with learning activities at home” (p. 1). While the ideal is to have a strong school-home relationship to benefit students learning, such a relationship at times, requires supporting whānau with the skills whereby they have an understanding of their children’s learning.

**Home school partnerships**

A home-school partnership is the relationship between the student and the teacher, the teacher/school and the whānau, and the whānau and the student when learning is involved (Bull, Brooking, & Campbell, 2008). The emphasis of a home-school partnership is for schools to develop learning relationships with whanau. It is not expected however that whānau take on the role of the teacher. When whanau do not have a relationship with the school in which to support learning at home, it can be difficult to build strong home-school partnerships. This can create barriers between whānau and the teacher/school (Bishop, 1996).

It is becoming more common that students are undertaking more of their school learning using digital tools such as Google Docs or Office 356 for writing, completing inquiry projects, and reading comprehension tasks. Teachers often ask their students to work on these activities from home or to get help from parents or other whānau when completing an inquiry project. It is sometimes whānau who are the experts in relation to areas of inquiry learning and whānau who may hold the expertise around Māori specific content and matters concerning their own whānau, hāpū and iwi.
With an ever-evolving digital world, students are able to complete or carry on with learning tasks anywhere and anytime due to resources such as Google drive/docs. (Ministry of Education, 2018). Although these applications are a useful tool to use to help involve whānau in the learning experiences at school, it can also have a negative effect on whānau as they may have a feeling of inadequacy if they do not know how to help their child with their school work using digital technologies or if they do not have access to these at home.

In a recent survey undertaken with whānau at the project school, which surveyed over 30% of the school whānau, it was noted that 97% of whānau stated that if they knew more about how their child uses technology at school as a learning tool they would be better equipped to help at home when they need to use digital technologies.¹ The 2016/2017 digital technologies in school’s survey (Johnson, Maguire, & Wood, 2017) stated that 70% of principals who completed the survey said that parents support for the use of digital technologies was a barrier to the use of digital technologies in schools. The same study found that this was even higher in decile 1 to 3 schools. The same study by Johnson, Maguire, & Wood (2017) also found that in decile 1 to 3 schools 69% of principals noted “inequity of student access to technology at home is a problem that teachers face when using digital technologies for learning” (p.94) as a major barrier, where in decile 7 to 10 schools, only 36% of principals noted this as a major barrier. This highlights the disparity between decile 1 and decile 10 schools, in that what is available to decile 10 schools/students is dramatically different to what’s available to decile 1-3 schools/students.

**Digital technologies in schools**

With the introduction of digital technologies in school, schooling has changed significantly since the majority of our student’s whānau were at school. The incorporation of computers in learning and education is a significant change in education over the last

¹ See appendix 1 for Initial Stakeholder survey.
decade or so. In taking a look at the new technology accessible to teachers today and; in looking at how digital technologies are used in teaching, it is well highlighted how technology has changed the face of teaching in today’s schooling. Schooling will continue to change and develop to meet the future needs of our students. Due to the rapid development of technologies, new kinds of jobs are created every year. For teachers, we need to be educating students with a wide range of skills that are adaptable for jobs that are yet to be discovered. Digital technologies are one tool that schools are using to assist with teaching these skills. In a recent report by the Education Gazette (2015) it suggests that due to the pace of technological change and the ‘ubiquity of the digital age’ and the way this continues to influence school’s delivery of education, teachers are faced with the exciting and challenging task of preparing students for a world and jobs that are yet to be imagined, so that every student has the ability to be a confident life-long learner. Therefore, if it is a challenge for teachers to keep up with an ever-changing and developing education world, then this may be an even bigger challenge for parents who do not use these tools in every-day life.

A meta-analysis of 46 peer-reviewed articles by Harper & Milman’s (2016) found that digital technologies have a small positive effect on student achievement but where it has a profound effect is on student engagement and keeping students engaged for a longer period of time. They also found that in classrooms where more digital technology was being used the environments adapted to encourage more collaboration and greater communication between students and the teacher. One example of this is it has allowed teachers to give immediate formative feedback on student work. It is noted that due to the complex nature and vast range of digital technologies within classrooms more studies are needed to measure the effectiveness of digital technologies on academic achievement (Harper & Milman, 2016).

Unfortunately, some schools have neglected to also upskill the whānau of their schools as to why we use digital technologies and what we use them for. Although schools have taken the time for professional development for the teachers and other staff, they have often forgotten about one of the key stakeholders in the children’s education, the whānau.
Consequently, in rural settings such as where this research is set, there are limited opportunities for whānau to actively access this type of learning. This then becomes a matter for the school to address to ensure the buy-in and also support engagement from the whānau with the use of digital technologies in the classroom. An issue with this is having limited time and resources to create these learning experiences for whānau.

**Overview of the project school**

The following information in this section has contributed to forming the case environment, in which the research project has been conducted.

**Case study demographics**

The project school is a state-funded, English medium, full primary school situated in a rural setting in New Zealand, teaching Years 1 to 8. Currently, the school has a roll of 270 students. Staff include; 1 Principal, 1 Deputy Principal, 1 Associate Principal, 11 teaching staff, 1 RTM (Resource Teacher Māori), 10 Teacher Aids, 5 reading tutors, 3 Administrators and 1 Caretaker. As with many schools in the district, the roll of the school can be very transient partly due to the socio-economic makeup of the community and also due to the high level of seasonal work in the district. Education Counts suggests that Māori students and students in decile 1 schools are more likely to be transient than students in other ethnic groups or decile ratings (Education Counts, 2017). Research from Education counts suggests;

There is good evidence that student transience has a negative impact on student outcomes, both in New Zealand and overseas. Research suggests that students who move home or school frequently are more likely to underachieve in formal education when compared with students that have a more stable school life. (Education Counts, 2017, p. 1).

At the time of this research, the school is at its highest roll for 4 years and growing. Currently, 98% of the students enrolled in the school identify as Māori. NZ European/Pākeha and Pacific Island making up the other 2%. The majority of the students at the
school whakapapa primarily to local Iwi – Te Whakatohea. Ngai Tuhoe and Te Whānau-Apanui contribute to the next biggest Iwi groups within the school.

The Ministry of Education (MoE) has classified the school as decile 1. Ministry of Education explains the decile rating as the measure of the socio-economic position of a school’s student community relative to other schools throughout the country. Decile ratings are then determined by the following five indicators; household income, the percentage of employed parents, household crowding, parent’s qualifications, and percentage of parents receiving employment benefits (Ministry of Education, 2017). The decile rating of a school determines the schools funding per student. This school has the lowest decile rating possible. The decile ranking is however no reflection of the school’s performance or a representation of the national standards data. It is purely used for funding purposes.

**Digital technologies within the project school.**

A description of the digital learning environment at the project school is explained as it shows the importance the school has put on using digital technologies as a learning tool. The project school currently has school supplied, one to one Chromebooks for all students in years 4 to 8. This equates to approximately 60% of the students at the school who have access to a personal device for learning. According to the Digital Technologies in Schools Survey (2016/17) by Johnson, Maguire, & Wood (2017), this is higher than the national average of one digital device per two students. The decile rating of the school has no influence on a number of devices a school has in primary schools, this is a decision made by individual schools. In secondary schools the higher the decile rating the better access the students have to a device (Johnson, Maguire, & Wood, 2017).

Chromebooks were chosen as the digital learning device by the school due to their ease of use and affordability. The school made the choice to purchase all of the Chromebooks rather than try to roll out a BYOD (bring your own device) scheme. This was decided as it ensured that all students have equal opportunity in their learning. It also means all
students have the same device, therefore, a school technician can fix any breakages and have spares that are easily transferred to a child while repairs are being made. This philosophy is also shared by the Ministry of Education (2017) “The Education Act 1989 provides NZ students with the right to a free education. Families cannot be required to provide devices, and students cannot be denied access to learning opportunities because they do not have the recommended equipment” (p.1).

All classes are fitted with projectors and senior classes have two desktop computers for video editing and collaboration projects. Junior classes have 4 desktop computers and a set of 5 iPads each. The school has ultra-fast broadband and a Wi-Fi network that services the whole school, all provided and fitted by Network for Learning (N4L). The school is currently working through an ICT strategic plan that was created by the school management and 2 lead teachers while the school undertook a MOE-funded ICT Professional development contract. The school’s goal is; for the school to use ICT as a learning tool to deepen learning and engagement in an ever-changing and evolving society.

Although the school is very well equipped with digital technologies, it is the individual teacher’s discretion as to how much they use these tools for daily classroom learning and what they use it for. All teachers are on their own learning journey using digital technologies within the classroom and have undertaken differing levels of professional learning in the area of digital technologies. As all teaching staff have differing abilities for use and teaching using digital technologies, it is difficult for the school to have a prescribed plan for the use of digital technologies. This is highlighted as a specific area for professional development.

**Design of workshops**

The aim of this study is to explore if digital technology workshops improve whānau understanding and involvement of and with their child’s learning. This was done by creating and implementing a series of three whānau digital education workshops. Whānau as the main stakeholders were consulted prior to starting this research via a
survey to see if this was a need and if they would be willing to attend workshops. Ninety-seven percent of whānau who responded during consultation said that they would like to attend workshops involving digital technologies to make links with their children’s learning. The consensus was also that evenings would be the best time to run these workshops to allow for those who work during the day.

The workshops were run drawing from the kaupapa Māori principle of ako where everyone is acknowledged as a learner, including myself as the teacher/researcher (Ministry of Education, 2017). This means that everyone learns from each other. The aim was to create a culture within the workshops where there is no fear of taking risks or to try something new. The goal was to create a culture within the workshops where it would be a non-threatening way for whānau to build their confidence to be able to talk and work alongside their tamariki, hence increasing their knowledge of their children’s learning.

The design of the workshops was based on the feedback given by whānau and teachers surveyed during the projects initial stakeholder feedback. It was important to get input from the teachers on the content in the workshops, to create a programme that was specific to what is being taught/used in the classroom.

Home-school partnerships are ideally multidimensional and responsive to the community where whānau have an input into the content and the makeup of the initiative to meet the needs of the school community (Bull, Brooking, & Campbell, 2008). The key focus for these workshops was about keeping the learning fun and relating it back to how their children use these tools and applications while at school, and how parents can use these at home to interact with and support their children’s learning. The workshops were designed in reflection of the original stakeholder survey. This survey was circulated through the school Facebook page. The workshop design took into account what topics the whānau wanted to cover and when and how long the sessions lasted. Wills (2013) concludes that the research and evidence points to projects or programmes that are ‘done to’ families and that treat them disrespectfully by diminishing their practices and

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2 Original stakeholder survey. See appendix 1
systems, as unsuccessful. Any approach to engage parents and whānau in their children’s education needs to treat them as partners including them in all aspects of the programme.

Workshop content was open to change depending on the needs and the skill level of the group of whānau. This plan was adjusted due to the speed at which the whānau learnt and additional content was added due to requests from the workshop members.

A key to the workshops being successful was creating the right culture at the workshops so whānau felt as comfortable as possible. For many going back into school for learning may have been an uncomfortable environment. The Education Review Office (2008) found this is a common answer from parents when asked about what made engagement difficult, “Factors that made engagement difficult related to Māori parents’ own experience of school. Where parents had had negative experiences in their own schooling they found it more difficult to get involved with their child’s learning” (p. 7).

Another aspect that was essential to consider when creating the workshops was whānaungatanga/relationships. Whanaungatanga is defined as establishing relationships in a Māori context based on kinship, common locality, and common interests (MacFarlane, A., Glynn, T., Bateman, T., Bateman, S. 2007). The online Māori dictionary, Te Aka Māori Dictionary (2017) defines whanaungatanga as “a sense of family connection - a relationship through shared experiences and working together which provides people with a sense of belonging” (p. 1). For this project, the relationships were based on the common interest of their child's learning and gaining knowledge to better assist in their child's learning. I have been a teacher at the project school for seven years and have established good relationships with the community and many of the whānau members. To create a comfortable environment, I provided tea, coffee and cake for the group to share together, creating a less formal environment where whānau were able to discuss the content of the lessons.

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3 The design and content of the workshops. See appendix 2
Another significant attribution to creating the right culture in the workshops is to acknowledge the kaupapa Māori principle of ako. According to The Ministry of Education (2013) “The concept of ako describes a teaching and learning relationship, where the educator is also learning from the student and where educators’ practices are informed by the latest research and are both deliberate and reflective. Ako is grounded in the principle of reciprocity and also recognises that the learner and whānau cannot be separated” (p. 20). To initially help create a positive culture where it is understood that everyone is a learner, I demonstrated that I was also a learner, by opening the workshops with mihi and karakia. As a new area of learning for myself, the intention was to show whanau that I too was on a learning pathway.

**Study aim**

The purpose of this study was to explore school based engagement with whānau through the implementation of whānau workshops using digital technologies. The study explored whether the series of workshops offered to school whānau would improve their use of digital technologies to enhance their understanding of their children’s learning.

Research Questions:

1. How does an initiative to introduce whānau to digital technologies used in the school affect school/whanau relationships?
2. Can the initiative increase links between the school and whānau in terms of student learning?

One way that engagement is currently measured at the project school is by the number of whānau who attend parent-teacher interviews. Currently, attendance is very high at 90 to 92% of whānau attending these interviews (Principal, personal communication, 2017). While this level of engagement is high, the participating school, like others around New Zealand; are always looking for ways to engage with the student’s whanau, other than at the two parent interviews a year.
In terms of the participating school initiating programmes to engage with whanau in regards to their children’s learning, the school has also facilitated projects in past years such as Reading Together and has good attendance of these courses. “Reading Together® is a gold standard, research-based workshop programme which helps parents/whānau to provide effective support for their children’s reading” (The Biddulph Group, 2017, p. 1). With up to 15 families attending the Reading Together programme each time it has been run. Reading Together’s focus is about coaching families to give them the skills and information needed to help their children when reading at home. In a similar vein this study looks at creating an initiative that will support whānau with the information and skills so they understand how and why we use digital technologies at school and how they might support their children with this at home.

**Thesis Structure**

This thesis structure outlines the specific aspects of this research project that have been undertaken for this study.

Section 1 – Introduction
This chapter situates the study and introduces the need for more research into this area specifically for the project school. It explains what a home-school partnership is and the importance of these particular partnerships for Māori students. A description of the design of the workshops highlighting aspects of what influenced the design is also discussed. The project school is described to set the scene for the research. To conclude the chapter, the study aims are explained.

Section 2 – The Educational setting
This chapter focuses on engaging with whānau to help to lift student achievement. The chapter then explains the benefits of engaging with whānau and how the project school currently does this. This section then explores how other schools have used digital technologies to increase their engagement with whānau. Finally, there is a discussion about barriers to engaging with whānau within New Zealand schools.
Section 3 – The literature review
This section investigates current literature from New Zealand and international sources relating to parental engagement/involvement and the effects of home-school partnerships on teaching, learning, and achievement. The literature review also examines literature associated with digital learning/e-Learning and specifically defines the term digital learning. The research also identifies the background of and relevance of digital learning in New Zealand schools and discusses the potential benefits and limitations of digital learning on teaching and learning. A brief history of school reform in New Zealand is discussed and the introduction of Ka Hikitia as a tool to lift Māori achievement and include whānau, hapū and iwi in education is discussed.

Section 4 – The research approach
This section explains, the rationale of choosing a single group case study approach, linking literature and exploring the role of qualitative research as an overview of the research. The study uses self-administered computer-assisted questionnaires and a focus group to collect data. Data is analysed using thematic analysis. This section also discusses how participants were selected and recruited. Validity and ethical considerations are also presented in this section of writing. The chapter also explores kaupapa Māori principles and discusses as to how researchers in New Zealand can and should consider these principles when researching in a New Zealand educational setting. The section concludes with the procedure as to how the study unfolded.

