

**The Value of Using Digital Devices for Reading:  
The Teacher's Perspective**

by

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## Abstract

Digital devices have become a central feature of everyday school life, increasingly integrated into classrooms worldwide as part of the shift towards more technology-rich education. In New Zealand, particularly in Auckland, the adoption of digital devices in schools accelerated following the COVID-19 pandemic, as schools transitioned to remote learning and then returned to in-person instruction with an expanded reliance on digital technologies (Wenmoth, 2021). This growing trend highlights the need to examine how digital devices impact teaching practices, student engagement, and learning outcomes. Research, such as from Grant and Basye (2014), suggest that the use of digital devices provides a range of opportunities, including access to diverse resources, personalised learning, and increased student engagement. However, it also presents challenges, including the need for teachers to adapt their pedagogical approaches and navigate the complexities of digital integration (Zhu, 2023; Steriu & Stănescu, 2023).

Particularly in Year 7 and 8 classrooms, digital devices have been utilised to enrich literacy instruction by offering a broader selection of reading materials and enabling more interactive, multimodal learning experiences (Lotherington & Jenson, 2011). This shift allows for students to engage with texts in new ways, deepening their literacy skills and fostering a more dynamic learning environment. The current literature on digital device integration focuses largely on their implementation and effectiveness in enhancing student outcomes. However, less attention has been given to exploring the perspectives of teachers, who play a critical role in shaping the successful use of technology in classrooms (Levin & Wadmany, 2008).

This study explores New Zealand teachers' perspectives on the value of digital devices in literacy instruction and the professional development that is needed to integrate digital devices effectively, into their classrooms. Six teachers from three schools participated in semi-structured interviews, sharing their experiences and perceptions of digital devices in their Year 7 and 8 reading programs. The data was analysed using Braun and Clarke's (2006) thematic analysis to identify key themes in their responses.

The findings reveal a strong belief in the importance of a balanced approach, where digital devices are used to enhance rather than replace traditional teaching methods. Teachers also emphasised the need for ongoing professional development to ensure they remain equipped to effectively use digital devices in their classrooms. These results underscore the importance of

fostering a supportive and well-resourced learning environment that integrates both digital and traditional approaches to literacy instruction, ultimately benefiting students' learning experiences.

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## **Attestation of Authorship**

I hereby declare that this submission is my own work, and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the Acknowledgments), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Signed: Bianca Katelyn Ness

Date: 28/02/2025

# Chapter 1 - Introduction

This chapter outlines the significance of the research topic. It explores the background context, clarifies the study's objectives, and addresses the gap in existing literature. It states the research questions, provides an overview of the study, and concludes with a summary of the chapter layout.

## 1.1 - Importance Of The Topic

The integration of digital devices in education has evolved from supplementary tools to essential components of modern teaching, especially in literacy instruction for Year 7 and 8 students. At this crucial stage in literacy development, digital tools became central to discussions on enhancing reading skills. In New Zealand, the push for technology in classrooms sparked both enthusiasm and scepticism.

Proponents argued that digital devices could revolutionise literacy instruction by offering personalised learning, increased engagement, and providing access to multimedia resources that made reading interactive and enjoyable (Grant & Basye, 2014; William et al., 2025). Digital devices were seen as vital for addressing diverse learning needs, supporting differentiated instruction, and aligning with students' varied reading levels and preferences (Beetham & Sharpe, 2019; Tomlinson, 2014; Kilbane & Milman, 2024).

The importance of digital literacy skills became clearer as the digital landscape grew. Technology in reading programs supports traditional literacy while also preparing students to navigate the complexities of the digital world (Leu et al., 2015). However, the effectiveness of these tools remained debated. Concerns included distractions, the erosion of fundamental literacy skills, and the widening of education inequalities due to the digital divide (Selwyn, 2016). These issues were particularly relevant in diverse educational contexts like Auckland, where schools varied significantly in resources and student demographics.

The digital divide posed a major challenge. Not all students had equal access to devices or reliable internet, deepening educational inequalities (Warschauer, 2004; Afzal et al., 2023). Some educators worried that an over-reliance on digital devices might undermine the development of foundational literacy skills, which are crucial for long-term success (Clark & Luckin, 2013).

Given these differing views, understanding teachers' perceptions of digital device use in literacy instruction is critical. Year 7 and 8 teachers, in particular, held a unique position to influence how technology was integrated into the curriculum and its impact on student learning outcomes. Their beliefs and attitudes toward digital tools could significantly shape their effectiveness in enhancing literacy instruction (Ertmer & Ottenbreit-Leftwich, 2013; Getenet et al., 2024).

My experience as a relief teacher, working across various classrooms, gave me a unique perspective on these dynamics. I observed different approaches to integrating digital devices and saw varied outcomes. This experience highlighted the need to understand the factors that influenced teachers' willingness and ability to incorporate digital tools effectively into their practice.

This study aimed to offer another point of view, that of the teacher. By capturing the voices and views of those on the front lines (teachers), this research sought to uncover teachers' perceptions of the challenges and opportunities that digital devices present in the classroom. By considering teachers' perceptions about the use of digital devices in reading, professional development programs that are better tailored to the needs of teachers can be developed. Aligning professional development to teachers' beliefs about the use of digital devices would help to ensure that teachers are well-equipped to integrate technology in ways that truly enhance student learning (Fullan & Langworthy, 2014; Fobert, 2024). Furthermore, recognising what teachers perceive as the role of digital devices in supporting children's learning has the potential to influence policy development, and therefore, guide decisions that support the equitable and effective use of digital devices in literacy instruction across New Zealand.

Ultimately, this research was both an academic inquiry and a practical exploration. It aimed to understand how digital tools could be used to improve literacy outcomes for Year 7 and 8 students. By understanding teachers' perceptions and classroom realities, the study sought to contribute to a more effective, inclusive, and future-focused educational system.

## **1.2 - Background**

Digital technologies encompass a wide range of electronic systems, tools, and devices designed to collect, store, and manage data (Friess, 2016). These technologies include hardware components such as motherboards, software components such as programs, and practices such as programming. While each of these components can be considered or studied as a 'singular' technology on its own (Arthur, 2009), the three components are interdependent in

a way that they need each other to function. For example, we need programming expertise to create applications that function on specific devices and vice versa. This study looked at digital devices as a manifestation of digital technologies that comprise the three components.

Learning, which happens in different contexts with various ways and tools, has been one of the most interesting phenomena to be examined and understood. Human and nonhuman elements, such as teachers, students, pens, and books, interact together and shape the learning process (Fenwick, 2010; Karthika, 2024). In the digital age, digital devices have become new elements that are widely used in formal and informal learning contexts. By using devices, the three components of digital technologies become part of the learning process; for example, students need to learn different practices and skills to deal with and utilise the software and hardware components for learning activities. Scholars argue that understanding the role of these technologies in the educational process is crucial to setting realistic expectations and making effective decisions when using them for learning and teaching (Ellis & Goodyear, 2013; Selwyn, 2021).

Several studies have reviewed the literature on using digital devices in classrooms. Chee et al., (2017) conducted a systematic meta-analysis review to examine the trends of mobile learning research in the top six major educational technology journals based on Google Scholar metrics. Their analysis included 144 studies published between 2010 and 2015. Their review showed that the main focus of more than half of the studies was to evaluate the effectiveness of mobile learning. More than 50% of the studies reported positive outcomes of mobile learning, while less than 5% reported negative outcomes and about 7% reported neutral outcomes. However, most of the studies were carried out in the higher education context. Crompton et al., (2017) reviewed 113 studies involving mobile learning in K-12 settings published between 2010 and 2015 in 10 major educational technology journals. They found that most of the studies focused on the effects of using mobile devices on student learning, with five out of the six participants reporting positive outcomes. The most common method used in the studies was questionnaires, followed by pre/post-tests. Most of the learning activities (40%) in these studies were aligned with behaviourist learning theory.