Section 5 – The Findings
This section outlines the findings from the questionnaires and the focus group. Data from the questionnaires and the focus group was analysed to identify themes. Five themes became apparent from the data as key influences to increasing engagement towards students learning through the use of digital technologies.

Section 6 – The discussion and recommendations
This section begins with a critical discussion on the findings – with five themes identified to enhance engagement between the school and whānau. The limitations of the study
and the data are also discussed as well as the implications for future practice and what changes can be made to ensure the efficacy of the workshops in the future within the project school and possibly other schools in New Zealand.
Section 2 - The Educational Setting

Why engage with whānau?

When schools engage with whanau it has many benefits for the students schooling. As stated by Weyer (2015) family engagement promotes school readiness, social-emotional readiness and academic success, family engagement focuses on being culturally responsive and maintaining relationships between family and school staff. Family engagement differs from parental involvement which typically refers to parents participating in school activities. “The term family engagement implies that the responsibility falls on more than just the parents; in an era of evolving family compositions, siblings, relatives, and even friends play an important role” (Weyer, 2015, p.1).

Research by Wills (2013) shows that families want the very best for their children educationally and are prepared and want to do whatever they can to help with this. How much they succeed depends on how well they are supported.

The benefits of whānau engagement are not only for the students, teachers and the school but also for the whānau members themselves. Some of the benefits to the whānau according to Mutch & Collins (2012) are;

- Feeling that they are making a valuable contribution to their children’s learning and the school;
- Being more confident about coming into the school and approaching the child’s teacher;
- Having opportunities to meet other parents and talking together in a trusting and safe environment;
- Receiving support in their role as parents, families, and whānau;
- Having a sense of pride and achievement in their child.
In the report *Evaluation at a Glance: Priority Learners in New Zealand Schools* completed by the Education Review Office (2012a) it identifies a group of priority learners as “groups of students who have been identified as historically not experiencing success in the New Zealand schooling system. These include many Māori and Pacific learners, those from low socio-economic backgrounds, and students with special education needs” (p. 4). One way to address the needs of these students is to identify them as target/priority students. The project school that is the base for this research is a decile one school consisting of a high Maori student population. The school does not, however, base its priority learners based on ethnicity or socioeconomic status. Due to this a high percentage of the target students are Māori. Priority learners in the project school are identified through achievement data and the school's strategic goals. “Māori students in English medium schools are more likely to have lower levels of achievement in literacy, numeracy, and science than non-Māori students. If not addressed early, students are likely to fall behind” (Ministry of Education, 2013, p. 37).

According to Bishop (2014) when schools acknowledge the cultural heritage and values and involve whānau and hapū in the students learning and when teachers are committed and connected to the lives of their students this can make a considerable difference (Bishop, 2014). In John Hattie’s research on the 195 influences and effect sizes relating to student achievement, it has ‘Parental Involvement’ rated with an effect size of 0.51. Hattie’s study is based on nearly 1200 meta-analyses. The effect size relates to how effective an element is to influencing student achievement. Any factor that has an effect size of 0.4 is regarded as typical or average, whereas, a factor of higher than 0.4 will make a significant difference to student achievement in a year. Parental Involvement ranks 58th out of 195 influences (Visible Learning, 2017).

**What the project school currently does**

The project school in this research prides itself on doing the very best it can to engage with whānau on all levels. The Principal (personal communication, 2017) often speaks of making positive contact with whānau early to build positive currency in the bank, for when
it is needed to deal with a difficult situation. What this means is that if teachers and schools have good relationships with the whānau of their students, they will be more willing to assist you to create the best outcome for the students if times get tough. All teachers of the project school are expected to make contact with a whānau member of all students in their class within the first week of school, or the first week of a new student enrolling. The goal of this communication is to introduce yourself and get to know the whānau more. This breaks the ice so parents can feel confident to contact teachers if they need to.

The project school currently has many initiatives and policies running that aim to lift active whānau engagement within the school in relation to the students learning. Some examples of these initiatives and policies at the participating school are:

- Open door policy – whānau can come and speak with teachers anytime.
- Annual Grandparents Day – Grandparents are invited to the school to look around their grandchildren’s classroom and watch a show; this is to acknowledge that their input into the students learning is valued and appreciated.
- Invite whānau to all school shows, sports days and assemblies.
- Annualised reporting to whānau and parent/student interviews.
- Continue to develop a learning partnership with the local iwi, Whakatohea.
- Continue to work with 315 members to develop and plan the 315 after school programme. The 315 programme is an after-school initiative that has been set up in collaboration with the Ministry of Social Development, between the participating school and parents that affiliate to a local gang. The purpose of this initiative is to create positive relationships between these whanau members and the school, while at the same time giving the families a positive focus for their children.
- Enhance the transition to school programme to ease the transition into school for five year olds and their whānau.
- Inviting the whānau to once a term information and learning mornings about the school reading programme.

One overarching principle of the participating school is creating relationships or whanaungatanga – to develop and maintain positive relationships with staff, students, and whānau that are based on manaakitanga. Manaakitanga is defined as the process
of showing respect, generosity, and care for others (Te Aka Māori Dictionary, 2017). A strategic goal as stated in the participating school’s 2017 School Charter – Strategic Annual Plan 2017-2019 is to develop meaningful and effective learning relationships with our whole school community. One way the school plans to achieving this is to develop positive learning relationships through online mediums. (School Charter, 2017). Currently, the school has begun working towards this goal by establishing class blogs to share student’s learning within the classroom with whānau. The blogs contain celebrations of learning within the class, pictures and writing about camps and trips, and any other learning that students are proud to share. It has also started a school Facebook page to share news and achievements with the school whānau; whānau can also use this tool to report any absentees.

The participating school believes that the number of whānau who attend and coach at sports days, are parent helpers on camps, and attending weekly assemblies shows that whānau are interested in the learning of their tamariki and are involved with the school community. An area that needs further development is facilitating whānau input alongside students and teachers to set student goals and the development of the local curriculum. The Ministry of Education (2013) believe that teachers must recognise the value and involvement of whānau, hapū, and iwi, then build on these connections both within and outside the school. These groups are essential to engaging students in education and can assist in developing a local curriculum that is specific to each area and iwi. This can be achieved by allowing and facilitating collaboration between whānau and school through the use of digital technologies and in drawing from whānau, hapū and iwi aspirations (Ka Hikitia, 2013-2017).

**What other schools are doing with digital technologies to engage with whānau?**

One example from the Ministry of Education (2017) of a case study called ‘Engaging parents in learning through technology’ describes a school that is using digital technologies to engage with whānau. This school believes they have increased parental engagement through the use of iPads as a tool for their child’s learning. Children use the
iPads to take photos and make videos, which they write about and upload to their class blog. It would seem that this initiative has prompted parents to discuss their learning more with their kids and the teacher. They have also been teaching parents to use the iPads at their learning celebrations, giving quick demos of how to use the iPad, so the parents were able to record the learning celebration using the iPads. This was then uploaded to the classroom blog. This has had the effect of whānau feeling involved in the learning hence increasing learning conversations with more parents leaving comments on their child’s learning on the class blog (Ministry of Education, 2017). The above case study was primarily about using digital video and photos to improve communication between whānau and school with a small element of engaging whānau. This example has some similarities with this study in that the goal was to increase whānau engagement but with less emphasis on working to upskill whānau in the use of the digital tools used in the classroom; with more emphasis on how to interact with the learning tools used by their children. This is an example however, of how digital technologies can enhance whānau –school relationships.

As explained by the Ministry of Education (2017) in the case study called ‘Engaging with parents’ has taken the communication approach to engaging with whānau. The school had put an emphasis on student blogging and creating e-portfolios to share student learning and progressions with whānau, by running information sessions with whānau at different times of the day to maximise the number of parents they could reach. At these information sessions, they had shown the whānau how to comment and give meaningful feedback to their children about their work. Whānau would get emails when their child has posted or updated a post on their blog. This allows parents to check in and then have learning conversations with their children while the learning is fresh in their minds. Whānau have commented saying “because you don’t have to wait, there are no surprises, because they are so honest about where they are at and what their next steps are. We can immediately talk about it as a family” (Ministry of Education, 2017, p.1). This approach is less time intensive for whānau and not as labour demanding for the school. It gives whānau an immediate insight into what their child is doing at school and the opportunity to be involved through commenting on their work.
Similar digital learning projects have been run around New Zealand. Although they have had differing aims and goals, they have essentially had the goal of improving engagement with whānau. The Ministry of Education (2017) case study called ‘Home-school partnerships’, implemented a similar project where they set up a computer lab on the school site and funded a full-time teacher aide who provides teaching on how to use computers and the Internet for parents. The IT specialist teacher from the school stated some of the benefits ‘behaviour has tremendously improved because parents are learning, they’re starting to see, hey look, there are great benefits in learning’ (Ministry of Education, 2017). While this is an example of empowering whānau with skills to support their child’s learning, it is also a large financial cost to the school.

Another example is a school in Papatoetoe where they have been running ‘Techie’ classes to discuss with their parents what learning happens with computers. A parent of the school said, “classes have been very beneficial to me because I know what my children have learnt through technology, also it was good to see that what I was doing, my children are also learning the same thing at school as well” (Ministry of Education, 2017, p.1). This example informs the whānau of what their tamariki are doing, but doesn’t support the learning of the whānau and where they are at on their journey of using digital technologies.

**Using digital technologies to engage with whānau**

Digital technologies allow schools and students to engage with whānau in new and exciting ways. From social media to share real time celebrations, to publishing mahi on blogs or school websites. Digital technologies permit whānau the opportunity to collaborate and engage with their child’s learning without needing to physically come into school to see workbooks. This allows busy whānau the opportunity to engage with their child’s learning more often and; often while the child is still working on a learning task. “Essentially, there is no ‘one way’ or ‘best way’ for schools and Māori communities to engage with each other. It is clear, however, that the balance of responsibility resides with the schools and the stance they adopt in communicating with whānau, hapū, and,
on occasions, iwi” (Education Review Office, 2012, p. 13). Using digital technologies is just one tool in a school’s kete to engage with whānau.

Using digital technology to engage with whānau is similar to the way teachers use digital technologies in the classroom to engage students in their learning. Coordinating workshops for whānau to learn about digital technologies has the potential to encourage hard to reach whānau to come into the school. From the initial stakeholder engagement survey completed with teachers at the participating school, it revealed that, 1) 100% of teachers said that the use of digital technologies was essential for motivation of students and to 3) increase engagement with the learning tasks, and 4) creating a wider range of relevant learning. Engagement through digital technologies may also discourage some whānau engagement if whānau do not have the necessary skills to do so. The Ministry of Education (2017) website, Enabling E-learning affirms this, saying that with the right knowledge and resources, technologies can be used to support and facilitate more profound engagement with parents, whānau, and the school community. One factor which can have a significant positive impact on the achievement of children is parental involvement in programmes that enhance their understandings of how to help their children educationally. “Effective programmes are those that empower the parents by adding to their repertoire of strategies (rather than undermining them). The processes of these programmes respect the dignity and cultural values of the parents” (Biddulph, Biddulph, & Biddulph, 2003, p. 178).

It is becoming ever more accessible for New Zealand school students to access the internet and digital learning at school and home. Three out of every four households at the 2013 Census had internet access, an increase of 34 percent since 2006, according to census results released by Statistics New Zealand (Statistics New Zealand, 2017). Recently, the participating school completed a survey of whānau members to gauge how many households have access to the internet within the home, 90% of the school population responded to this survey indicating that between 40 and 45% of the school now have access to the internet within the home. This is an increase from 25% two years
ago. However, it is unclear if this access to the internet is just through smartphones or devices in terms of how students are able to access this learning from home.

In low socioeconomic rural communities such as the community where this study was undertaken the majority of whānau who are employed, are employed in the primary industries of orchard work and forestry. Generally, this employment is on seasonal contracts, so work for many can be intermittent. As shown in the latest census data ‘The most common occupational group in the district is 'labourers,' whereas 'professionals' is the most common occupational group in New Zealand. (Statistics NZ, 2013). In these industries, they have very little exposure to computers or more importantly the use of the applications that schools use them for. When asked in the initial whānau survey, whānau have expressed that they use computers predominantly for social media and to use the Google search engine.

One disadvantage for schools/communities in rural areas is that there are fewer opportunities for whānau to seek to upskill in the use of digital technologies, if they choose to. If schools want to create stronger home-school partnerships through the use of digital technologies, then they need to give whānau the skills to do so. Parents who are not sure how to help their children to read have programmes such as “Reading together” to upskill. But whānau who don’t know how to use computers as a learning tool, do not have anywhere to go to upskill. Bull, Brooking, & Campbell (2008) suggests that if home-school partnerships are to make a difference for all children both groups need ongoing support, resourcing, and training.

With the stakeholder survey undertaken at the beginning of the year, 97% of whānau who responded said that if they knew more about how their child uses technology at school, this would help them to support their children’s learning at home. The New Zealand Curriculum online states “some parents do not feel confident about interacting with schools or confident enough to support their child’s learning in the most effective way” (2017). At times educators need to provide that support to community/whānau to enable them to better support their children and their learning. This is supported by
Brillante (2017) stating that if we empower the parents to understand how their children use technology at school for learning, this will help them to support and empower their children to learn, participate and belong.

The Ministry of Education expresses that Digital technologies can be used for: building two-way communication, and increasing parent engagement in student learning (Ministry of Education, 2017). “The engagement of whānau/iwi and wider community networks are enhanced by the use of digital technologies. A deeper level of engagement can lead to improved student achievement through blended, culturally inclusive, and sustainable e-learning practices” (Ministry of Education New Zealand, 2017, p. 1).

**Barriers to engaging with whānau**

There are a number of barriers or influences that hinder whānau from engaging wholeheartedly with students learning and or with the school. It is essential to know that while there are barriers, these are not thought of as a reason to not engage with whānau. These are merely factors to consider when developing a plan to overcome barriers and increase whānau engagement.

One barrier for whānau who have a lower level of engagement with their child’s school is confidence. Research has found that the perceived community expectations and perceptions about their own skills and experiences can make it harder for parents and whānau to get involved with their child’s schooling (Education Review Office, 2012). “Parents who feel more efficacious (self-efficacy) and who believe in their capacity to influence their child’s performance will exhibit greater involvement in school-related activities. This is seen particularly in respect to literacy and home learning” (Campbell, 2011, p. 11). At times the confidence level of the whānau is based on prior experiences with their own schooling experience and their perceptions of the school culture and the school's ability to accept them non-judgmentally (Mutch & Collins, 2012). Higher levels of parental (particularly maternal) education can be seen to contribute favourably to
children’s achievement. When parental education is higher, parents are more confident to engage with schools and teachers (Biddulph, Biddulph, & Biddulph, 2003).

It is suggested by MacFarlane and Glynn (2007) that for whānau to want to engage they must feel that they are treated as equals when in partnership with the school or the teachers. They must feel that their knowledge, culture, and heritage is valued and respected in the learning journey of their tamariki (MacFarlane, Glynn, Cavanagh, & Bateman, 2007). This is emphasised by the Education Review Office which stresses that whānau can have the feeling of being unwelcome at school or uncomfortable about talking with teachers. They also can feel uncertain if teachers understand the complexities and intricacies about their family and their culture (Education Review Office, 2012).

Hard to reach students and hard to reach whānau are identified by schools as having lower family engagement. Some of the traits that distinguish hard to reach families are; they have low income, may be unemployed or have English as a second language (Campbell, 2011). This is further emphasised by Mutch & Collins who state “Parents with low involvement are typically from single-parent or large family settings, have low educational attainment, have high mobility rates, lack time and resources, may be young parents, and are most often male” as cited in Mutch & Collins (2012, p.174).

Getting hard to reach families into the school is a particular challenge in terms of attempting to change the experience of education to a more positive one for some families. It is then vital for schools to put energy into forming positive relationships with whānau first, so they feel comfortable to come into the school before enrolling them into an initiative with a goal of improving engagement. Hard to reach parents is defined by Campbell (2011) as the parents in a school who very rarely, if at all, attend school events or meetings. They can be a mixture of low income, unemployed, English as a second language and frequently have children with poor attendance.
Summary

The focus of this chapter was on whanau-school relationships and why we as educators need whānau to be familiar with and confident to discuss their children's learning. As a teacher it can be easy to rely on whānau only when things occasionally go wrong and you need their support. This study has shown me, through literature the need to have whānau involved, engaged and supported throughout the learning process.

One aspect that was highlighted again in this chapter was that for schools to improve engagement with whānau there needs to be a focus on whanaungatanga and building positive relationships so whānau feel like they’re on an equal footing.

This chapter has sought to explain ways that the project school and other schools in New Zealand currently engage with whānau through the use of digital technologies. The case studies that are explored in this chapter all have similarities to this study but where they differ is that, this initiative is facilitated with the whānau and content is designed according to their wants and needs.

Finally, barriers to engagement and ways to overcome these barriers were discussed. After learning of the historical injustices towards Māori in education, it is clear that schools in this generation have a tough road to repair some of the negative feelings and experiences of education before being able to start the process of engaging with whānau for this generation’s education. The next chapter reviews the literature used to form and frame this research project.
Section 3 - Review of literature

Introduction

This literature review examines literature on parental engagement/involvement in schooling and the effects of successful home-school partnerships on teaching, learning, and achievement. Literature associated with digital learning/e-Learning is explored to define digital learning and to identify the background of digital learning in New Zealand schools and to discuss the potential benefits and limitations of digital learning on teaching and learning.

Parental engagement/involvement

Nāu te rourou, nākū te rourou, ka ora ai tātou. With the gifts you bring combined with mine, we will all benefit.

The New Zealand Curriculum (2017) states that Māori students' learning outcomes are maximised when there are effective practices and programmes that build partnerships between schools, educators, and whānau.

During primary school, students generally change teachers every year, with exception to smaller schools. Calder (2014) states that for most children their parents and whānau are their constant factor in the voyage through schooling. In a recent study conducted by the Education Review Office (2015) called Educationally powerful connections with parents and whānau, the writers found that one way for Māori students to succeed at school is for schools to create home-school partnerships that enable learning to be taken into the home and not just occur at school (Education Review Office, 2015a).

In another study called Partners in Learning: Parents Voices, undertaken by the Education Review Office (2008) found through interviewing parents, that parents want to be able to share in their child’s successes and to be able to help with their children's learning. The study also found that schools could improve when engaging with whānau
by improving communication and by providing better support for parents to understand their child’s learning (Education Review Office, 2008). The Education Review Office report ‘Educationally powerful connections with parents and whānau’ found that for many principals, recognising that the school values around respectful learning relationships extended to parents and whānau was also important. The principals understood that these relationships needed to go beyond talking about the child’s achievement and extend to work together to support student success (Education Review Office, 2012). According to Biddulph, Biddulph, & Biddulph, (2003) genuine home/school collaboration can also lift children’s achievement significantly.

Parental engagement is fundamental for students to achieve their educational goals at whatever level they are working at, it is also noted that parental engagement can be hard to improve from a schools’ perspective, due to families being “time poor” for various reasons including employment (Education Review Office, 2012; Calder, 2014).

The Ka Hikitea (2013) strategy presented by the Ministry of Education to ensure Māori students achieve success as Māori states;

A productive partnership starts with the understanding that Māori children and students are connected to whānau and should not be viewed or treated as separate, isolated or disconnected. Parents and whānau must be involved in conversations about their children and their learning. They need accessible, evidence-based information on how to support their children’s learning and success. (Ministry of Education, 2013, p. 18)

The Education Review Office study, ‘Partners in learning: School's’ engagement with parents, whānau, and communities' (2008) points out that parents just showing an interest in what their child is doing at school encourages them to talk and practice these things at home (Education Review Office, 2008). As the level of information and understanding increases whānau may start to see an increase in engagement from their children, leading to a rise in achievement levels.
A case study by Education Review Office (2015) found that when the partnership between home and school is strengthened, parents expressed satisfaction in knowing that their contribution is valued and that the responsibility of education was shared.

In one New Zealand case study called *Engaging Parents in Learning Through Technology*, Macintyre, (n.d). shares her experiences explaining that teaching parents to use iPads has given the parents the confidence to come into the classroom to speak with the teachers more often. As the students see that their whānau is taking a more active role in their education it gives them a sense of value towards their education, and motivates them to achieve. This is further purported by the Ministry of Education who conveys, strong engagement and contribution from student’s whānau, hapū, iwi; is one of the critical factors to accelerating success (Ministry of Education, 2013). Described this through a kaupapa Māori lens, Bishop states “Where connectedness is fundamental to relations. Teachers are committed and inextricably connected to their students and the community and vice versa; school and home/parental aspirations are complementary” (Bishop, 2014, p. 445).

The benefits to having parental involvement in schooling is not isolated to primary education, however, this is where it has the greatest effect on student achievement and student engagement. It also found that students who have parents who are highly involved in their learning had greater teacher attention given to their learning. This could be accredited to teachers knowing that the parents will be keeping them accountable for their child’s education. The hope of this initiative is that it will help to foster whānau to be more involved in their children's everyday learning.

Upskilling whānau whether it be in reading or digital literacy/skills has benefits not only for the students but also the whānau and the teachers. The Education Review Office, 2015 project, *Educationally Powerful Connections* found that teachers are more likely to seek whānau involvement if they could see parents making a useful contribution. They also found that it is harder to get whānau involved if the whānau didn’t think they could make a useful contribution. An initiative like the one in this study aims to give whānau
the skills and the confidence to make a useful contribution (Education Review Office, 2015a).

Home-school partnerships that are tailored to the unique needs of a particular school and community are more successful than those using a standard approach (Brooking and Roberts, 2007). However, some ways of working with families and communities are effective across a wide range of contexts. Incorporating school-like activities into family activities, through providing parents with access to both additional pedagogical knowledge and information about finding and using educational resources, can have dramatic and positive impacts on children's achievement (Biddulph, Biddulph, & Biddulph, 2003).

Many initiatives to increase whānau engagement fall short in that they aim to improve communication by simply giving information about qualifications, student achievement, curriculum development, and school programmes. They don’t give the whānau the skills to be able to use this information or the practical skills needed to act on this information (Bull, ND). Donohue (2017) believes that in the digital age, educators need to do the following to allow for greater engagement from parents;

- Meet the parents where they are – not all parents have the same technology or knowledge.
- Teachers/schools need to be aware of barriers to access.
- Provide multiple pathways – not all parents like to use digital technologies.
- Be media mentors to parents and be available to help if needed.

This study provided whānau digital workshops that focused on upskilling whānau in the use of Chromebooks and online applications that are used by their children at school. This aligns with what Bull (2011) recommends community engagement should look like. It is recommended that community engagement is;

- Improving communication between home and school.
- Building relationships between teachers and families.
- Encouraging families to include “school”-type activities into their homes.
This aligns with the school value of ‘ako – a reciprocal learning relationship where everybody is a learner’ (School Charter, 2017). This will be an opportunity for whānau to learn new skills to take home “school-type” activities, to then learn alongside their children in a non-threatening environment.

The Ministry of Education (2017) states that when teachers incorporate the principle of ako, they are able to create inclusive learning communities where everyone feels that they are able to participate and their contribution is valued. It is not merely getting along socially with the schools whānau, but about creating productive relationships where everyone is empowered to learn with and from each other. This initiative aimed to provide parents with practical ways to help their children at home, using digital technologies. These skills will help them in most curriculum areas using digital technologies as a tool. Ideally, this will lead to the students then becoming more confident in their school work. When schools reach out to whānau, this creates trust from whānau and tamariki as explained by Bishop (2014) that when schools reach into Māori homes and incorporate families into the children’s education it helps whānau to feel like they are valued and can contribute positively to their children’s education.

As a teacher-researcher, I realise that many parents and whānau did not have the best memories of their experiences at school when they attended. It is therefore essential that educators build relationships that are built on trust and their student’s learning before asking whānau to take part in an initiative such as this. When there is a relationship built, trust is built. “The extent to which parents become involved in their children’s school is sometimes influenced by their own schooling experiences and their perception of the school’s culture and willingness to accept their contributions nonjudgmentally” (Mutch & Collins, 2012).

One of the eight principles of the New Zealand Curriculum is community engagement, the document says that the curriculum needs to have meaning for students, to connect with their wider lives, and engage the support of their families, whānau, and communities (Ministry of Education, 2007). If whānau do not understand why and how teachers use digital technologies, then we cannot fulfil one of the eight principles of the curriculum.
The Curriculum online (2017a) tells us that Community engagement is also about establishing strong home-school partnerships where parents, whānau, and communities are involved and supported in students' learning.

**Engaging whānau and children’s learning?**

The better the engagement between parents, families, and schools, the more significant the positive impact on student learning (Mutch & Collins, 2012, p. 168). International research (Emerson, Fear, Fox, & Sanders, 2012) has shown that parental engagement of various kinds has a positive impact on many indicators of student achievement, including:

- Higher grades and test scores
- Enrolment in higher level programs and advanced classes
- Lower drop-out rates
- Greater graduation rates
- Increased likelihood of commencing post-secondary education (Emerson et al, 2012, p. 8).

Emerson et al, (2012) suggests that beyond educational achievement, parental engagement is associated with various indicators of student development. These include: more regular school attendance, better social skills, improved behaviour, better adaptation to school, increased social capital, a greater sense of personal competence and efficacy for learning, greater engagement in school work, and a stronger belief in the importance of education (Emerson et al, 2012). From a primary school perspective whānau engagement has the greatest influence on these areas.

The study called Educationally Powerful Connections with Parents and Whānau states “we know from research that most parents and whānau have friendly relationships with schools but for relationships to positively impact on learners, they must be ‘educationally powerful’” (Education Review Office, 2012, p.3). The study, Inquiring into Engaging Parents in the Education of their Children, believes the parental role in engaging has two roles: to continue informal learning (dinner table conversations, cultural expertise); and
being engaged in their learning at school (having a good relationship with the teacher and communicating well with them) (Wills, 2013).

The literature on parental engagement assesses the links between engagement and academic achievement. There is a risk, however, that parents may place excessive pressure on students to academically excel. This excess pressure can be detrimental to children’s wellbeing (Emerson et al, 2012). When parental engagement is focused on both the academic and the wellbeing of the child, then children will not suffer the pressure to achieve that may lead to lower self-esteem (Emerson et al, 2012).

**Digital learning/e-learning**

**What is digital learning/e-learning?**

Enabling e-Learning defines ‘e-learning’ as; “learning and teaching that is facilitated by or supported through the appropriate use of information and communication technologies” (Ministry of Education, 2017, para. 1).

Best practice e-learning enables accessible, relevant, and high-quality learning opportunities that improve student engagement and achievement. E-Learning has the potential to transform the way teaching and learning takes place. It is about using technologies effectively across the curriculum to connect schools and communities and to provide accessible, relevant, and high-quality learning opportunities so that every student is better able to achieve their full potential. (Ministry of Education, 2017, para. 4).

The use of digital games and apps are like any other learning tool; their greatest value as a learning tool is when adults use them as a tool for interacting with children in adaptive and age-appropriate ways, emphasis should be put on the quality of media use rather than its quantity. Thus, technology can be viewed as one of many possible tools

According to the NZ Curriculum digital learning or e-learning has considerable potential to support teacher actions to promote student learning. This is possible due to; assisting students to make connections, facilitating shared learning through collaboration, and assisting with creating supportive learning environments (Ministry of Education New Zealand, 2017).

**Benefits of digital learning/e-learning**

The Ministry of Education website; Enabling e-Learning suggests that using digital technologies has the following benefits; it enables students to learn in relevant real-world 21st-century contexts (Ministry of Education, 2017). Digital technologies or e-learning allows students to:

- Learn, create, share, and collaborate anywhere, at any time.
- Opens up a new world of resources for students, providing much more knowledge than any one teacher or school library could.
- Enables students to personalise their learning experience.

Wright (2010) believes that the benefits for students learning through the use of digital technologies are;

- Motivation and engagement.
- Independence and personalised learning.
- Critical thinking and multi-literacies.
- Access to information, resources and experts.
- Collaboration in wide contexts, including international ones.
All of these factors can contribute to more students being present in their classroom learning where they are engaged and enjoying learning; and achieving better results (Wright, 2010). The Ministry of Education states ‘A deeper level of engagement can lead to improved student achievement through blended, culturally inclusive, and sustainable e-learning practices’ (Ministry of Education, 2017, p. 1).

Eighty percent of Principals in a recent study of 464 New Zealand schools said that digital technologies had a moderate to high impact on student achievement (Johnson, Maguire, & Wood, 2017). Eighty to ninety percent of the Principals also said that digital learning makes learning more relevant and engaging for students, and enables more personalised teaching and learning (Johnson, Maguire, & Wood, 2017). Massachusetts Institute of Technology (MIT) believes that learning using digital technologies has the potential to create richer assessments, better immediate feedback, customised and differentiated learning pathways, and enhanced learning pathways. Even more exciting are the advances that we are yet to imagine that will revolutionize teaching and learning (Massachusetts Institute of Technology, 2017).

**Limitations to digital learning/e-learning**

Principals listed the following limitations or barriers to the use of digital technologies in schools; cost of digital technology equipment; cost of upgrades, affordability of personal digital devices for parents, cost of online services, professional development of staff, parent support for use of digital technologies (Johnson, Maguire, & Wood, 2017). Some sources suggest that using digital technologies does not equate to academic success. Kentaro (2014), a researcher from the University of California expresses that in recent studies in the United States of America, that when students are given computers to complete their school work, there is no improvement in academic scores, attendance or behavioural issues. Hartnett (2014) believes that technology is not the answer to behavioural issues and low achievement, the key to improve this is quality teaching, but the use of digital technologies can assist good teachers to improve these areas where relying on the technology alone will leave schools disappointed.
**School reform in New Zealand**

This study looks to enrich the connection between whānau and their children’s learning. This is an area that due to past wrongs needs attention from the education sector in New Zealand to ensure we are providing the optimal learning environment for our Māori learners (Wylie, 2013). This section will cover some of the history of the New Zealand education system and how in recent times the Ministry of Education has tried to address some of the inequalities of the past.

Following is a brief breakdown of the history of the New Zealand schooling system, to give a background as to why it is essential now to include whānau in the decision making and everyday schooling of our children.

Schooling began in New Zealand at the arrival of European missionaries. In 1867 the Native Schools Act was passed, this allowed for schools for only Māori students. This approach, however, was not designed to foster Te Reo or Māori culture as stated by Tearney (2016). “This approach involved educating Māori to abide by the habits of the European population by actively discouraging Māori language, belief systems and culture” (p. 17). The emphasis of education was on ‘Europeanising’ Māori. The Native school system ran alongside the public school system until 1969 where Māori students had the choice of which school to attend (Tearney, 2016).