### **1.3 - Digital Devices in New Zealand Education**

In New Zealand, the Ministry of Education provides support documents to guide teachers in developing programmes in their classrooms. These include both curriculum and other support

documents. The Ministry's publication *Digital Technologies: Hangarau Matihiko* (Tāhūrangi, 2024) outlines a framework for using technology to enhance student engagement and learning outcomes, stressing the importance of professional development and a focus on digital citizenship. Additionally, *The New Zealand Curriculum* (MOE, 2007) encourages the use of digital tools to support literacy and promote collaboration, while *Te Whāriki* (MOE, 2024) highlights the role of relationships and supportive environments in effective digital integration. These resources collectively offer valuable guidance for teachers, although challenges remain in their implementation. This section explores how these documents inform teachers' strategies and how schools can better support educators in navigating digital technology integration.

#### **1.4 - Support Documents**

In addition to academic research, the Ministry of Education in New Zealand, has provided key resources that guide the integration of digital technologies into literacy instruction. The Ministry's publication, *Digital Technologies: Hangarau Matihiko* (Tāhūrangi, 2024), offers a framework for incorporating digital tools into the curriculum, emphasising the importance of using these technologies to enhance student engagement and learning outcomes. While these guidelines are broad and apply to all subject areas, they underscore the value of digital literacy as an essential component of modern education.

The Ministry of Education's online resources (such as the Digital Technology Safe and Responsible Use in Schools and Connected Ako; Digital and Data for Learning) provide teachers with strategies to create a classroom environment where digital tools are used to support reading and writing activities. These resources stress the importance of ensuring that digital device integration is not just about using technology for the sake of it, but rather about using these tools to enrich the educational experience and meet the diverse needs of students. For instance, the Ministry emphasises the need for professional development and ongoing support to help teachers effectively incorporate digital technologies into their literacy instruction.

Moreover, the Ministry's guidelines have highlighted the role of schools in fostering a culture of digital citizenship. This involves teaching students not only how to use digital tools but also how to use them responsibly and ethically. Schools are encouraged to create policies that support the safe and effective use of digital devices, ensuring that students are prepared for the challenges of a digital world.

## 1.5 - The New Zealand Curriculum Connections

The New Zealand Curriculum (Ministry of Education, 2007) has placed a strong emphasis on the integration of digital technologies across all learning areas, including literacy. The curriculum has highlighted the importance of providing students with opportunities to use digital tools to enhance their learning and to prepare them for the demands of the digital age. It advocates for a future-focused approach to education, where digital literacy is considered as vital as traditional literacy skills.

Although the curriculum does not specify how digital devices should be used in literacy instruction, it provides a framework that encourages schools to explore innovative approaches to teaching and learning. This includes using digital tools to support reading and writing, promoting collaboration through online platforms, and utilising digital resources to differentiate instruction for diverse learners. The curriculum's principles of inclusivity and lifelong learning are particularly relevant, as they align with the goal of using digital technologies to make literacy instruction more accessible and engaging for all students.

As teachers in New Zealand primary and intermediate schools navigate the challenges of integrating digital devices into their classrooms, they often rely on the guidance provided by the New Zealand Curriculum. Ensuring that teachers have access to clear and comprehensive resources is essential for the successful integration of digital technologies in literacy instruction, as further discussed in the next section.

## 1.6 - Te Whāriki Connections

The principles outlined in *Te Whāriki: He whāriki mātauranga mō ngā mokopuna o Aotearoa/Early Childhood Curriculum* (Ministry of Education, 2024) offer valuable insights into the integration of digital technologies in education, particularly in terms of building relationships and creating supportive learning environments. *Te Whāriki* emphasises the importance of responsive and reciprocal relationships, which are crucial in integrating digital tools into literacy instruction.

In the context of using digital devices in literacy programs, the focus on relationships in *Te Whāriki* can be extended to the interactions between students, teachers, and digital tools. Building a strong relationship between these elements is key to ensuring that digital technologies are used effectively to support learning. For example, teachers can use digital platforms to foster collaboration among students, encourage peer feedback, and create a sense of community within the classroom.

Te Whāriki highlights the significance of creating environments that are safe and supportive, which is equally important when introducing digital technologies into literacy instruction. This involves not only ensuring that digital tools are accessible to all students but also that they are used in ways that promote positive learning experiences. By integrating the principles of *Te Whāriki* into literacy programs, teachers can create a holistic approach to digital device integration that supports students' emotional and academic needs.

## **1.7 - Context**

This study took place in intermediate schools in Aotearoa New Zealand, focusing on Auckland's North Shore. The research gathered data from six teachers who teach Year 7 and/or 8 students (11 and 12-year-olds). It explored these teachers' perceptions and experiences of using digital devices in literacy instruction.

## **1.8 - Motivation**

My experience as a relief teacher inspired this research. As I moved between classrooms, I observed various factors influencing the learning process, including the role of the teacher, curriculum, instruction, and notably, the use of digital devices. The unexpected outcomes during these experiences sparked my curiosity. I wanted to understand how digital devices were used by students and how these tools contributed to literacy learning, from the perspective of teachers who worked with them regularly.

The study aimed to gain insights into teachers' experiences and perceptions of digital devices in literacy instruction, with a focus on reading. This study explores teachers' perceptions about the role of digital devices in their reading programme.

## **1.9 - Research Questions**

Though research has been conducted on digital device use in classrooms, much remained unknown about how teachers in New Zealand, specifically those teaching Year 7 and/or 8, perceived the value and use of these devices. This study aimed to present another view of the use of digital devices in the classroom, that of the teacher.

My study's overarching research question is:

What are the experiences and perceptions of New Zealand intermediate school teachers on using digital devices to enrich literacy, specifically reading, instruction in the classroom?

In exploring the main research question the semi-structured interview focused on the following sub-questions.

1. From your experience, what do you perceive the advantages and/or disadvantages of using digital devices in a reading programme are?
2. How do you perceive digital devices support or hinder student engagement in reading?
3. In what ways has the integration of digital devices transformed your role and practice in teaching reading?

## **1.10 - Dissertation Overview and Structure**

This study aimed to gather insights into teachers' experiences and perceptions of digital devices. The findings were intended to enhance understanding of how digital tools could be effectively integrated into educational practices, ultimately contributing to more informed decision-making and better support for teachers.

A qualitative approach using semi-structured interviews to collect data was used to answer the research question. This data was analysed by drawing on Vygotsky's Sociocultural Theory (Scott & Palincsar, 2013) and Braun and Clarke's (2006) thematic analysis. The results are then discussed in terms of the research question and current literature.

## **1.11 - Chapter Layout**

This dissertation consists of seven chapters, which address the study's questions and aims.

Chapter 1: Introduction. This chapter provided an overview of the study, research aims, contexts, and methods.

Chapter 2: Literature Review. This chapter analyses past research based on the impacts of digital devices in education. The consequences of digital device use were discussed, referencing researchers' work. This was then followed by connections to the Ministry of Education, the New Zealand Curriculum, and Te Whāriki. The gaps in the literature were also highlighted, which informed my research questions and approach.

Chapter 3: Theoretical Framework. Vygotsky's Sociocultural Theory was used to connect the topic to a theory that was further explored in this chapter. Through his ecosystem layers, I examined connections between the individual and the broader system, relating this to my topic.

Chapter 4: Methodology. This chapter explained the chosen qualitative research paradigm, focusing on thematic analysis. I detailed the research design, data collection procedures, and analysis techniques used to address the research questions.