In 1877, the Education Act was the beginning of compulsory education that was accessible to all children aged seven to thirteen (Swarbrick, 2012). With this bill came a Department of Education, Minister of Education and twelve regional Education Boards. The regional Education Boards were given a per child subsidy. For this, they were expected to build schools, hire and dismiss teachers and where possible train teachers (Tearney, 2016). Educational policy from this period on, very much excluded Māori in both policy or decision-making.

The 1960 Report for the Department of Māori Affairs (Hunn Report) was the first report to claim that Māori were a ‘depressed ethnic minority’ and that education had a big part
to play in this (Tearney, 2016). Following on from the Hunn Report was the 1962 Currie Report or the Report of the Commission on Education in New Zealand. Tearney (2016) points out that it drew attention to the gap between Māori and non-Māori in terms of retention and achievement levels, it turned down the notion that there was any difference in the intellectual ability between Maori and Europeans, instead regarding Māori as ‘the greatest reservoir of unused talent in the population. Thus highlighting that the education systems performance was not delivering for Māori.

In 1988, the Administering for Excellence: Effective Administration in Education (Picot Report) was published. This report highlighted significant flaws in the existing education system: ‘over-centralisation of decision-making; complexity; lack of information and choice; lack of effective management practices; and feelings of powerlessness from families and schools (Tearney, 2016). From this report came one of the most significant changes to the New Zealand education system when the Labour government introduced the ‘Tomorrow’s Schools Policy’ in 1989.

**Tomorrows Schools**

The Prime Minister of the time and Minister of Education; David Lange stated, when speaking of the Tomorrows Schools reform “The Government is certain that the reform it proposes will result in more immediate delivery of resources to schools, more parental and community involvement, and greater teacher responsibility” (Wylie, 2013, p. 7). The Prime Minister was also quoted saying “reformed administration will be sufficiently flexible and responsive to meet the particular needs of Māori education” (Wylie, 2013, p. 7). Tomorrows Schools began the self-governance of schools where every primary school in the country appointed a Board of Trustees that was responsible for the governance of the school including staffing, budgets, school achievement and school policies.

A key reason for the reform was to lift the achievement of Māori students and increase whānau involvement in education, with the opportunity to have a greater say in the education of their tamariki (Bates, 2009). Twenty years on from the introduction of
Tomorrows Schools reform and the efficacy of local control and enhanced parent voice, there was still a disproportionate underachievement of Māori and Pasifika students (Bates, 2009). Due to the disproportionate underachievement of Māori, the Ministry of Education began a Māori Education Strategy in 1998. Up to this point whānau, hapū and Iwi had very little input into the direction and policies of education in general.

In 1999 the first Māori Education Strategy was published, which has three primary goals:
- Raise the quality of English-medium education for Māori.
- Support the growth of high-quality kaupapa Māori education.

**Ka Hikitia**

In 2008, the redevelopment of the Māori Education Strategy was released, *Ka Hikitia – Managing for Success* (Ministry of Education, 2008-2012). Ka Hikitia aimed to transform the education system and ensure Māori educational success is the norm. It aims to ensure all students have the opportunity to realise their potential through education (Ministry of Education, 2013). Ka Hikitia was the first step made by the Ministry of Education to put right over one hundred years of whānau, hapū and iwi being left out of the conversation when dealing with Māori education. Ka Hikitia has five guiding principles that steer its kaupapa (principles/policies), they are;

- Treaty of Waitangi
  
The relationship between the Crown, Iwi and Māori to collaborate and to value working closely together to lift the performance of the education system. The Treaty of Waitangi was the initial partnership that failed to involve Māori in matters of education. Therefore, over 170 years later Ka Hikitia is an attempt to get the relationship right to include whānau, hapu and iwi in education (Ministry of Education, 2017).

- Māori potential approach
Every Māori student has the potential to make a valuable social, cultural and economic contribution to the well-being of their whānau, their community and New Zealand as a whole. Emphasis is given to expectations around student achievement in that schools must have high expectations for and of their students and that students in turn have high expectations of themselves and are therefore more likely to succeed (Ministry of Education, 2017).

• Ako – a two-way teaching and learning process
Ako is a dynamic form of learning where the educator and the students interactively learn from each other. Ako is grounded in the principle of reciprocity and recognises that the student and whānau cannot be separated (Ministry of Education, 2017).

• Identity, language and culture count
Student’s achievement increases when what they learn builds on what is familiar to them, where they come from, what they value, and their prior knowledge. Māori students are more likely to achieve when they see themselves, their parents, whānau, hapū, iwi and community reflected in learning and teaching (Ministry of Education, 2017).

• Productive partnerships
Productive partnerships include all key stakeholders where there needs to be an ongoing exchange of knowledge and information, and where everybody contributes to achieving the learning and social goals. A productive partnership starts by understanding that Māori children and young people are connected to whānau and should not be viewed or treated as separate, isolated or disconnected. Whānau, hapū and iwi must be involved in conversations about their children and their learning (Ministry of Education, 2017).

In 2013, the second phase of Ka Hikitia was released following Me Kōrero – Let’s Talk! Survey (Ministry of Education, 2018). It was released as Ka Hikitia – Accelerating Success 2013–2017. This document is critical to this study as it is an important
foundation of how to create and maintain productive partnerships. Of further importance is the critique and theory that raises the essential and urgent nature of academic success for Māori learners.

Ka Hikitia would be more likely to make traction in schools who are working in conjunction with hapū and iwi. Productive relationships will ideally involve hapū and iwi who are able to contribute to what children learn about the tribal regions they live in and connect to. Having Māori involved in policy decisions and the strategic direction at a school Board level gives Ka Hikitia traction. This involves and empowers whānau and gives them the say in education that was missing for generations of Māori (Ministry of Education, 2017).

**Summary**

This chapter investigated some of the current literature from New Zealand and international sources regarding whānau engagement and the effects of home-school partnerships on teaching, learning, and achievement. The focus on this chapter was on the impact parental engagement can have on Māori students’ achievement.

Literature associated with digital learning/e-Learning is explored where the literature relating to the potential benefits and limitations of digital learning on teaching and learning was examined. This showed a shortfall of academic research into the effect of digital technologies on academic achievement. Although it is widely recognised that digital technologies can increase engagement, the effect of digital technologies directly related to academic success still needs further investigation (Hartnett, 2014).
Section 4 - The Research Approach

Introduction

This research project is a mixed method single group case study which uses a computer assisted self-administered questionnaire and a focus group to collect data. Data collected is a combination of qualitative and quantitative data that explores the effectiveness of a series of three whānau connection workshops to increase engagement with whānau to assist their child’s learning through digital technologies. A mixed method case study was chosen as the best way to answer the research question:

1. How does an initiative to introduce whānau to digital technologies used in the school affect school/whanau relationships?
2. Can the initiative increase links between the school and whānau in terms of student learning?

This research was completed in response to a common problem around New Zealand and the world more generally, in terms of encouraging whānau to be more informed and thus engaged in their children’s learning. The school that this research was undertaken in has had difficulty engaging whānau in the use of digital technologies since rolling out one to one devices five years ago in all of the senior school.

Overview into educational research

Creswell (2008) describes educational research as a process of identifying a problem, reviewing literature, collecting and analysing data, forming some conclusions and communicating the findings and conclusions to participants in the educational community. This is commonly known in New Zealand as teaching as inquiry. The New Zealand Curriculum defines the use of the inquiry cycle as “Since any teaching strategy works differently in different contexts for different students, effective pedagogy requires that teachers inquire into the impact of their teaching on their students” (Ministry of
Education, 2007, p.35). The focus for teaching as inquiry or educational research is to improve educational outcomes for all students by reflecting on practice and pedagogy.

Educational research gives the researcher the opportunity to explore ways of improving current practice and theories or to verify previous studies in a specific educational setting or with a particular group of learners (Creswell, 2009). Research provides opportunity to add to, and explore gaps in knowledge, verify earlier findings together with adding different perspectives and potentially provide opportunities to empower marginalised groups and provide a more balanced view of education (Creswell, 2008).

**Practitioner research**

Menter, Elliot, Hulme, Lowden, & Hall (2011) describe practitioner research as, when the person undertaking the research is both the researcher and the practitioner. This is often a teacher researching within their own practice. Burton & Bartlett (2005) states that “practitioner research in education can be seen as any research carried out by teachers into aspects of their work” (p.46).

My involvement not just with the school community but also outside of the school community creates a familiarity that has built up a trusting relationship with most participants. This trust allows whānau participants to feel at ease to re-engage in a learning environment that they can confidently engage with. However, knowing me could also have its disadvantages, such as participants perhaps not wanting to give feedback that might be viewed as criticism of the initiative, in fear that it may offend me.

**Kaupapa Māori**

Drawing from a Kaupapa Māori approach to research was essential in the study as the majority of the school whānau and students are Māori. A Kaupapa Māori approach to education is based on Māori achieving Māori aspirations, learning through Māori cultural practices, validating Māori knowledge, addressing power imbalances within the classroom and the school and allowing Māori students to be Māori. Cram (2013) explains
Kaupapa Māori research can facilitate the revitalization of traditional constructions as well as the formation of new constructions of what it means to be Māori within Aotearoa. The role of researchers is therefore twofold: the affirmation and validation of Māori world views and the critique of Pakeha/colonial constructions of Māori (p. 313).

Bishop, Berryman, Tiakiwai and Richardson (2003) explain that a Kaupapa Māori practice recognises Māori cultural aspirations and ways of knowing rather than those enforced upon them by the dominant culture. In the New Zealand education system, the dominant culture is New Zealand Europeans. Penetito (2010) describes that a Kaupapa Māori approach uses Māori knowledge as the base for education, drawing on Māori cultural practices. Pihama, Cram, and Walker (2002) define a Kaupapa Māori approach as being about Māori and being Māori and about having a unique view of the world. This definition is supported by Bishop and Glynn (1999) who advocate that a Kaupapa Māori approach authenticates Māori knowledge, Māori teaching and learning pedagogy, and Māori identity. Cram (2001) also believes that a Kaupapa Māori approach allows Māori to critique western worldviews and gives Māori the opportunity to promote a Māori worldview.

A key component of a Kaupapa Māori approach is often articulated as whānau-led initiatives, where whānau aspirations and Māori worldviews are at the fore-front of learning. Whānau aspirations are centred on children’s learning and success where whānau set their own goals. It is not about Māori trying to achieve goals set by another culture (Durie, 1998). Bishop and Berryman (2006) discovered that when Māori are able to set their own goals they are more likely to achieve them, and this empowers Māori because they can be successful as Māori as they do not have to negate their Māori culture or worldviews to be successful. Johnston (1997) explains that goals that are set by the dominant culture for Māori, are based on the dominant culture’s norms, which disempowers and isolates Māori because it delegitimises Māori knowledge. Macfarlane (2004) found that with whānau participation in research it helps to counteract the uneven
balance of power between the education sector and Māori. In Kaupapa Māori educational research whānau can share with researchers what they want their children to learn and what knowledge is essential to them. Cram (2013) describes this as Kia Mahaki, “sharing of knowledge, expertise, networks, and so on with a community so that, for example, they are better placed to access research findings and put them to use for the community” (p. 317). This is about showing humility when sharing knowledge and acknowledging that all parties, researchers and whānau have valuable knowledge, experience and expertise to share.

A case study

The primary objective of this research is to explore if digital technology workshops improve whānau understanding and involvement of/with their child’s learning. This study adopted a mixed method single group case study so the researcher could explore whānau perceptions towards their engagement with their child’s learning using digital technologies before and after taking part in the series of three digital technologies workshops. The Journal of Mixed Method Research defines mixed methods research as, research in which the investigator collects and analyses data, integrates the findings, and draws inferences using both qualitative and quantitative approaches in a single study or program of inquiry (Clark, 2008). A mixed method approach was decided upon to gather a more in-depth and rich cross section of data from the participant’s perceptions of the workshops and their understanding of their child’s learning, involving digital technologies. A mixed method also gives the researcher the opportunity to collect and examine both qualitative and quantitative data. Each data form in itself gives the researcher quality data but when used in conjunction with each other, gives the research a greater depth and richness. As explained by Creswell (2008) mixed method research provides “both quantitative information about magnitude and frequency as well as qualitative information from individual perspectives from participants and the context in which they were commenting on the research problem” (p. 527). Dawson (2002) believes that combining both qualitative and quantitative research is what many researchers believe to be a good way of approaching research, as it enables you to counteract the weaknesses in both qualitative and quantitative research.
Qualitative research

The majority of data collected in this study is qualitative as the study is exploring participants’ opinions and perceptions to whānau workshops. “Qualitative research is generally exploratory in nature, not starting with a hypothesis that needs confirmation, but allowing issues and questions to emerge as the study takes its course” (McDonald-Brown, Laxman, & Hope, 2016, p. 6). This research is based on a small sample group that has undertaken workshops that hope to meet a need where whānau engage with digital technologies used in their children’s learning. Qualitative data uses purposeful sampling of a group that have all experienced a central phenomenon (Creswell, 2009). This research looked at creating an initiative to meet the need of whānau engagement using qualitative data sampling as one of the tools. Qualitative methodology provides tools for researchers to study complex phenomena within their contexts, if applied correctly, it becomes a valuable method to develop theory, evaluate programs, and develop interventions (Baxter, & Jack, 2008).

As explained by Baxter & Jack (2008) qualitative research is an approach to research that facilitates exploration of a phenomenon within its context using a variety of data sources such as questionnaires and focus groups or interviews. This ensures that the issue is not explored through one lens, but rather a variety of lenses which allows for multiple facets of the phenomenon to be revealed and understood.

For a study of this kind where the researcher works directly with a small group to explore perceptions and experiences in relation to digital workshops, the researcher will be in the position to collect in-depth qualitative data. Dawson (2002) agrees with this when discussing qualitative research that it explores attitudes, behaviour and experiences through such methods as interviews or focus groups, it attempts to get an in-depth opinion from participants, as it is the attitudes, opinions and experiences of the group and the individuals which are important: fewer people take part in the research, but the contact with these people tends to last a lot longer.
This study explored and investigated the perceptions of whānau participants and their experiences of the digital technology workshops aimed at increasing their level of knowledge/engagement with their children’s learning. Through the focus group and the questionnaire, the whānau participants can express their feelings and beliefs. As expressed by Stewart et al. (2008, p.35) “qualitative approaches are commonly used to explore, interpret, or obtain a ‘deeper understanding’ of certain aspects of human beliefs, attitudes or behaviour, such as people’s personal experiences and perspectives”.

Data collection

Data for this research project was collected using two self-administered computer assisted questionnaires and a focus group. Alasuutari, Bickman & Brannen (2008) portrays that when using computer-assisted interviewing, the interviewer gives the respondent the computer for a short time allowing them to complete the questions. The interviewer is available to answer questions if needed by standing at a respectful distance. Questionnaires were completed at the start of the first workshop and again at the completion of the last workshop. Questionnaires were completed during the workshops to ensure that all questionnaires were completed by the participants and to get 100% completion rate from the participants. This also gave the participants the opportunity to seek guidance from the researcher if they were unsure of the meaning of the questions or of the wording of the questions. Group-administered questionnaires can be seen as a hybrid between interview and mail survey, combining the advantages of both methods; providing enough privacy for subjects to answer more freely, and provide available assistance when needed (Alasuutari et al, 2008). Participant’s opinions and perceptions towards engagement before and after the workshops will show the level of engagement as seen by the whānau participants themselves.

According to Creswell (1994), research design is about providing a framework for the collection and analysis of data. This research adopted a mixed method approach. A google form questionnaire was used to collect information that could otherwise be collected using an individual interview approach. The researcher decided to use questionnaires instead of interviews, as it is quicker to administer questionnaires than
one to one interviews. As the participants are volunteers giving up their own time to attend workshops, the limited time the researcher has with them is time-bound, therefore it was felt the time is better spent in the workshops learning new skills rather than asking them to give up more time to be interviewed at a later point in time.

**Questionnaires**

The questionnaires were composed of 15-17 questions that gauged the whānau participants’ perceptions (opinions and experiences) of their engagement towards the use of digital technologies as a learning tool and the use of digital tools to better engage with their children’s learning. It was also used to collect information on the effectiveness of the programme from a whānau participant perspective. Questionnaires recorded responses from each individual prior to the workshops starting, they were then used to compare to their responses gathered from the questionnaires post workshops. Although responses were not anonymous, all responses have been anonymised for the purpose of writing this thesis.

Having the questionnaire as one of the learning intentions for the workshops doubled as a learning opportunity to demonstrate how we could use Google forms as a learning tool in the classroom as well as a data collection tool. A Google form was chosen as opposed to using a Survey Monkey or other online tools because of the ease of use and as it is a tool that is used by the students in their learning.

A disadvantage of using a questionnaire over an interview was that you are limited to the responses that the participants give. Answers can be brief and don’t give enough information. Whereas in an interview the interviewee is able to ask further questions to get more information.
Focus group

At the completion of the workshops a focus group of three of the participants was undertaken. Initially there was to be four people participating in the focus group however one participant had to withdraw the morning of the focus group due to health issues. It was decided however to continue with the focus group, as it was difficult to coordinate the right time for all members to be able to attend. I felt that sufficient discussion could be achieved with the three participants who were able to attend. A focus group was chosen as a data collection tool because of the ease of use to collect qualitative data from a group of people. Vaughn, Shay Schumm, & Sinagub (2013) believe that the reasons many in the educational research field have chosen to use focus groups is because (a) variety and versatility for both qualitative and quantitative research methods, (b) compatibility with the qualitative research paradigm, (c) opportunity for direct contact with subjects, (d) advantages of a group format.

The focus group enabled a deeper exploration into some of the responses collected in the questionnaire, to seek clarification and more information where some of the answers were vague or brief. It also facilitated discussion around engagement and the use of digital technologies to assist whānau participants become familiar with their children’s learning. Focus groups can be used for generating information on collective views, and the meanings that lie behind those views. They are also useful in generating a rich understanding of participants' experiences and beliefs (Gill, Stewart, Treasure, & Chadwick, 2008).

The focus group was audio recorded for transcribing purposes with the permission of the focus group participants. All transcribing was undertaken by myself. The bonds and relationships developed over the three-week period of the workshops enabled the participants to openly share their opinions and perceptions on the topic without the feeling of being judged in anyway.

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4 See appendix 5 - Post research focus group interview schedule
Data Analysis

All participants completed two questionnaires during the workshops. This provided, pre and post data. As this was a computer assisted self-administered questionnaire, Google Forms was used to assist with the analysis. Data was then presented in graphs and tables, this provided relevant and succinct facts about the participant’s perceptions towards the workshops and engagement. The data that was numerical and factual gave a clear and precise representation of whānau views of their engagement with their child’s learning. The surveys also asked questions that collected qualitative responses, the participants were asked to give a short written answer. Either a sentence or a short paragraph.

Analysis of the interviews and focus groups took a thematic approach. Thematic analysis (TA) is a widely-used qualitative data analysis method. It is one of a cluster of methods that focus on identifying patterned meaning across a dataset. The six steps of thematic analysis are as follows; familiarization with the data, coding, searching for themes, reviewing themes, defining and naming themes, writing up results (Allen, 2017). The participants’ responses from questionnaire was collated into one document for ease of use and to better identify the common themes throughout. The data collected here enabled the researcher to develop questions to be asked during the focus group, to delve deeper into the information gathered through the questionnaire and get more clarity of responses where needed.

For the focus group data, the six step thematic analysis process was used to identify and analyse themes and sub themes. After the focus group was completed the recording was listened to and transcribed on a computer as a transcript the next day. Extra attention was given to listen and record the secondary conversations and comments. Once the recordings of the focus group were transcribed, the typed up transcripts were cross-checked with the recordings to ensure that the typed data accurately reflected the recorded interviews.
The first part of the data analysis reviewed the data in a general sense by reading the transcription in its entirety to get an overall picture of the data. Once this initial review of the data had been completed, the data was tentatively coded into themes that were a mixture of preconceived themes/concepts identified in the literature and responses relayed in the data where participants’ ideas and perceptions related to these themes. The themes/concepts were then identified by highlighting the themes in different colours and writing notes and ideas in the margin (Creswell, 1994).

Following the initial coding, data was then organised into sub-themes by removing individual themes from the data and putting all the same highlighted themes/concepts together. The data was then analysed to identify any ideas that were within a theme to create sub-themes. The sub-themes and major themes were then analysed to see how or if they were connected to each other and how they related to the main research question.

Participants

Nine volunteers participated in this research. The original goal was to have 20 whānau members participate in this research. All participants were mothers of students in years 4 to 8 at the school where the workshops/research took place.

Twelve whānau members expressed interest through responses to advertisements in the school newsletter, on the school Facebook page, letters home to all senior students’ whānau and through word of mouth. After expressing interest, I either rang the volunteers or met with them at school to discuss the requirements of the workshops. They were then given the participant information letter and the participant consent letter to sign. Three volunteers were excluded from the research due to two having the children that were too young to meet the criteria of being in year four to year eight, and one volunteer being unable to attend one of the workshops.

The workshops started with nine participants. One of the participants dropped out after the first week as she reported that she found the content to be too easy for her and the
pace of the workshop wasn’t moving fast enough for her needs. One other member pulled out with one week to go, due to her father being ill. Four of the participants also volunteered to take part in a focus group at the conclusion of the workshops.

As I am a teacher at the school where the research was undertaken for the last 7 years, I am known to all but one of the participants as I have taught one or more of their children. This put the participants at ease as there was already a prior relationship developed through the teaching of their children in previous years. A disadvantage of this is that it has the potential for participants not wanting to be completely honest as there could be a perception that it may damage the on-going relationship.

**Ethical Consideration**

Prior to commencing this research, it was important that the ethical approval of the procedures and conditions of research was fully explored, and that the research design fell within the parameters set by the Unitec Research Ethics Committee.

**Minimisation of harm**

In research such as this harm is generally not physical harm but is more likely to involve psychological distress, discomfort, social disadvantage, invasion of privacy or infringement of rights (Israel, 2017). All participants received an information sheet that contained the details about the research intentions and the format of the research project. Israel (2017) believes that researchers are normally expected to adopt risk minimisation strategies which might involve considering whether lower-risk alternatives might be available, and anticipating and counteracting any distortion or misuse of research results that might act to the detriment of research participants. To ensure this and to ensure participants were not in danger of harm, all participants’ questionnaire responses, the recording and transcript for the focus group removed from the recording device was stored securely on my personal computer. The transcript of the focus group was made

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5 see the Participant Information Sheet, Appendix 6
without any additions or exaggerations to the actual recording. One of the participants who was a member of the focus group did not feel comfortable to be videoed, therefore the focus group was only audio recorded. It was made clear to the participants of the focus group that this was a completely voluntary exercise and that they were entitled to withdraw at any time.

**Informed consent**

Before undertaking this research project informed consent was sought from all participants.\(^6\) This was given to all participants with the Participant Information Sheet. It is imperative that all participants have details of exactly what the intentions of the research is and the detail of the data collection processes, for this research it was questionnaires and a focus group. Informed consent is a key principle of ethics and something that needs to be considered whenever gathering data. Informed consent develops through a process of communicating key information about your research to likely participants in order to get their voluntary agreement to participate. There are two different methods of confirming informed consent, oral consent and written consent (Charles & Jensen, 2017). Written consent was gathered from all participants in this research. As the research was undertaken within a New Zealand public primary school it was vital that institutional consent was given by the Principal on behalf of the Board of Trustees.\(^7\)

**Anonymity and confidentiality**

To avoid participant’s possible concerns about being identified they were informed within the Participant Information Sheet that their names would never be published during the research or writing of the thesis. Although when completing the questionnaires, the participants were asked to give their name. The purpose of this was to compare pre and

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\(^6\) see Appendix 7 - Participant Consent Form

\(^7\) see Appendix 8 - Organisational Consent Letter
post data to analyse change in perceptions and opinions. Participants were assured that all responses would be anonymised when writing results.

Although participants within the focus group knew each other, the transcript and summary of findings was recorded using pseudonyms. Many ethical codes outline the importance of anonymity and confidentiality, and researchers routinely use pseudonyms as a means to this end (Ogden, 2002). All participants were asked and agreed that everything that was said during the focus group was not to be repeated outside of the focus group. This is to safeguard confidentiality of the participants and give participants the confidence to openly and honestly share their perceptions and opinions of the topic. To guarantee the confidentiality of the focus group it was recorded using an audio recording device and transcribed by myself. The transcription was made available to all members of the focus group to certify that what was transcribed was accurate in representing what was said and to provide opportunity for participants to amend or withdraw comments made. However, none of the participants wished to do so.

**Procedures**

*Stakeholder engagement* – Throughout this research project, I have continued to engage with various stakeholders. I have had continual conversations with the school Principal as the overseer of the school about the project and the use of the school and the schools’ resources. Teachers had been consulted up until the running of the workshops to ensure the content of the workshops is current with the practice in the classroom. Engagement with the school whānau was completed prior to submitting a research proposal to gauge the need for the programme and see if there was genuine interest to attend workshops and participate in research.

Continual communication with the schools local Kaumatua and Resource Teacher Māori(RTM) has ensured that the research project is undertaken in a culturally responsive way and aligns with Kaupapa Māori research principles. This has been a vital communication link for myself as a large learning area for me.
Summary

This section explains the rationale of choosing a single group case study approach, linking literature and exploring the role of qualitative research as an overview of the research. The use of a self-administered computer-assisted questionnaires and a focus group to collect data has been explored and justified the data collection tools. Data is analysed using thematic analysis.

This section discusses how participants were selected and recruited. Validity and ethical considerations are also presented in this section of writing. The chapter also explores kaupapa Māori principles and discusses the importance of kaupapa Maori within a New Zealand context.

The section concludes with the procedure as to how the study unfolded. I felt that it was important to have this here as it gives an understanding as to how the study eventuated and the steps to include whānau in the process of designing and implementing the workshops. This shows that the initiative was done in collaboration with whānau.
Section 5 - Findings

This section presents the research findings. Major themes and sub-themes drawn from the research data are discussed. Pseudonyms have replaced participant names to protect participant identities.

Figure 1 - Elements to increase engagement

The above diagram has been created as a visual representation of the key themes identified in the data collected. It is essential to make it clear that the results are concerned with whānau engaging with their child’s learning through the use of digital technologies, not whānau engagement with the school. The yellow boxes illustrate the five themes that the participants have identified as the aspects that help to increase engagement through the use of digital technologies. They are: confidence, knowledge, resources, relationships, specifically designed programmes. The red shape at the bottom represents that if the five aspects are present then the workshops will have a positive
influence on improving engagement when using digital technologies. The following paragraphs will discuss these themes in more detail and how the data from the whānau relates to these themes.

**Confidence**

Lack of confidence was a key theme identified as a barrier for whānau for not engaging with their children through digital technologies, when confidence increased it was also identified as a fundamental attribute for whānau to engage with their children.

“Not very confident. So if I am more educated about what technology is being used during class time, then I am more than happy to incorporate it into our regular home routine.” (Participant B. Pre-workshop questionnaire)

I am more confident now than when you introduced the apps, and you explained that they are educational and stuff, it takes that stigma away from technology from just being a way to brainwash our kids and stuff like that. (Participant D. Focus group)

Participant D acknowledges that originally their perception of digital technologies was not necessarily related to their child’s learning, but potentially taking the thinking out of learning or that digital technologies are used as a tool to indoctrinate ways of thinking. They are now more informed and confident to use digital technologies as a way to enhance learning experiences.

“I am more daring and confident now to find out more especially with educational tools, they’re just mind-blowing.” (Participant C. Focus group)

Some participants had very little knowledge of how to use their technology at home as educational tools and not just toys.
In the initial pre-workshop questionnaire, participants reported that their confidence was relatively low when using computers to support their children. Seven of the participants indicated moderate to low confidence levels to assist their child with learning using digital technologies. Two of the participants of the workshops stated that they were very confident to use digital technologies when helping their children with their learning. These two members, however, were the two who stopped coming to the workshops after the first workshop as they felt that the content was not pitched at a high enough level for them to enhance their learning.

The following graph shows the results from the pre workshop questionnaire, where participant’s reported their level of confidence when helping their children to use a computer for school work.

**On a scale of 1 to 5 How confident do you feel to help your child with their schoolwork using a computer?**

![Figure 2- Pre workshop questionnaire graph 1](image)
Four participants rated their confidence as very high when there are no computers needed to help their child with their learning. This shows that while whanau participants had some considerable overall confidence in supporting their child in their school work in general, their confidence ranking dropped when computers were the medium through which the school work was being done.

When asked about their confidence to use digital technologies for their personal use, seven of the participants reported their confidence as moderate to high. This shows that although they are confident in their use of technology for personal use i.e. social media, their lack of confidence is more significant when using the educational apps to engage with their child’s learning.
When participants were asked to describe their confidence when helping their children with their learning using digital technologies they had mixed feelings towards this and expressed that they enjoyed helping their children but often confidence towards using technology was something that inhibited them from doing so.

"Bit scary for me when I am not in my comfort zone". (Participant C. Pre questionnaire)

These comments show that participants require practical, hands-on guidance to feel confident with new technologies. Confidence was a standout theme in the pre workshop data as key barrier to participants using digital technologies for learning within the home.

Following the workshops participants reported an increase in confidence, this was demonstrated in their responses to the questionnaire and the comments made in the focus group. This graph shows how they rated their confidence levels to use digital technologies to help their children with their learning following the series of workshops.
In the post-workshop questionnaire, there were only seven respondents instead of nine. In addition to this, the two who gave the response of being very confident were the two who did not complete the workshops making them ineligible to complete the post-workshop questionnaire. Therefore, this graph shows that there are now only four participants who gave a moderate to low confidence rating whereas prior to the workshops seven responses made gave a moderate to low rating.

Respondents were also asked to give their feedback towards using digital devices as a learning tool post the workshops.

“A lot more confident in using the apps that they are using at school”. (Participant G. Post questionnaire)

“Although not fully confident in the mannerism of technology, I get by with the little amount of knowledge I have.” (Participant C. Post questionnaire)

“Okay, still not completely confident but this has helped that somewhat.” (Participant E. Post questionnaire)
“A lot more confident and makes it way easier.” (Participant H, Post questionnaire)

Even though the workshops have not been enough to improve confidence levels entirely, participant 2 and participant 3 now report that they feel like they are confident enough to give it a go and engage with their children and their learning through the use of digital technologies. This is shown below where no responses were provided in the not confident section. There were two people who responded saying “I will now attempt to help” and six responded saying “I look forward to learning alongside them.” This highlights how that even though there were only small gains made with the introduction of workshops for parents, that this was significant in terms of encouraging further interest in their understanding of the digital technologies used by their children in their learning.

![Figure 6 - Post workshop questionnaire graph 2](image)

Post the workshops, confidence has grown in the participants use of digital technologies when using them with their children. Participant 7 and participant 8, still expressed that they are still not confident enough to use digital technologies when helping their children with homework. When asked in the focus group why a number of the participants had
said they still wouldn’t use digital technologies once a week to assist with their child’s learning their responses are as follows;

“It’s my element to just use here (pointing to her head), or use what I know or if I want to know something I'll open up a book, yeah that's it, what I’m comfortable with.” (Participant C. Focus group)

I'm the same as well; I'll read, maybe cos I wasn't taught technology, so I just go with what I'm comfortable with or what I already know how to do. If I knew more about computers, then I would use them more. (Participant B. Focus group)

The statements above suggest that participants are unfamiliar with the use of digital technologies in relation to learning. If they knew more and were more confident in the uses for learning then possibly, this may increase the likelihood of using technology to help with learning.