Chapter 5: Findings. Here, the results of the thematic analysis are presented and key themes are identified. The findings were then discussed in relation to the research questions, highlighting significant patterns and insights into teachers' perceptions of digital device integration in education.

Chapter 6: Discussion. Using findings from Chapter 5, I drew connections to the literature. This chapter explored how the theory impacted individuals at various levels and then linked the discussion back to the study.

Chapter 7: Conclusion. This chapter summarised the conclusions and the significance of the findings. It also included recommendations for future education policies, schools, and teachers.

## **Chapter 2 - Literature Review**

The integration of digital devices into classrooms has transformed educational practices, presenting both opportunities and challenges for teachers and students. The increasing reliance on technology in education highlighted the need to understand how digital devices influence teaching methods, student engagement, and outcomes. This shift was particularly evident in Auckland, New Zealand, where the COVID-19 pandemic sped up the adoption of digital technologies (Lips & Eppel, 2022).

This chapter provides an overview of the research on the use of digital devices in education, focusing on their effects on teaching practice and student engagement. As I engaged with literature, it became clear that many studies, such as those by Mhlanga and Moloi (2020) and Haleem et al., (2022) emphasised the significant impact of digital devices on education. The focus was finding practical solutions to help teachers integrate technology effectively while addressing the challenges. The vital role of teachers in fostering a supportive, tech-enriched environment was clear, as their approaches strongly influenced student engagement and learning outcomes.

### **2.1 - The Impacts of Digital Device Integration on Teaching and Learning**

The integration of digital devices into Year 7 and 8 classrooms has had profound effects on teaching practices, student engagement, and learning outcomes. This section examines the impacts of digital device use in education. It focuses on teachers' experiences, the influence on student literacy, the challenges and opportunities presented by technology, the role of professional development, and long-term educational outcomes. Understanding the impact of digital devices in education is crucial for developing effective strategies to support teachers and maximise the benefits of digital device integration in literacy instruction (Valverde-Berrocoso et al., 2021).

#### **2.1.1 - Teachers' Experiences and Perceptions**

Teachers' experiences with digital devices are central to understanding the broader impacts of technology integration in literacy education. Research by Ertmer and Ottenbreit-Leftwich (2010), Jones and Flannigan (2006) and Haleem et al., (2022), has shown that while many teachers

acknowledge the potential of digital devices to enrich literacy instruction, they also face significant challenges in implementing these tools effectively. One challenge identified is that teachers often struggle with the rapid pace of technological change, the need for ongoing professional development, and the varying levels of digital literacy among students (Ally, 2008; Hennessy et al., 2007; Falloon, 2020).

Throughout the process of integrating digital devices, teachers experienced both excitement (Wati, 2020) about the possibilities and anxiety about the challenges (Chiu & Churchill, 2016). For most of the teachers (five out of six), these feelings were intensified by a lack of confidence in their digital skills or concerns about managing classroom dynamics in a tech-enriched environment (Bebell & O'Dwyer, 2010; Manciaracina, 2022). This highlighted the critical need to address teachers' professional development and provide them with the tools and support necessary to navigate the complexities of digital integration effectively (Mishra & Koehler, 2006; Anis, 2024).

### **2.1.2 - Influence on Student Literacy**

The shift to using digital devices in literacy instruction has significantly impacted how students engage with reading and writing (Mills, 2010; Alneyadi et al., 2023). As teachers incorporate technology into their lessons, they must adapt their pedagogical approaches to meet students' evolving needs. Research suggests that digital devices enhance student engagement and motivation in literacy activities, especially when used to create interactive and personalised learning experiences (Schindler et al., 2017; Brown & Lee, 2015). However, the effectiveness of digital devices in improving literacy outcomes often depends on how well teachers integrate them into their instructional practices (Falloon, 2020).

As students transition from traditional print-based methods to more dynamic, multimodal forms of reading and writing, the use of digital devices in literacy instruction offers both opportunities and challenges. While this shift can lead to increased engagement, it also poses difficulties for students who struggle with digital navigation or are distracted by non-educational content (Gunter, 2012; Coiro, 2003; Moe, 2024). The effectiveness of digital devices in literacy instruction depended on how they supported specific learning objectives, underscoring the importance of teacher strategies (Turan et al., 2018).

### **2.1.3 - Challenges and Opportunities of Technology Integration**

Integrating digital devices into classrooms presented both challenges and opportunities for teachers. On the one hand, technology offers new avenues for creativity, collaboration, and differentiated instruction (Schmid et al., 2014; McKoy & Merry, 2023). On the other hand, teachers often face obstacles such as limited resources, technical difficulties, and the need to balance screen time with traditional teaching methods (Bebell & O'Dwyer, 2010; Ertmer & Ottenbreit-Leftwich, 2010). These challenges affected teachers' ability to fully harness the potential of digital devices in their literacy programs.

Teachers also had to adjust their instructional strategies to accommodate the diverse needs of students in a technology-rich environment. This included differentiating instruction based on students' varying levels of digital literacy and finding ways to integrate technology that complemented, rather than replaced, traditional literacy practices (Becker & Ravitz, 2001; Kirschner & Erkens, 2006). These challenges could be mitigated by providing teachers with the necessary support, training, and resources to navigate the complexities of digital integration effectively (Ertmer, 1999; Gyawali & Mehndroo, 2024).

### **2.1.4 - The Role of Professional Development**

Professional development is critical in supporting teachers as they integrate digital devices into their literacy instruction. Research has shown that ongoing training and support are essential for helping teachers develop the skills and confidence needed to use technology effectively in the classroom (Hew & Brush, 2007; Inan & Lowther, 2010). Professional development programs that focus on both the technical aspects of digital devices and their pedagogical applications can empower teachers to create more engaging and effective literacy lessons (Desimone, 2009; Aithal & Aithal, 2023).

Despite the importance of professional development, many teachers reported that they did not receive adequate training or support in using digital devices (Xie et al., 2017). This led to frustration and a lack of confidence in their ability to implement technology meaningfully (Bebell & O'Dwyer, 2010). To address this issue, schools and educational institutions needed to prioritise professional development tailored to teachers' specific needs and aligned with their literacy program goals (Mishra & Koehler, 2006).

### **2.1.5 - Long-term Educational Outcomes**

The long-term educational outcomes of digital device integration are still being studied, but early research suggested that, when used effectively, technology could enhance students' literacy skills and overall academic achievement (Turan et al., 2018; Tamim et al., 2011). However, the success of digital device integration depends on factors such as the quality of instruction, student engagement, and the support provided to teachers (Harris et al., 2017).

Research has revealed that students with access to well-integrated digital devices and instruction from confident teachers were more likely to experience positive educational outcomes (Chai et al., 2013; Voogt et al., 2015). This underscores the importance of ensuring that teachers are well-prepared and supported in their efforts to integrate technology into their literacy instruction (Hew & Brush, 2007).

### **2.1.6 - Benefits of Digital Devices**

One key benefit of incorporating digital devices into reading programs is the potential for increased student engagement. Digital tools often feature interactive elements like animations, audio support, and quizzes, which makes reading more appealing to students (Ciampa, 2012). These features not only capture students' attention but also cater to different learning styles, enhancing the overall learning experience. It was found that auditory learners benefitted from audio support, while kinesthetic learners found interactive quizzes more engaging. Additionally, digital devices provide vital support for struggling readers by simplifying complex texts, offering immediate feedback, and providing alternative ways of comprehension (Biancarosa & Griffiths, 2012; Pearson et al., 2022).