The findings here would suggest that confidence is a crucial component for participants to improve engagement with their children’s learning through digital technologies. For some, the workshops are just the start of their journey to be confident enough to use digital technologies regularly.

**Skills**

Initially in the stakeholder feedback survey, whānau and teachers both identified skills or lack of skills when using digital technologies as the most significant inhibiting factor that was preventing whānau from using digital technologies to engage with their child’s learning. In the questionnaire that the participants completed prior to undertaking the workshops, they indicated that their reasons for wanting to participate in the workshops was to gain new skills.

“To acquire a better understanding of why/how technology is being used by our children.” (Participant B. Pre questionnaire)
“To better equip myself to help my children and grandchildren.” (Participant C. Pre questionnaire)

“To understand more about what my child is using at school, so then I might be able to help when there is something they are stuck on without looking so dumb lol.” (Participant E. Pre questionnaire)

“To learn more about the programme to better myself and my child.” (Participant H. Pre questionnaire)

“To learn more about how the children work at school and in class, and how I can help them at home.” (Participant I. Pre questionnaire)

These comments demonstrate that overall the participants report that their desire to learn more about technology is so that they can support their child’s learning. It also highlights the want for more information and skills in this area.

When participants were asked if they knew of ways to use digital technologies prior to undertaking the workshops, responses were limited. Three participants listed “Chromebooks” as their only response. One member said “no idea.” The remaining five were able to record one application each; they were; Studyladder, Sumdog, Google, and the STEPS reading programme. Participants were asked this to gauge their level of understanding and to know what information they already knew.

Following the series of workshops, the participants reported through the questionnaire that they were more confident in their skills. Although the level of knowledge and skill had improved, they were still aware that they had a lot more learning to do. For some, they felt like they were trying to catch up with their children. When asked, in the questionnaire, how they felt after learning new digital skills the participants responded in positive ways. They reported feeling ‘proud of myself’ (participant A), ‘encouraged to
learn more’ (participant B), ‘awesome, but need to learn more’ (participant F), ‘buzzy as’ (participant H), ‘bit more educated especially in the classroom environment (participant D). This was expanded on in the focus groups where participants responded in the following way;

“For me, it has enticed me to learn and to want to know more especially when you mentioned the coding.” (Participant B. Focus group)

“It’s just what you can apply it to aye, it’s just for me, it’s opened another door, and for me, I’m 51 years old, so it’s like, whoa!” (Participant C. Focus group)

As the participants have become more knowledgeable and learnt new skills, it has helped the participant’s understand the way technology is used in the school and; resolved prior perceptions of digital technology use within the school. Many had not seen the merits of using technology themselves although they trusted the school to be using digital technologies as a learning tool. Now that they have more skills and know some of the uses of technology as an educational tool, some participants reported that it has changed the way they use digital technology at home.

For me, it was just a babysitter or toy and entertainment that was how I looked at it and a big hole in my pocket at the end of the month. I never knew that it could actually help me to change the concept with my son. (Participant C. Focus group)

This comment shows how this participant widened his/her view of technology beyond their perception of technology being used for gaming. Other participants noted how they had become more conscious of what their children were doing

It has made me conscious, I make sure I put my head over and have a look what he’s up to. Now that he knows that I know certain things, he will say to me Mum I’ll show you this, and he’s a really good teacher, and this is helping me get on the same plane as him. (Participant C. Focus group)
Participant B explains how becoming more skilful also helps her to ensure that they keep their children safe while on their devices. Being aware of what is appropriate and educational allows whānau to direct the preferred activities that their tamariki spend their time on using devices.

*I've had Internet on my phone, and I've used it for things like social media and Googling yes, but I never thought of using it for education or for learning with my girls. But now that I know that things are available……now that I know there are particular ones and these are the ones that kids are using at school, I'll incorporate that into our home program, but prior to doing the workshops I wouldn't let them on it.* (Participant B. Focus group)

When parents know what their children are using computers for at school, they are more likely to trust these sites for their children to use at home. The workshop also familiarises parents with good learning apps for their children.

As the workshops only ran for a total of four weeks, it is unlikely that the participants were able to gain all the skills and information needed to confidently assist their tamariki with their learning. However, it is hoped that the skills and information they have gained will be enough to begin the learning conversations with their tamariki and; possibly ignite a passion to want to learn more.

**Resources**

All participants of the workshops had access to digital devices at home. In relation to resources, the participants gave the following feedback,

*I honestly don't know anyone who doesn't have access to the Internet. They might not have a computer, but they have Internet on their phones, or they have devices, and there's free Wi-Fi spots in town*. (Participant D. Focus group)
It is important to note that in low socio-economic communities even though people may have devices (phone, iPad, etc.) it doesn’t mean people will always have the budget to sustain the use of these tools. In the community where this study has been undertaken there is a high percentage of seasonal work where income levels for whanau can be unpredictable. One participant talks about affordability,

“The cost of technologies is a big one because you have to have the Internet and then you have to have devices to use them on although they are getting cheaper.”
(Participant C. Focus group)

As well as resources being a barrier, participants mentioned that not knowing what resources/apps to use to help their children was a significant barrier to supporting them at home. Participants reported that knowing what to use at home and how it links with the learning at school helped participants to build the knowledge needed to better understand and engage with their child’s learning. After completing the workshops, the participants involved in the focus group expressed that they now know where to go on the internet and what ways they can use digital technologies and online resources to help their children.

I know where to look to find different apps and games to help them. I needed it to be introduced to me by an adult not by a child for me to be ok with it. Prior to being introduced to them I would not give them a go, on my own. (Participant D. Focus group)

We weren’t brought up with the technology we weren’t even allowed to use a calculator, so it’s like trying to teach a dinosaur to use technology, well for me anyway. But after just even the few looks at it and it made me consolidate what I knew. I didn't realise you could use it as much as an educational tool; I thought it was just for Googling. (Participant C. Focus group)
Participants were made aware of the school’s website that contains a page called “Student zone”. This page has links to the most commonly used sites and apps that students at our school use. The participants reported that they appreciated this page as it was specific to what their children use at school and was something they could continue with at home. It allowed them to save time and not need to search all over the internet for sites that are appropriate for their child to use.

When asked about some of the highlights of the workshops participants reported that; they now know what their child uses at school and that can also be used at home, (Participant C. Focus Group). Another said ‘my children were happy that I knew where to go and that I was trusting them to use the sites that I had learnt in class’ (Participant F. Post questionnaire)

Participants reported that trusting websites and resources was essential for them, as there is a vast amount of content and sites on the internet for educational purposes. Not all sites are appropriate for learning or follow on from learning at school. If participants have the information about what sites are used at school, they are more willing to trust it at home.

The use of Google docs and Google drive means that students can continue their learning anytime and anywhere. It also means that parents can see the progress their child is making and make comments on their child’s work.

"I was interested and excited that I could go into my boy’s folder and have a look at his writing. I felt a bit naughty like I was stalking him and his work. But when I learned that I could leave comments for him to see how proud I was of his mahi it made me feel way better. (Participant C. Focus group)"

“Actually being able to see what she had completed in class that day meant that, me and her Dad were able to talk to her about her writing. She could tell us what she was writing and why”. (Participant B. Focus group)
Relationships / Whanaungatanga

This section starts by acknowledging the prior relationship between the teacher/researcher and the participants, and the effect this had on the workshops. It then speaks about how the participants have suggested that their new knowledge/skills have helped them to work with their children.

Participants acknowledged that due to having a positive relationship with the teacher/researcher, this encouraged them to want to be part of the workshops.

“I signed up because Jeff said it was part of a thesis he was doing, I thought, oh yeah I’ll have a look.” (Focus group)

I didn’t know what it [workshops] was, I saw it advertised but I didn’t know what it was but it said it was helping you [researcher] so I was like, yip. Then I was excited cos it had something about technology, and I have no idea… so I thought, I’d be interested in finding out a bit more. (Focus group)

Participants reported that the workshops have also helped some participants strengthen their relationships with their children as they now have a shared knowledge and interest in digital technologies.

That’s what it’s [workshops] doing for me and my son you know; he’s buzzing that I even hopped on Gamefroot or Kahoot and all that, so he’s quite excited that we can try and make a game together because he can help me with a few things. (Participant C. Focus group)

When discussing how the workshops have helped a participants’ relationship with her kids, she said,
“I want to be experiencing it with my kids, because it’s a way we can have fun together and we are learning”. (Participant D. Focus group)

Participants were encouraged throughout the four weeks of the workshops to try things out when they got home with their kids. The participants revealed that this was a positive experience that made their kids proud of them. This encouraged them to want to learn more and be adventurous with their kids.

“I got to use Sumdog and Storyline online, and I used these for all three children. It saved me time in finding a safe site to access, and they were sites that the children use on a daily basis”. (Participant D. Focus group)

This Mum was sharing about logging into their child’s Google drive from home to look at their child’s mahi completed at school. “I was glad that I got it right in front of him, but it was a very nervous experience for me, my son was like, oh you did it, Mum!” (Participant H, Post questionnaire)

Participants were asked how often they come to school to talk to the teacher of their child. This was asked to get an idea of their current level of engagement with the school and their teacher. As seen in the graph below only one person talked to their child’s teacher at interviews, and unfortunately, one whānau member felt they only spoke to the teacher when their child had done something wrong. The majority of participants reported that they have a moderate to high level of engagement with the school, and reported contact times of as much as once a week.
Specifically designed programmes

The purpose of this study was to explore school based engagement with whānau through the implementation of whānau workshops using digital technologies. The study explored whether the series of workshops offered to school whānau would improve their use of digital technologies to enhance their understanding of their children’s learning. This was a tailored programme developed for this school.

Having a specifically designed programme gave the teacher/researcher flexibility to control the pace and content of the lessons to meet the needs of the participants. One participant explained that after requesting a fourth session ‘we choose what we wanted to learn about and somethings we went over again because we didn’t get it’ (Participant D. Focus group). Being able to control the pace of the lessons ensured that participants felt at ease learning new and often challenging concepts. Participant B stated ‘being from the generation that this doesn’t come naturally, it can be scary, but I didn’t feel that because, I just needed things explained a bit more’. (Focus group)
A positive aspect to creating workshops specifically for this audience meant that the participants in the workshops had an input into the content. Participant C spoke about this in the focus group saying 'My boy kept coming home talking about Epic books, so I asked Jeff, and we learnt all about it and how to use it at home, and I did!' Additionally, the Principal and teachers were able to have a say in what content and skills they felt was important for participants to know and learn. It also meant that during the workshops, whānau participants were able to influence the speed of the lessons and request any content that they wanted to go over again. Participant B mentioned in the focus group how “It [the pace] was comfortable because it allowed you [teacher/researcher] time to get all of us up to par, because every day you had to get us onto the right level again.” Participant C also said when discussing the pace of the lesson “The delivery and how you gave it was really cool because, I like that we could slow down or do it again if needed”.

**Workshop reflection**

A reflection of the workshops and how the participants perceived the workshops demonstrates that the participants found value in attending them.

When participants were asked if the workshops helped to equip them with the skills needed to engage with their children using digital technologies, five out of the seven members rated a moderate to high level of satisfaction with the workshops ability to do so, as shown in the graph below.
Participants were asked if they would recommend other whānau to participate in the workshops if they were to be offered again, all participants said that they would recommend the workshops to other whānau members. One of the members said that they would with some changes. This is shown in the graph below collated from the questionnaire data.
When asked in the focus group if they would recommend others to participate in the workshops, the whānau responded with the following statements “Yeah totally.” (Participant D), “I would like to come back and get into coding a bit more now that I know what it is.” (Participant B)

One member said “I've already started telling a few of my ladies. I even had a couple of Dad's that were interested in the workshops” (Participant C. Focus group). When she spoke of “her ladies” and “dads” she is speaking about an after-school club that she runs on Fridays at the project school for children and whānau of one of the local gangs. Generally, in the past, these whānau have been the hard to reach whānau of the school. Having this mother as an early adopter who has now encouraged her whānau to participate in the next series of workshops gives hope that if these hard to reach whānau will engage with the workshops, then the workshops will have a greater likelihood to achieve the goal to increase engagement with this group in the school through the use of digital technologies.

Participants in the workshops were asked what they enjoyed most about the workshops. The participant's responses were very positive.

“Developing an understanding of what technology is used by my child at school.” (Participant D. Post questionnaire)

“Knowing and learning how to track my son’s school days and what he is up to.” (Participant B. Post questionnaire)

“Games and learning about how to use a computer.” (Participant H. Post questionnaire)

“Learning with other people.” (Participant G. Post questionnaire)
“Interaction with all classmates and meeting with different parents.” (Participant E. Post questionnaire)

“I was very happy, well engaged, fun, fun, fun.” (Participant Post C. questionnaire)

A goal when creating the workshops was to create a culture within the workshops where participants would have fun and learn in a non-threatening way. Participants were asked if there was anything they did not enjoy about the workshops. Once again the responses were very positive. Two members said they were “not long enough” and four members said that there was “nothing” that they didn’t like. One member said, “Game froot wasn’t really my cuppa tea.” (Participant F. Post questionnaire)

Participants were also asked if they had any suggestions for change if the workshops were to be rerun. There was a consensus that they wanted or needed more time and more workshops, six participants wanted more time and more lessons.

“I enjoyed the workshops; maybe next time add a few more classes. The tutor was really good and easy to get on with”. (Participant F. Post questionnaire)

“The way it worked enticed me to want to know more, so yeah I like the little sessions we had. It has awakened my curiosity, so yeah, I’d love to see it maybe run a bit longer”. (Participant C. Post questionnaire)

If the workshops are to be run again, I will increase the number of workshops from four to six sessions, with the content spread over the sessions. This will allow participants more time to grasp a concept and practice new skills. I would also look at running a beginners’ series of workshops and a more advanced series of workshops.

Some discussion was had during the focus group as to the size of the group being just the right size.
It was good, and your numbers were really good it was the perfect size class. I think if you had more it would have been a congestion for you because, we're all like what's happened to my screen! Where did it go! And things like that. (Participant B. Focus group)

“I think if we had more people it would be too much like a lecture and lose the personal whānau feel about the classes.” (Participant D. Focus group)

“I agree if there were more people I would’ve felt bad for always asking for help. For me, I felt comfortable. When I got things wrong I wasn't going to be judged, just helped” (Participant C. Focus group).

As the responses through the questionnaires and focus group were not anonymous, it is realised that it can sometimes be hard for respondents to be completely frank if they didn’t like aspects of the workshops, due to possibly feeling uncomfortable about me as the teacher-researcher seeing their responses. As a teacher-researcher, I am completely mindful of this.

**Summary**

The data showed that the most significant impact for the participants was on improving their confidence to use digital technologies and to use them to support their children’s learning. The workshops also increased their confidence to interact with the school. As the participants increased their skills and knowledge around the use of digital technologies and the applications used by their children in the classroom, they were more willing to try and use digital technologies with their children at home. As workshops were created specifically for the whānau members of the project school, the content was appropriate in terms of how their tamariki use digital technologies. This meant that participants were able to use the skills learnt with their children.