Research by Tsai et al., (2020) showed that the interactive nature of digital devices significantly boosted student motivation and participation. Further studies confirmed that students engaged more with reading materials that included multimedia elements, making the content more relatable and exciting (Ciampa, 2012; Chisunum & Nwadiokwu, 2024). Features like text-to-speech and instant dictionary access help students with reading difficulties, allowing them to understand and enjoy content without feeling overwhelmed (Ciampa, 2012).

Digital devices also facilitate access to a broader range of reading materials. E-books and online libraries provide a selection of texts, including culturally diverse and multilingual ones, enriching students' reading experiences and promoting inclusivity (Larson, 2010; Prabhakar, 2025). The availability of these texts allows students to explore content that reflects their own cultures and languages, fostering a more inclusive worldview (Winters, 2020). Moreover, digital tools support collaborative learning, enabling students to work together on reading projects, share insights, and engage in discussions, enhancing their critical thinking and communication skills (Srivastava, 2025).

The potential for personalised learning is an additional significant benefit. Digital devices can adapt to individual students' reading levels and learning paces, providing customised content that meets their specific needs (Zmuda et al., 2015). This personalisation is crucial for supporting differentiated instruction, where teachers can assign different texts and activities to different students based on their abilities and interests (Tomlinson et al., 2003; Goyibova et al., 2025). Moreover, digital platforms often include analytics tools that allow educators to track students' progress and adjust instruction accordingly, thereby improving educational outcomes (Bailey & Nyabola, 2021).

Research has demonstrated that personalised learning through digital devices can lead to significant improvements in reading proficiency. For example, a study by Roschelle et al., (2010) and Hidayat (2024), found that students using personalised learning tools showed greater gains in reading comprehension and fluency compared to those who used traditional methods. These tools enable a more targeted approach to instruction, ensuring that each student's unique needs are met.

### **2.1.7 - Challenges of Digital Devices**

Despite the numerous benefits, several challenges are associated with the use of digital devices in reading programs. A significant concern is the issue of screen time and its impact on students' health and well-being. Excessive use of digital devices leads to a range of health issues, including eye strain, sleep disturbances, and reduced physical activity (Straker et al., 2018). To mitigate these risks, teachers need to balance the use of digital tools with traditional reading methods, ensuring that students engage in a variety of activities that promote both mental and physical health.

Conducting this research underscores the importance of setting guidelines for screen time to avoid adverse health effects. Studies have suggested that prolonged exposure to screens can negatively impact sleep patterns and physical health, highlighting the need for a balanced approach (Straker et al., 2018). Educators must therefore implement strategies that integrate digital tools while also encouraging physical activities and traditional reading practices.

Ensuring equitable access to digital devices and resources is another challenge faced. Socioeconomic disparities can result in unequal opportunities for students to benefit from digital learning tools, exacerbating existing educational inequalities (Floyd & Judge, 2012). Schools must address these issues by providing sufficient devices and support to all students, regardless of their background. This involves investing in school-wide technology programs, offering subsidies for low-income families, and providing technical support to ensure that all students can effectively use digital devices.

Research highlights the digital divide as a critical barrier to equitable education. Studies have shown that students from lower socioeconomic backgrounds often lack access to digital devices and reliable internet connections, which hinders their academic progress (Floyd & Judge, 2012). Addressing this issue requires concerted efforts from schools, policymakers and communities to ensure that all students have the tools they need to succeed.

Moreover, the integration of digital devices into reading programs requires significant teacher training and professional development. Educators must be proficient in using digital tools and understand how to incorporate them into their teaching practices effectively. This includes not only technical skills but also pedagogical strategies for integrating digital content into the curriculum. Without adequate training, teachers struggle to utilise digital devices effectively, limiting their potential benefits for students (Ertmer et al., 2012; Passey et al., 2018).

Research supports the necessity of ongoing professional development for teachers. Studies found that teachers who receive training in digital literacy are more likely to successfully integrate digital tools into their instruction, resulting in better student outcomes (Ertmer & Ottenbreit-Leftwich, 2010). Professional development programs should therefore focus on both the technical and pedagogical aspects of digital device use.

By addressing these issues of screen time management, equitable access to resources, and teacher training, educators can harness the full potential of digital devices to enhance reading instruction and improve educational outcomes for all students. This section aimed to provide an analysis of these dynamics, contributing to the ongoing discourse on the role of digital technology in education.

## **2.2 - Summary of Impacts**

The integration of digital devices into literacy instruction has a wide range of impacts on teachers, students, and educational outcomes. Teachers often face challenges related to professional development, resource availability, and the need to adapt their instructional strategies to accommodate technology. However, with the right support and training, digital devices have the potential to enhance literacy instruction, increase student engagement, and improve academic outcomes. Schools and educators play a critical role in ensuring that digital device integration is effective and that teachers are equipped to navigate the complexities of technology-rich classrooms. The following section (2.3) of this literature review explores how the New Zealand Ministry of Education provides information and support for teachers when integrating digital devices into their literacy programs.

## **2.3 - Developing Effective Strategies for Digital Device Integration**

Integrating digital devices into the classroom presents unique opportunities and challenges. Teachers play a crucial role in navigating these challenges and ensuring that digital tools effectively support student learning. One critical aspect is developing effective strategies for integrating these technologies into daily teaching practices. According to McKnight et al., (2016) and Hover & Wise (2022), teachers need to develop strategies to effectively use digital devices to enhance learning experiences. This involves understanding how to balance digital and traditional methods, manage screen time, and select appropriate tools that align with learning objectives (Hamilton, 2022). When teachers lack clear strategies or face barriers in implementing technology, it can impact students' learning experiences and hinder the potential benefits of these tools (Mumtaz, 2000; Alenezi, 2017).

### **2.3.1 - Teacher Training and Support**

Teacher training and support are essential for the successful integration of digital devices into classrooms. Research indicates that professional development can significantly influence how effectively teachers use technology in their teaching practices (Koehler & Mishra, 2009; Rodrigues, 2020). Training programs should focus on equipping teachers with the skills to use digital devices effectively, including how to integrate them into lesson plans, assess their impact on student learning, and address any technical issues that arise (Gaible & Burns, 2005; Valverde-Berrocoso et al., 2021).

Soufghalem (2024), emphasised that understanding students' digital literacy skills and their comfort with technology is crucial for developing effective teaching strategies. This highlights the need for specialised teacher training that not only covers the technical aspects of digital devices but also how to leverage these tools to meet diverse learning needs.

Ventouris et al., (2021) suggest that teachers need to be aware of the broader impact of digital devices on students' emotional and cognitive development. Teachers can enhance their preparedness and provide the necessary support during this transition by adapting their teaching techniques to accommodate the diverse ways in which students interact with digital technology. However, for teachers to effectively integrate digital devices, they need adequate support and ongoing professional development to stay current with technological advancements and pedagogical strategies.

### **2.3.2 - Addressing Evolving Perceptions of Digital Devices**

As digital devices have become more embedded in education, teachers' perceptions of their importance have evolved. While initial enthusiasm highlighted the potential of these tools to transform learning, some educators now question whether digital devices are still as beneficial as once thought. Research has shown that while digital tools continue to offer valuable educational opportunities, teachers are increasingly aware of the need to balance digital and non-digital methods to address students' varying needs (Masterman & Manton, 2011). Teachers may need additional support to adapt their approaches, ensuring that digital devices enhance rather than detract from students' learning experiences.

In the following section, I discuss the gaps in the literature regarding teachers' experiences with digital devices in New Zealand primary schools and propose areas for further investigation to enhance teacher preparation and support.

## **2.4 - Gaps In the Literature**

In this section, I identify key gaps in the existing literature regarding the integration of digital devices in New Zealand primary schools, particularly in relation to literacy instruction. While much research has focused on the broader impacts of technology in education, there remains a lack of detailed insights into how teachers experience and adapt to the challenges of using digital tools in diverse classroom settings. Additionally, limited attention has been given to the specific needs of teachers in terms of ongoing professional development and support, as well as how digital technologies are used to meet the unique needs of students in literacy programs. By highlighting these gaps, this section aimed to pave the way for further research that can better inform teacher practices and improve support mechanisms for digital integration in literacy education.

### **2.4.1 - The Gaps I Have Found**

A significant gap in the literature is the lack of detailed exploration regarding how teachers can effectively integrate digital devices into literacy instruction in New Zealand, specifically in Year 7 and 8 classrooms. While much of the existing research emphasises the potential benefits of digital devices in education, there is limited information on how teachers can navigate the challenges associated with their use. This can be things such as managing student engagement, ensuring equitable access, and balancing digital and traditional literacy practices. Hargreaves and Fullan (2015), highlight that the integration of digital devices can be professionally challenging and emotionally taxing for teachers, especially when they are not equipped with adequate training and resources. Each student interacts with digital tools differently, which underscores the need for professional support to prevent students from 'falling through the cracks,' potentially risking lower academic achievement and disengagement from learning (Kiptoo-Tarus, 2016).

However, the literature does not fully outline what specific support and strategies can be implemented by teachers in New Zealand. The goal should be a scenario where teachers are

provided with comprehensive guidance on various digital literacy strategies and ways to connect with their students to support their learning needs. If this goal is achieved, students who face challenges with digital device integration may have a higher chance of academic success and improved engagement in literacy programs. In my literature review, I found a wealth of research focused on the benefits and challenges of digital device use from a theoretical perspective, but there is a noticeable lack of research that explores teachers' practical experiences and perceptions within the New Zealand context. Therefore, I identify the gap in my research as the need to explore teacher approaches to integrating digital devices into literacy instruction in New Zealand's Year 7 and 8 classrooms.

#### **2.4.2 - My Research Questions**

Based on the gaps that were identified prior, my research questions have been designed to explore how teachers can effectively facilitate the integration of digital devices in literacy instruction in New Zealand classrooms. I aimed to uncover what resources are currently available to teachers, the challenges they face in addressing this gap, and what changes and strategies can be implemented to enhance the learning experiences of students. These research questions are explained and examined in Chapter 3.

#### **2.5 - Chapter Summary**

This literature review highlighted the complex and multifaceted challenges associated with integrating digital devices into literacy instruction, particularly in New Zealand's Year 7 and 8 classrooms. The research discussed the potential benefits of digital literacy, such as increased student engagement and access to diverse learning materials, but it also emphasised the need for teacher support and professional development to navigate the associated challenges. Despite the growing recognition of the importance of digital literacy, there is still a significant gap in the literature regarding specific strategies and tools that teachers in Aotearoa can use to effectively integrate digital devices into their literacy programs.

This literature review aimed to underscore the critical need for focused teacher preparation and professional development to equip teachers with the skills and knowledge required to address the challenges of digital device integration. It also advocated for the establishment of comprehensive support structures in schools, including clear guidelines for effective digital

literacy instruction. The review highlighted the necessity for schools to leverage community resources and networks to provide additional support for teachers and students as they navigate this digital transition.

The literature review set the stage for exploring how teachers can better integrate digital devices into literacy instruction. This dissertation aimed to improve teachers' preparedness in New Zealand schools by addressing the identified gaps and suggesting practical solutions to enhance students' literacy outcomes. The following chapters describe how the research problem will be addressed. The study employs qualitative research methods to gather teachers' perspectives, analysed through a relevant theoretical framework to gain a deeper understanding of effective integration strategies.

## **Chapter 3 - Theoretical Framework**

In this chapter, I explore the application of Vygotsky's Sociocultural Theory as the theoretical framework for understanding the integration of digital devices into literacy instruction in Year 7 and 8 classrooms in New Zealand. Vygotsky's emphasis on social interaction, cultural tools, and cognitive development provides a valuable lens through which to examine how teachers use digital tools to mediate learning (Eun, 2017). This chapter outlines key concepts such as the Zone of Proximal Development (ZPD), scaffolding, and mediated learning, and discusses how these ideas relate to the use of technology in education. By applying Vygotsky's theory, this chapter aims to highlight the dynamic relationship between teachers, students, and digital tools, offering insights into the role of social and cultural factors in shaping educational experiences with technology.

### **3.1 - Vygotsky's Sociocultural Theory**

Vygotsky's Sociocultural Theory posits that learning is inherently a social process, deeply embedded in the cultural and historical contexts in which it occurs. According to Vygotsky, cognitive development is not merely an individual endeavour but is profoundly influenced by social interactions and the use of cultural tools (Tudge & Rogoff, 2014). These tools, which include language, symbols, and, in the modern educational landscape, digital devices, serve as mediators that shape and enhance learning experiences. Vygotsky's theory challenges the notion of learning as a solitary activity and instead emphasises the collaborative nature of knowledge construction, where learners engage with more knowledgeable others and cultural tools to develop their understanding and skills (Verenikina, 2010).

Central to Vygotsky's theory is the concept of the Zone of Proximal Development (ZPD) (Silalahi, 2019). The ZPD refers to the range of tasks that a learner can perform with the guidance of a more knowledgeable other but cannot yet accomplish independently (Borthick et al., 2003). ZPD underscores the importance of social interaction in learning, as it is through collaboration and guided assistance that learners are able to achieve higher levels of cognitive functioning. In the context of digital device integration in education, the ZPD can be seen as the space where students engage with digital tools under the guidance of teachers, who scaffold their learning experiences to help them reach their full potential (Wass & Golding, 2014).

Scaffolding, another key concept in Vygotsky's theory, involves the provision of temporary support by a more knowledgeable other (Mcleod, 2024; Shabani et al., 2010). This enables the learner to accomplish tasks that would be beyond their unaided capabilities. This support is gradually withdrawn as the learner gains competence and independence. In the modern classroom, digital devices can serve as powerful scaffolding tools, offering interactive, personalised learning experiences that are tailored to the individual needs of students (Grant & Basye, 2014). Teachers, in turn, play a crucial role in selecting and implementing these digital tools, ensuring that they are used effectively to support student learning.

Mediated learning, a core principle of Vygotsky's theory, highlights the role of cultural tools in shaping cognitive development (Kozulin, 2003). Cultural tools, including digital devices, are not merely passive instruments but actively mediate the learning process by transforming how students engage with content and interact with others (Mahiri, 2011). In the context of literacy instruction, digital devices can provide access to a wide array of resources, enabling students to engage with diverse texts and multimedia content that enhance their understanding and promote critical thinking. By mediating learning through digital devices, teachers can create more dynamic and interactive learning environments that foster deeper cognitive engagement (EISayary et al., 2022).

### **3.2 - Links to Aotearoa New Zealand Contexts**

The application of Vygotsky's Sociocultural Theory within the educational landscape of Aotearoa New Zealand aligns closely with the principles and objectives outlined in both the New Zealand Curriculum and the Te Whāriki early childhood curriculum (Ministry of Education, 2007; Ministry of Education, 2017). These curricula emphasise the importance of social interaction, cultural responsiveness, and the use of appropriate tools and resources to support learning and development (Kahuroa, 2021). Vygotsky's emphasis on the social and cultural dimensions of learning provides a valuable framework for understanding how these principles are enacted in the classroom, particularly in relation to the integration of digital devices (Hung, 2001).