There is now a desire to have more workshops next year to include more whānau members and to build on what has already been learnt by the current participants.
The themes in this chapter will be further discussed in relation to current literature in the following chapter.
Section 6 – Discussion

Introduction

This section will critically discuss the findings identified in the previous section. The discussions will be focused on the themes that emerged from the data that have been identified as key to successful whānau engagement through digital technology as identified through this research project. As discussed, confidence, skills, resources, relationships and specifically designed programmes are all themes that have emerged as a result of this study.

This section will also discuss the limitations of this research and will make recommendations for future research. As the researcher, I will discuss the implications for future practice and how this study will impact on the project school. Discussion will also include suggested changes to the initiative where improvements can be made for the success of any future workshops.

Discussion

In this study, the data gathered from the questionnaires and the focus group identified five areas themes that emerged as a result of the workshops. This section will critically discuss these five themes in relation to current literature.

Confidence

A key theme to come out of this study was confidence. As participants engaged in the workshops and their skills grew, their confidence grew. As their skills grew they felt more confident in checking out what their children were doing and started to have a growing awareness of their learning through digital technologies. Educationally powerful connections with parents and whānau report, conducted by ERO, found that, because whānau had a greater understanding of what their child was learning and experiencing at school, they developed a greater confidence to talk to their children about their school
day and discuss their learning with them. Many of the parents expressed that this improved their relationship with their children (Education Review Office, 2012). As digital technologies are a commonly used learning tool at the project school, upskilling whānau in the use of the digital applications used at school increases their confidence to be able to discuss this with their child and use these applications with their children at home.

Mapp & Kutter (2013) believe that once parents have developed the necessary skills, connections, and confidence, they will be able to engage in partnerships with the school, teachers and their children that will support learning and engagement. Harvard School of Education has stated that when parents and families take part in home-school partnerships or interventions, they have an increase in confidence and self-efficacy. This leads to continued growth and engagement with their child’s learning and ability to work across lines of cultural differences (Mapp & Kuttner, 2013).

An inquiry into case studies within New Zealand schools found that some schools are using technology to strengthen relationships and engagement with families. One example of this from Calder (2014) is the Computers in Homes Programme designed for decile one schools to lift the literacy level of children. The programme provides families with a computer, internet, and training at local schools. Schools that have implemented this initiative have reported an increase in communication between home and school and between teachers and parents. It helps parents to know how they can help with school work at home and make a valuable contribution to their children’s learning. One of the most significant reflections from parents is that it has given them the confidence to help their children and to use computers (Calder, 2014). This confirms the findings from this study that with upskilling in the use of technology, whānau grow in confidence to engage with their children’s learning using digital technologies.

A lack of confidence can be an immense hurdle for whānau members to overcome if they have not had the best experience with education. As reported by Calder (2014), “Many parents said they do not feel comfortable in their child’s school, particularly when their own experiences at school had been negative” (p. 17). Parents and whānau have often
had a negative experience of the education system; when at school they were made to feel “dumb” and often they lack the confidence to engage and interact with schools and teachers on behalf of their children. Many also feel that there is little they have to offer to their child’s learning when they themselves may not have achieved while at school (Education Review Office, Partners in learning: Parents Voices, 2008). One participant said “I never felt comfortable at school, so coming back into a classroom was a scary step for me. But my son needed to see that to help him I could do it (Participant C. Focus group).

Having a culture of ako in the workshops where everyone has the potential to learn and learn from each other was essential. “Some parents fear that they might actually disadvantage their children by becoming involved in their learning. New and varied approaches to meeting with parents are needed to overcome such perceptions, which make parents reluctant to engage with schools/teachers” (Calder, 2014, p. 17).

Skills

Acquiring the skills to use digital technologies or the journey of gaining new skills can increase engagement using digital technologies. This was the number one element that whanau stated had inhibited their engagement being their own knowledge of digital technologies (stakeholder survey). It was the driving factor of this study, to improve skills and give information and in turn improve engagement. Ka Hikitia – Accelerating Success 2013–2017 (Ministry of Education, 2013) says that “for productive partnerships to be successful their needs to be an ongoing exchange of knowledge and information from both parties” (p. 18).

In the workshops run as part of this study, children’s learning at home was actively at the forefront of learning goals, and this was promoted by providing relevant learning opportunities, resources, and support that related back to the learning their children were doing at school. The purpose of increasing the skills and knowledge of the parents was not to replace the teachers teaching but was to give the whānau the skills and information needed to be able to integrate the children’s learning into home activities. This is also
shown in a study by the Education Review Office – Educationally powerful connections (2012) found that successful workshops focused on teaching parents and whānau specific strategies that could be used at home, sometimes the classes were designed to help parents learn practical skills such as English language or computer skills in ways that they can support their child at home (Education Review Office, 2012).

As knowledge/skills increases, so does the parents belief that they are able to contribute and bring their knowledge, expertise and experiences to their child’s learning. Campbell (2011) reports that “Parents who feel more efficacious and who believe in their capacity to influence their child’s performance will exhibit greater involvement in school-related activities. This is seen particularly in respect of literacy and home learning” (p. 11).

Although it is not possible to impart all the knowledge and skills needed in a series of three whānau workshops, enough skills have been learnt for participants to have the confidence to explore and start a journey for themselves into digital competency/literacy.

**Resources**

Participants expressed that another key component to increasing engagement through digital technologies is having the resources available to use. They also said that more than having the digital resources, it is knowing what resources to use at home. (Focus group)

Schools and teachers providing the children's whanau with the resources and clear information needed for homework etc gives whānau the confidence to help at home. “Many Māori parents saw homework as a way of strengthening home-school partnerships. Parents thought that clearer expectations about what was expected of their child’s homework would help them to understand its purpose and the level of involvement they should have” (Education Review Office, 2008, p. 7). If the school can provide the website links to the whānau that are used in class, it negates the risk for the parents to not fully understand what the learning task is. This also gives the children the opportunity to carry on with what they learn at school, at home.
A best evidence synthesis reported that computer-based activities within the home positively correlated to student achievement (Biddulph, Biddulph, & Biddulph, 2003). Unfortunately, not all families have access to computers or the internet within their homes, and this is not something the school has any influence over. The Digital Technologies in Schools study that was mentioned in chapter two stated the disparity between school deciles (Johnson, Maguire, & Wood, 2017). In rural areas such as where this study was undertaken, there is not the availability of cheaper internet options. Some whānau would need to access the internet via satellite due to limited availability via cable. For lower income, unemployed or seasonal workers having regular access to internet connection may not be an option due to the costs associated with being connected.

As well as being a key element to increasing engagement, resources are one of the significant engagement inhibitors. If the resources (devices, internet) are not present in the homes, engagement through digital devices is not possible. When whānau have no access to the physical resources, it is essential that schools either provide or support whānau to access the digital tools/resources needed to use within the home. This may mean providing whānau with the logins required to access Google apps from home, or a list of some sites the whānau can use at home that the children are using at school. Whānau expressed that when given this knowledge from the school it meant that they trusted that their children were learning at home and not just using technology to play. This is however, dependent on the availability of internet within the home.

**Relationships / Whanaungatanga**

A consensus from a number of researchers (Biddulph, Biddulph, & Biddulph, 2003; Bishop, 2014; Bull, Brooking, & Campbell, 2008; Bull A., 2011; Education Review Office, 2012; Education Review Office, 2008) is that for whānau engagement to increase, then positive relationships must be formed with all concerned. For most educational settings there are three key stakeholders, the students, the whānau, and the teachers. When
positive relationships are fostered, all those involved are more willing to have trust in each other. In this study, it was the positive relationships developed by the researcher that encouraged whānau to be involved with the study.

Strong relationships are especially relevant for Māori students and whānau. Since as stated by Emerson et al, (2012) “If positive relationships between teachers, schools, and parents are developed during primary school, parents are more likely to develop confidence about participating in school activities and having an ongoing role as partners in their children’s learning. Parents’ confidence and their knowing their role in learning allows them to engage more in the creation and maintenance of a quality home learning environment” (p. 45).

From a kaupapa Māori view whanaungatanga is critical to building genuine relationships and is defined as “the concept of establishing relationships in a Māori context based on kinship, common locality, and common interests” (Bishop, 2014, p. 6). For whanaungatanga to be created, teachers need to get to know each student as an individual, so as to create opportunities to build mutual trust and respect. It is also essential for the students to learn something about the teacher’s interest and concerns (MacFarlane, Glynn, Cavanagh, & Bateman, 2007).

The relationships that I have developed over the past seven years were important in encouraging people to sign up for the workshops and be part of the first whānau to try this new initiative. Knowing the teacher/researcher gave some participants the confidence to come and learn new skills.

The Ministry of Education in Ka Hikitia (2013) states that to create successful home-school partnerships with Māori students’, parents, caregivers, and whānau; schools need to develop positive relationships that are focused on educational success, then link learning at home with learning at school (Ministry of Education, 2013). This initiative was built on the strong positive relationships that already existed and then began to link the learning that can occur at home with learning that already happens at school.
Improving whānau engagement with a school and with the learning the students are taking part in, requires schools to undertake a multi-pronged approach. There is not one way that a school can reach all whānau. As stated by Education Review Office in the report Partners in Learning: Good practice, “Relationships mattered where schools were successfully engaging families and communities. A commitment to investing time and energy in positive relationships was reflected in how parents and staff interacted through a variety of activities and events. Positive relationships were a necessary part of effective engagement for the benefit of students” (Education Review Office, 2008, p. 20).

As the teacher-researcher, I observed that it is possible that one component to increase whānau engagement is that there needs to be some form of consistent engagement with the school. Although not stated in the data that was collected through the two questionnaires and the focus group, it was observed that the participants in this research all had some form of consistent engagement with the school. Of the participants there were three support staff members of the school, one Board of Trustees member and five mothers who are heavily involved in the school through coaching, school camps, tutoring kapahaka and helping on sports days. Due to there being no data to confirm this, it cannot be listed as a theme that improves engagement in the results section of the thesis but as an interesting observation that may need further investigation in the future.

To create educationally powerful relationships that encourage whānau to have better links with their children’s learning they need to be supported to have the skills and the strategies to strengthen children’s learning. If schools are to support whānau by offering these strategies and skills; there needs to be a relationship present first between teachers and whānau. Bull (2011) suggests that this process needs three steps “improving communication between home and school; building relationships between teachers and families; encouraging families to include “school”-type activities into their homes, for example, maths games, reading together, study time” (p. 4).
Specifically designed programmes

As stated in the findings it was a goal for this initiative to create workshops that met the needs of the learning community at the project school. The project school uses Chromebooks and Google apps for education. We do not offer a one-size-fits-all prescription because any effort must begin by assessing local conditions, assets, and needs (Mapp & Kuttner, 2013). Although this may be a limitation for this programme to be used in other schools, it is essential to the ethos of the study to have created workshops that support whānau to learn about their children’s use of digital technologies at school.

Similar initiatives have been carried out in New Zealand, but specific to their learning community (Education Review Office, 2012). This report said that "technology was also used for learning to enable multiple educationally powerful connections, in the best situations, teachers helped parents understand how to use particular tools and how they could support their child (Education Review Office, 2012, p. 38). These initiatives, often referred to as home–school partnerships, usually focus on strengthening the communication between schools and families. Sometimes the main activity is the school simply giving information about qualifications, student achievement, curriculum developments, school programmes, etc. to families. Such initiatives, though, also often involve the school encouraging families to include school-type activities (for example, maths games, reading together, study time) into their home lives" (Bull, nd, p. 2).

Although the workshops are fairly basic, whānau members stated in the focus group that they wanted to be able to “do the cool things kids do at school not just reading with their kids” (Focus Group). When creating workshops or intervention programmes it is essential that schools consult with the whanau to see what it is that they want to learn. Although some schools communicated information clearly and supported parents to develop strategies to help their child, they did not really listen to parents and develop school activities that reflected the home environments of the students (Education Review Office, 2012).
If these workshops are to be run again, a recommendation would be to ask whānau members before planning the workshops what they want to learn and get an indication of their digital competency levels. This would allow the facilitator more time to prepare the workshops related to the needs of the whānau. Planning would need to be flexible to incorporate identified learning needs of whanau participants.

This study has shown that whānau from the project school are eager to upskill and want to support their children’s learning. As teachers, we need to consistently be creating ways to assist whānau to upskill and give them the information they need to help their children to be successful. It is however essential that the initiatives that eventuate are designed or adapted to meet the specific needs of the schools whānau. Emerson et al, (2012) believe that there are three elements needed when creating an initiative aimed at helping families to engage in learning, they are; creating opportunities for parents to become involved in academic and learning activities in the school, creating an environment at home which is conducive to learning and linking school work to current events and other topics.

As technology changes so rapidly and the use of technology in education develops, there cannot be a one design fits all for these workshops. While the base design of the workshops will stay the same, the digital content will be open to change as new applications and software that aligns with key learning areas become available.

**Workshop reflection**

Although the workshops had a significant impact on increasing skills and confidence, there is still room for more learning. There is a want and desire from the participants to come to more workshops and have the opportunity made available for more of the school whānau to participate. With a number already expressing interest, I will need to look at running workshops again next year with the support and assistance of colleagues.

The members who took part in this study took a risk as early adopters. As this was an unknown and non-trailed programme, it meant that they were taking a chance going into
this study, not knowing if it would be successful or a waste of their time. Having consistent engagement in the school and knowing me as the researcher may have taken away a bit of this risk. Early adopters, is a term widely used in the business sector and is becoming more widely used with educational settings. It is defined by the Business Dictionary as “the first to try new ideas. Early adopters generally rely on their intuition and vision, choose carefully, and have above-average education level. For any new product to be successful, it must attract innovators and early adopters” (Business Dictionary, 2017).

As the workshops are the foundation of this study it was fundamentally important that the workshops were a success and seen by the participants as something they benefited from. Similar initiatives have been used elsewhere in New Zealand to achieve various goals relating to family engagement. The Best Evidence Synthesis from 2002 speaks of such home-school partnerships. It expresses that when such partnerships as these work, the positive impacts range from enhancing well-being, better behaviour and achievement, and helps parents to develop lasting constructive partnerships with their children’s school and teachers (Biddulph, Biddulph, & Biddulph, 2003).

Calder (2014) believes that an important way to improve a child’s development is for the home environment to encourage learning. Some parents need support in furthering their own education, particularly in developing their literacy and numeracy. Schools and teachers encouraging and valuing parents in their roles as parents and as educators of their own children does not just benefit their children; it has an intergenerational effect on the behaviour of future parents and the outcomes of future students.

The workshops created the opportunity for participants to further their learning at home. A school such as the project school that encourages workshops such as this one and the Reading Together programmes shows that it values the contribution that parents make in the education of their children.
The Education Review Office (2008) believes that for engagement between schools and the school community to be successful, schools need to be aware of their communities and responsive to them. In response to the needs of the participants, a fourth workshop was added to the plan. This workshop was for participants to request what they wanted to learn or if they wanted to go over anything again.

**Limitations of the research**

As with any study conducted in a small school there are a number of limitations associated with the findings of this study. Such limitations will be outlined here. Firstly, this was a single group case study with a fairly small number of participants. To know the true effectiveness of whānau workshops to increase engagement with student learning through digital technologies, further case study groups would be of benefit.

As with any initiative that is run using staff from within a school, it can be difficult to find and fund staff to run a programme outside of work hours. This would need to be facilitated by someone who is passionate about digital technologies and sees the benefits for students and the student’s whānau.