In the New Zealand context, the role of digital devices as cultural tools is particularly significant, given the country's commitment to providing equitable access to technology and fostering digital literacy among students. The New Zealand Curriculum explicitly encourages the use of digital technologies to enhance learning and promote engagement, reflecting a broader societal

recognition of the importance of digital skills in the 21st century (Benade et al., 2014). Vygotsky's theory offers a robust theoretical foundation for exploring how these digital tools are used in the classroom, not only as instruments for accessing information but as mediators that shape the learning process itself (Taber & Li, 2021).

The integration of digital devices into New Zealand classrooms has been an evolving process, marked by significant milestones such as the introduction of computers in the 1980s, the widespread adoption of the Internet in the 1990s, and the recent implementation of Bring Your Own Device (BYOD) policies (Falloon, 2020). These developments have transformed the educational landscape, presenting both opportunities and challenges for teachers as they adapt their practices to incorporate new technologies. Vygotsky's Sociocultural Theory provides a valuable lens through which to examine these changes, offering insights into how social interactions, cultural tools, and the broader educational context influence teachers' experiences with digital device integration (Anh & Marginson, 2012).

### **3.2.1 - Digital Device Integration in Aotearoa New Zealand**

The introduction and integration of digital devices in New Zealand classrooms have been shaped by both global trends and local educational policies. Since the early 1980s, when computers were first introduced to schools, there has been a steady increase in the use of digital technologies in education (Zawacki-Richter & Latchem, 2018). The adoption of the Internet in the 1990s further accelerated this trend, providing students and teachers with unprecedented access to information and resources (Ely, 2002). More recently, the implementation of BYOD policies has encouraged students to bring their own digital devices to school, further integrating technology into the everyday learning environment.

These developments have not only changed the tools available to teachers and students but have also transformed the dynamics of teaching and learning. Vygotsky's Sociocultural Theory offers a framework for understanding these changes, emphasising the role of social interaction and cultural tools in shaping cognitive development (John-Steiner & Mahn, 1996). In the context of digital device integration, this theory highlights the importance of considering how these tools mediate learning and how they are used within the social context of the classroom. By applying Vygotsky's theory, educators can better understand the complexities of integrating digital

devices into their teaching practices and can develop strategies to enhance the effectiveness of these tools in supporting student learning (Engeness, 2020).

### **3.2.2 - Impact of Digital Devices on Educational Practices**

The impact of digital devices on educational practices in New Zealand can be understood through the lens of Vygotsky's Sociocultural Theory, which emphasises the importance of social interaction, cultural tools, and the broader educational context in shaping learning experiences (Bernard, 2024). Digital devices, such as cultural tools, play a central role in mediating learning and transforming the way students engage with content and interact with their peers and teachers. The use of these tools in the classroom has the potential to enhance learning by providing access to a wide range of resources, facilitating collaboration, and supporting personalised learning experiences (West, 2013).

The integration of digital devices also presents challenges, particularly in terms of ensuring that these tools are used effectively to support learning. Vygotsky's theory highlights the importance of scaffolding in this process, emphasising the role of teachers in providing the guidance and support needed to help students navigate the complexities of digital learning environments (Mamun, 2018). Effective scaffolding involves not only selecting appropriate digital tools but also designing learning activities that promote meaningful engagement and cognitive development (Sharma & Hannafin, 2007). By applying Vygotsky's principles, teachers can develop strategies to maximise the benefits of digital devices while addressing the challenges associated with their use.

In the New Zealand context, the impact of digital devices on educational practices is also influenced by the broader societal and cultural environment. The New Zealand Curriculum emphasises the importance of digital literacy and encourages the use of digital technologies to support learning and engagement (Reinsfield, 2018). This policy framework reflects a broader societal recognition of the importance of digital skills in the 21st century and underscores the need for educators to integrate these skills into their teaching practices. Vygotsky's Sociocultural Theory provides a valuable framework for understanding how these policy goals can be translated into practice, offering insights into the role of digital devices in mediating learning and promoting cognitive development (Beck, 2017).

### **3.3 - Key Concepts in Vygotsky's Sociocultural Theory**

#### **3.3.1 - Zone of Proximal Development (ZPD)**

The Zone of Proximal Development (ZPD) is a central concept in Vygotsky's Sociocultural Theory, representing the range of tasks that a learner can perform with the assistance of a more knowledgeable other but cannot yet accomplish independently (Chaiklin, 2003). The ZPD emphasises the importance of social interaction in learning, as it is through collaboration and guided support that learners are able to achieve higher levels of cognitive functioning. In the context of digital device integration in education, the ZPD can be understood as the space where students engage with digital tools under the guidance of teachers, who scaffold their learning experiences to help them reach their full potential.

Digital devices, when effectively integrated into the classroom, can serve as extensions of the ZPD, offering interactive and adaptive learning experiences that are tailored to the individual needs of students. For instance, educational apps and platforms often provide differentiated tasks that align with a student's current level of understanding, challenging them just beyond their independent capabilities. Teachers play a crucial role in this process, as they must select appropriate digital tools, provide necessary guidance, and gradually release responsibility to the students as they become more proficient. In this way, the ZPD concept is not just about the interaction between teacher and student but also includes the interaction between students and technology.

The ZPD emphasises the collaborative nature of learning, where peers can also play the role of the more knowledgeable other (Nyikos & Hashimoto, 1997). In digitally enhanced classrooms, students can work together on projects, share knowledge, and learn from each other's expertise with various digital tools. This collaborative learning environment aligns with the social constructivist principles of Vygotsky's theory, where learning is seen as a socially mediated process. By fostering such an environment, teachers can enhance the effectiveness of digital devices in supporting student learning within the ZPD, promoting not only individual cognitive development but also collective knowledge building.

#### **3.3.2 - Scaffolding**

Scaffolding, a concept closely related to the ZPD, refers to the temporary support provided by a more knowledgeable other to help a learner accomplish tasks that they cannot complete independently (Xi & Lantolf, 2021). In the context of digital device integration, scaffolding can take many forms, including direct instruction, modelling, feedback, and the use of digital tools that offer prompts or hints to guide students through tasks. As students become more competent, the scaffolding is gradually removed, allowing them to take full responsibility for their learning. This process is critical in ensuring that digital devices are used effectively to enhance learning, rather than simply serving as passive tools.

Teachers act as key facilitators in scaffolding within digitally enriched classrooms. They must not only understand the capabilities of the digital tools available but also how these tools can be used to support students' learning at different stages of development (Fishman et al., 2016). For instance, in literacy instruction, a teacher might use an e-reader annotation feature to help students identify and analyse key themes in a text, gradually encouraging them to make these connections independently. Similarly, interactive simulations and educational games can be scaffolded by the teacher, who might initially guide students through the use of the software, and then allow them to explore and learn from the tool independently as they gain confidence and skills.

Scaffolding also extends to the way teachers design learning experiences. By structuring tasks that build on each other and providing digital resources that support each stage of the learning process, teachers can create a scaffolded learning environment that gradually leads students towards greater independence and mastery. This approach not only aligns with Vygotsky's principles but also reflects best practices in digital pedagogy, where the goal is to integrate technology in ways that support, rather than overwhelm, the learner (Keengwe et al., 2014).

### **3.3.3 - Mediated Learning**

Mediated learning, another cornerstone of Vygotsky's Sociocultural Theory, refers to the process by which learners interact with and are influenced by cultural tools, such as language, symbols (Pesseisen & Kozulin, 1992), and, in the modern context, digital devices. These tools are not neutral; they actively shape the way learners perceive, interpret, and engage with the world. In the classroom, digital devices serve as powerful mediators of learning, offering new

ways for students to access information, communicate with others, and engage in critical thinking.

In the context of literacy instruction, digital devices can transform traditional learning experiences by providing multimodal texts, interactive content, and opportunities for collaboration beyond the classroom walls (Mahdi, 2023). For example, students might use tablets to access ebooks with embedded multimedia, engage in discussions on digital platforms, or collaborate on writing projects using shared online documents. These activities are mediated by digital devices, which not only facilitate access to content but also influence the way students interact with that content and with each other.

Teachers, in turn, play a critical role in shaping the nature of mediated learning (Hakkarainen, 2009). They must not only select appropriate digital tools but also design learning activities that take advantage of the unique affordances of these tools. For instance, in a lesson on persuasive writing, a teacher might use a digital platform that allows students to publish their work online and receive feedback from a global audience, thereby mediating the learning experience through the use of digital tools that expand the classroom community. By understanding the mediating role of digital devices, teachers can more effectively integrate technology into their instruction in ways that support the goals of literacy education.

The concept of mediated learning also emphasises the importance of cultural context in shaping the learning process (Ma, 2017). In New Zealand, the integration of digital devices into education must be understood within the broader cultural and societal context, including the values and priorities reflected in the New Zealand Curriculum. For instance, the emphasis on biculturalism and the incorporation of Māori perspectives in education can be supported by digital tools that provide access to a wide range of resources, including those in te reo Māori, thus mediating learning in a way that reflects and respects the cultural context of the learners.

### **3.4 - Vygotsky's Theory In The Digital Age**

Vygotsky's Sociocultural Theory, though developed in the early 20th century, remains highly relevant in today's digital age (Polly et al., 2017). The principles of social interaction, scaffolding, and mediated learning are particularly pertinent as educators navigate the challenges and opportunities presented by digital devices in the classroom. The integration of these devices

offers new ways to engage students, personalise learning, and connect with diverse resources, but it also requires careful consideration of how these tools are used to support meaningful learning experiences.

The digital age has expanded the possibilities for social interaction in learning, enabling collaboration not only within the classroom but also with peers, experts, and communities around the world. Vygotsky's emphasis on the social nature of learning is more relevant than ever, as digital devices facilitate new forms of communication and collaboration that transcend traditional classroom boundaries. These opportunities for social interaction can enhance learning, but they also require teachers to be mindful of how digital tools are used to foster meaningful and productive collaboration.

Scaffolding, too, takes on new dimensions in the digital age. Teachers must navigate a complex array of digital tools and resources, selecting those that provide appropriate levels of support for students at different stages of learning. Digital devices offer unique opportunities for scaffolding (Grévisse et al., 2019), such as adaptive learning technologies that adjust to the learner's level, but they also require teachers to be proactive in guiding students through these new learning environments (Sharma et al., 2024). The challenge is to balance the use of technology with the need for direct instruction and support, ensuring that digital tools enhance rather than detract from the learning process.

Finally, the concept of mediated learning is particularly salient in the context of digital device integration. Digital devices are not merely tools for accessing information; they are mediators that shape the way students interact with content and with each other. Understanding the mediating role of technology is crucial for educators as they design learning experiences that harness the potential of digital devices to support cognitive development (Cavanaugh et al., 2016). This requires a nuanced understanding of both the affordances and limitations of digital tools, as well as a commitment to using technology in ways that align with educational goals and values.

### **3.5 - Vygotsky and My Research**

Vygotsky's Sociocultural Theory was chosen as the theoretical framework for this study, emphasising the importance of social interaction, cultural tools, and the Zone of Proximal

Development (ZPD) in shaping students' learning experiences. This framework is particularly relevant in understanding how digital devices, such as cultural tools, influence the teaching and learning processes in the classroom. The interview questions were designed to explore how teachers perceive and utilise these digital tools to mediate student learning, foster collaboration, and scaffold students' reading skills, all of which align with Vygotsky's principles.

There are four sections to my interview questions. Each section contains eight questions and each focuses on a different array of topics related to the integration of digital devices in literacy instruction. All of these have been designed to provide insight into teachers' experiences and perceptions regarding the integration of digital devices into literacy instruction for Year 7 and 8 students in New Zealand. Each section is crafted to support a specific research objective, ensuring a logical flow that aligns with the broader research question. (To view these research questions, refer to the appendix).

The focus of each section of questions supports a different aspect of Vygotsky's Social Cultural Theory. Each section is discussed and linked to the appropriate aspect of Vygotsky, as outlined in the following.

### **Section One:**

In the first section, the questions aimed to explore teachers' perceptions of the value of digital devices in reading programs. For example, the question "What do you as a teacher see/perceive as the value of digital devices in reading programmes?" directly relates to Vygotsky's idea that tools, including digital devices, mediate cognitive processes. This question provides an opportunity for teachers to share their ideas on the value of digital devices in reading.

Questions like "How do you compare the engagement levels when using digital devices versus traditional reading methods?" and "Can you provide examples of how digital tools accommodate students with varying reading levels or learning needs?" are designed to investigate how digital devices serve as scaffolds within the ZPD. Teachers' insights on how these tools support or challenge students at different levels of proficiency reflect the Vygotskian perspective that learning is most effective when it occurs just beyond the current capabilities of the learner, with appropriate support.

## **Section Two:**

The second section delves into the evolving role of the teacher in the digital age. Questions such as "How has your role evolved with the integration of digital devices in your teaching?" and "What new skills or knowledge have you needed to acquire to effectively use digital devices in teaching reading?" focus on the professional development of teachers as they adapt to new educational tools. From a Vygotskian viewpoint, this relates to the concept of the more knowledgeable other, where the teacher must continuously develop expertise to effectively guide and support students' learning with these new tools.

Additionally, questions like "What strategies do you use to encourage collaboration among students using digital devices?" align with Vygotsky's emphasis on social learning. The responses will help uncover how teachers facilitate collaborative learning experiences, leveraging digital tools to create social interactions that promote cognitive development. Vygotsky argued that learning is inherently a social process, and these questions are intended to explore how digital devices are being used to foster such collaborative environments in literacy instruction.

## **Section Three:**

In the third section, the questions are designed to explore the direct impact of digital devices on children's learning. For instance, "How do you use data from digital devices to tailor instruction to individual student needs?" relates to the concept of the ZPD by examining how teachers utilise technology to provide personalised learning experiences that are attuned to each student's current level of development. This question, along with others such as "How do digital devices support the development of student's ability to analyse and interpret texts?" is aimed at understanding how digital tools are employed to promote higher-order thinking skills and deeper cognitive engagement, reflecting Vygotsky's views on the role of cultural tools in cognitive development.

Questions like "How do you incorporate diverse and multicultural texts available through digital platforms into your reading curriculum?" also resonate with Vygotsky's emphasis on the sociocultural context of learning. By exploring how teachers integrate culturally relevant

materials through digital platforms, the research seeks to understand how digital devices are used to connect students with a broader array of cultural narratives, thus enriching their learning experiences in a manner consistent with Vygotskian theory.

#### **Section Four:**

The final section of the interview focuses on the changes in pedagogy necessitated by the integration of digital devices. Questions such as "What changes in pedagogy do you as a teacher see as needed to effectively use digital devices in a classroom?" and "What techniques do you use to manage a classroom where digital devices are frequently used?" provide an opportunity for teachers to share their ideas on how teaching practices are evolving in response to the incorporation of new digital tools. These questions align with Vygotsky's idea that tools, including digital devices, are integral to the learning process and that teachers must adapt their instructional strategies to effectively mediate learning.

Additionally, questions like "How do you balance traditional and digital reading methods in your instruction?" are designed to investigate how teachers negotiate the use of old and new tools in the classroom. Vygotsky's theory suggests that new tools, such as digital devices, can transform cognitive processes and instructional practices, and this research seeks to explore how teachers are balancing these different modalities to support student learning.