**Conclusion**

The evidence presented in this study is the result of participant responses to creating and facilitating a series of four whānau workshops to explore if upskilling whānau in the use of the digital technologies their tamariki use while at school, will have a positive impact on them supporting their children’s learning through the use of digital technologies. The impact of the workshops was gauged by collecting whānau opinions and perceptions through the use of two computer-assisted self-administered questionnaires and a focus group. This data was analysed to identify five themes that are essential to promote whānau learning specific to the use of digital technologies. The findings from this case study have found that in this instance, whānau education initiatives are useful to up-skill whānau in the use of digital technologies to increase their knowledge and understanding of their children’s learning when the conditions are right.
**Future advice**

The following recommendations are made based on the data collected through this study. Other suggestions come from reflections on practice, observations made and suggested improvements by participants in the study.

- Create a programme based on the needs of the whānau. Collect pre-data on capabilities prior to starting the workshops. This is to ensure that the level of learning meets the needs of the class.
- Differentiate the classes. Provide classes aimed at differing skill levels. This will allow better flow in classes where content is focused on participant capability.
- Be flexible. If the whānau members need more time on a concept or skill, give more time. Have a list of everything to cover, don’t be restricted on what needs to be included each lesson.
- Increase the number of workshops. One hundred percent of participants reflected stating they wanted more sessions as they felt they had a lot more to learn.
- Relationships are key. Spend time building whanaungatanga with the whānau. Have fun and listen to their needs. Value their knowledge and opinions.
- Use a variety of facilitators. Schools have many experts in different areas of technology, utilise their skills. This also lessens the commitment needed for one staff member.
- Have fun. Just like kids, adults also want to have fun while learning.

This study set out with an aim to explore if a series of workshops designed to upskill our whānau participants on the use of digital technologies related to their children’s learning would increase their engagement with their children’s learning. With the data collected in this study from the opinions and perceptions of the whānau, these workshops have had a positive impact on increasing whānau participant’s knowledge and confidence which as a result has increased their engagement with their child’s learning.
References


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**Personal Communication**

Personal communication, Principal, 10 February, 2017

Personal communication, Principal, 18 March, 2017

Personal communication, Teacher, 10 March, 2017

Personal communication, Workshop Participant, 20 July, 2017
Appendix 1 – Original Stakeholder survey

As part of my study leave this year I am completing research into whānau engagement. I would really appreciate you filling in this quick survey. All responses are anonymous and will be used towards my research.

Thank you,
Mataua Jeff Dunn

1. What year is your child/children in?
   - [ ] Year 1
   - [ ] Year 2
   - [ ] Year 3
   - [ ] Year 4
   - [ ] Year 5
   - [ ] Year 6
   - [ ] Year 7
   - [ ] Year 8

2. On a scale from 0-10, how much do you know about how your child uses a computer at school?
   - [ ] 0
   - [ ] 1
   - [ ] 2
   - [ ] 3
   - [ ] 4
3. If you knew more about how your child uses a computer at school, would this help you to help them at home?
   - Yes
   - No

4. Would you like to know/learn more about how your child uses a computer at school?
   - Yes
   - No

5. Would you attend workshops to learn more about how your child uses their computer at school?
   - Yes
   - No

6. If you answered yes to the above question, what would be the best time to run workshops?
   - While your child is at school
   - Between 3pm and 5pm.
   - After 5pm.
Appendix 2 - Workshop Design

Workshop 1

- Karakia and Mihi
- Introduction to the workshops, what we will cover and what we use.
- Learning outcome (L.O) 1 - Completing a Google Form. How and why we use this tool in the classroom. Complete the pre-workshop Questionnaire about whānau engagement towards digital technologies.
- L.O 2 - How to access the students learning from home. Getting onto Google Drive at home. How to log into students work anywhere in the world.
- L.O 3 - Opening and naming a Google Doc. What do we use a google doc for? How can we use a doc to enhance collaboration in the classroom? How can I use it at home? Write a letter to your child about what you have learnt and the mahi that you have seen in your child’s Google Drive.
- L.O 4 - Using a Kahoot to enhance learning of a new skill. A Kahoot will be used to reiterate the learning covered in the lesson.
- Karakia

Workshop 2

- Karakia and Mihi
- L.O 1 - Recap on the last workshop. Getting onto Google drive opening and naming a doc. Using the Chromebooks webcam to leave photos for their tamariki (whānau request).
- L.O 2- Online learning tools - What online tools can I access from home that are learning based that support learning at school. Sumdog, Studyladder, Epic books,
- L.O 3 - Gamifying education. How do we use games/game thinking to enhance learning/behaviour and social skills?
- L.O 4 Using film and other media
- L.O 5 - Online safety. How do we keep students safe online at school? What can you do to keep your child safe when using internet at home?
- Kahoot for fun – whānau wanted to do these and see how they could use a kahoot for fundraising.
• Karakia

**Workshop 3**

• Karakia and Mihi

• L.O 1 - Warmup Kahoot game using smartphones. How can we use our smartphones as a learning tool at home?

• L.O 5 - Online safety. How do we keep students safe online at school? What can you do to keep your child safe when using internet at home? Moved from week 2 as we ran out of time.

• L.O 2 - How to comment and interact with my child’s learning from home or work using Google apps or class blog.

• L.O 3 - Developing critical thinking skills using technology. Coding a basic game on Gamefroot.

• Final Survey for data collection

• Karakia
Appendix 3 - Pre workshop Questionnaire

CISC9090 Unitec Masters in Applied Practice - Research Project. Whanau Questionnaire. - Pre

This form is to collect data on the effectiveness of whanau workshops to assist whanau with engaging in their child’s learning through digital technologies. All data collected will only be seen by the researcher. Participants will be anonymised by the researcher in the writing of the thesis.

* Required

1. Briefly explain your reasons for wanting to attend these workshops.

2. On a scale of 1 to 5 How confident do you feel to help your child with their schoolwork using a computer? *
   Mark only one oval.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not confident</td>
<td></td>
<td></td>
<td></td>
<td>Very Confident</td>
</tr>
</tbody>
</table>

3. How often do you use a computer or other digital device to help your child with their maths, reading or writing? *
   Mark only one oval.

   [ ] Once a week
   [ ] Few times a week
   [ ] Few times a month
   [ ] Few times a term
   [ ] Once or twice a year
   [ ] I don’t.

4. How do you think your child feels when you help them with their school work? *
   Check all that apply.

   [ ] They enjoy it.
   [ ] They get frustrated with me.
   [ ] They hate it and won't let me help.
   [ ] They love it.
   [ ] They feel proud to work with me.
   [ ] Other:
5. How confident are you to help your child with their school work? *
   Mark only one oval.
   1  2  3  4  5
   Not at all confident  O  O  O  O  Very confident

6. How often do you go into school and speak to the teachers. *
   Mark only one oval.
   O Only at parent interviews.
   O When my child has done something wrong.
   O Only when I have concerns.
   O 3 to 4 times a term.
   O Usually once a week.

7. On the scale of 1 to 5 how confident are you to use digital technologies (computers, internet, smart phones) for your own personal use? *
   Mark only one oval.
   1  2  3  4  5
   Not at all  O  O  O  O Very confident

8. In what ways do you use digital technologies *
   Check all that apply.
   O Social media
   O Gaming
   O TV and movies
   O Photography
   O Research
   O Communication (email, Skype, Messenger)
   O Child’s homework
   O At work
   O Other.

9. On a scale of 1 to 5 how confident are you to help your child with learning on a computer?
   Mark only one oval.
   1  2  3  4  5
   Not at all.  O  O  O  O Very confident to help them

10. Do you know of some ways that your child uses digital technologies at school? *
11. Describe your feelings towards your child using computers or tablets as a learning tool. *

12. Describe your feelings when learning new skills on computers or tablets. *

13. What are your experiences (how did you both feel, was it positive) when helping your child to use a computer? *

14. Describe how you feel about helping your child with their learning using digital technologies. *

15. In what ways could you use a computer to assist with your child’s learning. *

16. Name *
Appendix 4 - Post workshop Questionnaire

CISC9090 Unitec Masters in Applied Practice - Research Project Whanau Questionnaire - Post

* Required

1. On the scale of 1 to 5 how confident are you to use digital technologies (computers, internet, smart phones)?
   Mark only one oval.

   1  2  3  4  5
   Not at all  ☐  ☐  ☐  ☐  ☐ Very confident

2. How often do you use a computer or other digital device to help your child with their maths, reading or writing?
   Check all that apply.
   ☐ Once a week.
   ☐ Few times a week
   ☐ Few times a month
   ☐ Few times a term
   ☐ Once or twice a year
   ☐ I don't.

3. How do you think your child feels when you help them with their school work?
   Check all that apply.
   ☐ They enjoy it.
   ☐ They get frustrated with me.
   ☐ They hate it and won't let me help.
   ☐ They love it.
   ☐ They feel proud to work with me.
   ☐ Other:

4. On a scale of 1 to 5 how confident are you to help your child with learning on a computer?
   Mark only one oval.

   1  2  3  4  5
   Not at all.  ☐  ☐  ☐  ☐  ☐ Very confident to help them.

5. Describe your feelings towards using computers or tablets as a learning tool.
6. Describe your feelings when you learn new skills on computers or tablets.

7. What are your experiences of helping your child use a computer?

8. What are your experiences (how did you both feel, was it positive) when helping your child to use a computer?

9. What ways do you know of to help your child with their learning using a computer?

10. Since completing the workshops how confident do you now feel to assist your child with learning at home using digital technologies?
    Check all that apply.
    ☐ Not confident
    ☐ I will now attempt to help.
    ☐ I look forward to learning alongside them.
    ☐ I will be helping them wherever possible.

11. Do you have any advice for future workshops? What do you think could be improved?
12. Are there any barriers that you see that will stop you from helping your child with their learning using digital technologies?

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

13. After completing the 3 workshops do you now feel that you are better equipped to engage with your child's learning through digital technologies?

Mark only one oval.

Still unsure on how to help. 1 2 3 4 5 Very well equipped.

14. Describe how you now (after the workshops) feel about helping your child with their learning using digital technologies.

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

15. What did you most enjoy about the workshops?

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

16. What did you not like about the workshops?

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

17. Would you recommend other whanau to complete these workshops if they were offered again?

Mark only one oval.

☐ No they were too hard.
☐ They are not for all.
☐ Yes with some changes.
☐ Yes all whanau should come along.
Appendix 5 – Post research focus group interview schedule

Focus group schedule
- Welcome/mihi/karakia
- Discuss the purpose of this focus group. How a focus group works and what the information will be used for. This is to get more in depth information about the workshops and if the workshops have helped with engaging whanau to use digital technologies to engage with their child’s learning.
- Questions will be based on the information gathered from the computer assisted self-administered questionnaire. Using the information gathered in the questionnaires. If there are questions that I need to get more information from I will ask these here.
- Thank you and Karakia

Questionnaire based questions
- In the questionnaire 71% of people said that they don’t use computers to help with their child’s learning, why is this?
- Confidence to use digital technologies has risen quite dramatically from the start of the workshops. Is there one thing from doing the workshops that has increased your confidence to use digital technologies?
- Has doing the workshops encouraged you to be more adventurous when using digital technologies?
- The majority of people said that more time would of made the workshops better. Is this longer sessions or more sessions? And why?

Focus group questions
- Before the workshops did you use digital technologies when helping your children with their learning? If not why?
- Before the workshops did you see merit in using digital technologies?
- Is there anything that may still hinder your engagement with your child’s learning? What barriers do you still see that will inhibit you from using digital technologies to help with your child’s learning?
- Knowing our community in your opinion would knowledge be the biggest hindrance for using digital tech to help our kids with their learning?
- After the workshops do you feel better equipped to assist your child in their learning both at home and school?
- Do you think that you will now use digital technologies more to assist with your child's learning at home?
- In what ways have the workshops helped you to engage with your child’s learning?
- Did the workshops meet your expectations? Please explain why or why not.
- Any other feedback, comments or questions
My name is Jeffrey Dunn. I am currently enrolled in the Masters in Applied Practice degree in the Digital and Collaborative Learning Practice Pathway at Unitec New Zealand and seek your help in meeting the requirements of research for a Thesis course which forms a substantial part of this degree.

**Research Project Title** - Digital Technologies and Whānau Engagement

**The aim of my project is** - Explore whānau engagement towards students learning through the implementation of whānau education workshops using digital technologies.

**Synopsis of project**

**What we are doing**
This project will be based on a series of three whānau workshops. The workshops will aim to upskill whānau in the use of the digital technologies used by the students at ####### Primary. During the three workshops you will learn how and why we use digital technologies at school. Some of the topics will include; how to access your child’s work from home, a number of ways to help with their learning from home, what websites are fun and help students with reading, writing and maths, and how to keep your child safe on the internet. The workshops will run for an hour and a half. This will include time to complete a questionnaire to give your feedback on the workshops. I will also need 5 or 6 whānau volunteers to participate in a focus group that will take no longer than 1 hour. This focus group will be sound and video recorded for data collection purposes.

**What it will mean for you**
If you agree to participate, you will be asked to sign a consent form. This does not stop you from changing your mind if you wish to withdraw from the project. However, because of our schedule, any withdrawals must be done within 2 weeks prior to starting the workshops.

Your name and information that may identify you will be kept completely confidential. All information collected from you through the questionnaires or focus group will be confidentially stored on a password protected file and only the researcher and my supervisors will have access to this information. When completed the results of the research activity will be able to be viewed online through the thesis by members of the public. You are free to ask me not to use any of the information you will give, and you can, if you wish, ask to see the Thesis before it is submitted for examination. All data collected for the purpose of this research project will be kept for five years on site at Unitec.

Please contact us if you need more information about the project. At any time if you have any concerns about the research project you can contact our supervisor:

My supervisor is: Jo Mane phone: 815-4321 ext. 7146 or email: jmane@unitec.ac.nz

UREC REGISTRATION NUMBER: 2017 1055

This study has been approved by the UNITEC Research Ethics Committee from 24 July 2017 to 24 July 2018. If you have any complaints or reservations about the ethical conduct of this research, you may contact the Committee through the UREC Secretary (ph: 09 815-4321 ext 8551). Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.
Appendix 7 – Participant Consent Form

Participant Consent Form

Research Project Title: Digital Technologies and Whānau Engagement

I have had the research project explained to me and I have read and understand the information sheet given to me.

I understand that I don't have to be part of this research project. Should I choose not to participate I may withdraw at any time prior to two weeks of the workshops starting.

I understand that everything I say is confidential and none of the information I give will identify me and that the only persons who will know what I have said will be the researchers and their supervisor. I also understand that all the information that I give will be stored securely on a computer at Unitec for a period of 5 years.

I understand that if I volunteer for the focus group the discussion with the researcher will be sound and video recorded and transcribed for data collection.

I understand that I can see the finished research document.

I have had time to consider everything and I give my consent to be a part of this project.

Participant Name: …………………………………………………………………….......

Participant Signature: ……………………… Date: ……………………………

Project Researcher: …………………………… Date: ……………………………

UREC REGISTRATION NUMBER: 2017 1055
This study has been approved by the UNITEC Research Ethics Committee from 24 July 2017 to 24 July 2018. If you have any complaints or reservations about the ethical conduct of this research, you may contact the Committee through the UREC Secretary (ph: 09 815-4321 ext 8551). Any
issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.
Appendix 8 – Organisational Consent

Date: 21 July 2017

To: Unitec Ethics Committee

Name: Dr Lisa Maurice-Takerei

Address: Private Bag 92025
Victoria Street West,
Auckland 1142

Dear Dr Lisa Maurice-Takerei,

Re: Organisational Consent

I, Tony Röwe, Principal at Opunake Primary School, give consent for Jeffrey Dunn to undertake research in this organisation as discussed with the researcher.

This consent is granted subject to the approval of research ethics application 2017-1055 by the Unitec Research Ethics Committee and a copy of the application approval letter being forwarded to the organisation as soon as possible.

Signature:

Date: 21-7-07