Incorporating Vygotsky's Sociocultural Theory into my research provided a comprehensive framework for understanding the complexities involved in integrating digital devices into literacy instruction. This theory guides the development of my research and interview questions, ensuring they capture the diverse influences that impact teachers' experiences and perceptions. The study seeks to explore the teacher's perceptions about the challenges they face, the strategies they find effective, and the resources available to them by examining how social interaction, cultural tools, and scaffolding processes shape the integration of digital devices in the classroom.

### **3.6 - Summary**

Vygotsky's Sociocultural Theory provided a robust theoretical framework for understanding the integration of digital devices in New Zealand classrooms, particularly in the context of teacher's

perceptions of their use in literacy instruction for Year 7 and 8 students. The concepts of the Zone of Proximal Development, scaffolding, and mediated learning offer valuable insights into how digital devices can be used to enhance learning, while also highlighting the critical role of teachers in guiding and supporting this process. As digital technology continues to evolve, Vygotsky's theory remains a relevant and powerful tool for understanding the complexities of teaching and learning in the 21st century.

Grounding this research in Vygotsky's Sociocultural Theory has provided a critical lens through which to examine the integration of digital devices in literacy instruction for Year 7 and 8 from the teacher's point of view. The theoretical concepts of the Zone of Proximal Development, scaffolding, and mediated learning have not only shaped the research design and interview questions, but have also offered a deeper understanding of how digital tools function as cultural artefacts that mediate learning. This framework has enabled an exploration of the complex and evolving role of teachers as facilitators of digital literacy, highlighting their pivotal responsibility in adapting pedagogy to meet diverse student needs. It has also underscored the importance of collaborative learning environments and the ways in which digital devices can be used to extend cognitive engagement and promote inclusive, personalised learning experiences.

By drawing direct connections between Vygotsky's principles and the realities of contemporary classroom practices from the teacher's viewpoint, this research contributes meaningfully to the broader discourse on educational technology and pedagogy. It affirms that while digital tools offer significant potential, their effectiveness is ultimately shaped by the teacher's belief about their use and their ability to implement them purposefully within a socially and culturally responsive instructional context. As the educational landscape continues to be reshaped by rapid technological advancement, the enduring relevance of Vygotsky's theory becomes increasingly evident. This study reinforces the idea that thoughtful, theory-informed integration of digital devices is essential not only for supporting students in the present, but for preparing learners and teachers to navigate and succeed in a digitally driven future.

The following chapter, Chapter 4, links the study questions, interview questions, and theoretical framework to the chosen methodology and methods.

## **Chapter 4 - Methodology**

This chapter outlines the methods and strategies I planned to use in this study, building upon Vygotsky's Sociocultural Theory and the theoretical framework introduced in the previous chapter. I aimed for this study to explore the experiences and perceptions of New Zealand intermediate school teachers who are using digital devices to enrich literacy instruction in their classrooms, particularly in Years 7 and 8 (11 and 12-year-old students). This chapter begins by considering the interpretivist paradigm as the guiding worldview, linking it to Vygotsky's theoretical framework to illustrate its application throughout the study. An overview of my research design is provided, justifying the qualitative methods used to gather data and select participants.

Central to this research is the use of Braun and Clarke's (2006) thematic analysis, which is discussed in detail throughout the chapter. This method is employed to systematically identify, analyse, and report patterns (themes) within the data collected from semi-structured interviews. A rationale for the chosen methodologies is stated, followed by a reflection on the data collection methods discussed in the second section. Ethical considerations and limitations of the study are also considered throughout.

The second section of this chapter details the research implementation, including the methods and strategies used to gather and analyse data. It reflects on the data-gathering methods outlined in the first section and how the process was framed. A breakdown of study participants is provided in the table below. To begin this methodology chapter, I first explain how my research paradigm and worldview influence the study.

### **4.1 - Worldview**

A paradigm refers to the shared principles, methods, and values agreed upon by researchers within a specific field of study (Kivunja & Kuyini, 2017). Paradigms, as diverse perspectives of the world, serve as the foundation for research projects, encompassing assumptions about reality, the process of knowledge creation, and the aspects deemed worthy of exploration (Sparkes, 2012). Research paradigms guide researchers in their studies, shaping their perspectives on the world and influencing how knowledge is created and acquired.

In this study, the interpretivist paradigm which offers a comprehensive worldview that emphasises understanding the subjective realities of individuals (Pervin & Mokhtar, 2022) was used. This perspective resonates with my worldview, which values the importance of exploring the diverse experiences and perceptions of teachers as they integrate digital devices into literacy instruction. The interpretivist approach allowed for an examination of how six teachers construct their understanding of technology use in educational settings and how these experiences vary across different classrooms at schools.

With a focus on the integration of digital devices in Year 7 and 8 classrooms, this study aimed to explore how teachers perceive and navigate the challenges and opportunities presented by technology. By incorporating elements of Vygotsky's Sociocultural Theory into the research methodology, the study gains a framework to examine the interactions between teachers and the cultural tools, social interactions, and scaffolding processes that influence their practices. This approach acknowledges the complex dynamics within educational environments and seeks to uncover the multiple realities that shape teachers' experiences with digital device integration.

## **4.2 - My Research Paradigm**

Identifying the research paradigm for a study involves understanding the beliefs, assumptions, and varying perspectives that reveal the essence and purpose of the research. By incorporating aspects of interpretivism and Vygotsky's Sociocultural Theory into the development of my research methodology, this study adopts an interpretive approach as its research paradigm.

The interpretivist perspective posits that our understanding of reality as humans is shaped and maintained through our interactions in social processes (Willis, 2007). Through these social processes, individuals construct their social realities, which are subjective and context-dependent, as each person has different interpretations of the world, shaping their contextual understanding (Phillips, 2023).

An interpretivist approach does not accept the concept of a single reality and aims to describe, explore, and understand the context of naturally occurring events (Goldkuhl, 2012). This approach aligns with the theme of technology integration in education, acknowledging that the use of digital devices in classrooms is a dynamic and context-specific process. Each classroom

and teacher brings unique perspectives and realities, but common challenges and opportunities associated with digital device integration can impact teaching and learning.

This study adopts an interpretive paradigm as it recognises the diversity of teachers and their experiences, acknowledging that their perspectives and practices differ. The focus is on how teachers socially construct their relationships with technology and their students, understanding that each individual makes sense of the world differently and believes that there may be multiple realities. By adopting the interpretive paradigm, this research aimed to uncover specific strategies and interventions that teachers use to integrate digital devices into literacy instruction. Simultaneously, it seeks to recognise the diverse experiences and perspectives of teachers, understanding how their social realities, beliefs, and interpretations vary based on their individual experiences.

To capture teachers' viewpoints and their interpretations of multiple realities, I used semi-structured interviews as the primary research method. This qualitative research approach was best suited to gather rich and insightful perspectives from teachers. As I have chosen Vygotsky's theoretical framework to underpin this study, I have used this theory to connect my research approach.

### **4.3 - Understanding Teacher Approaches Through Vygotsky's Framework**

Vygotsky's Sociocultural Theory serves as the theoretical framework presented in Chapter 3. This framework provides a foundational lens for understanding the role of social interaction, cultural tools, and the Zone of Proximal Development (ZPD) in shaping teachers' experiences and perceptions, particularly in the context of integrating digital devices into literacy instruction. The theory emphasises the importance of the social environment and cultural tools in cognitive development, suggesting that teachers and students co-construct knowledge through interaction. By acknowledging the importance of these factors, teachers can develop comprehensive strategies to enhance literacy instruction through the effective use of digital devices.

At the centre of Vygotsky's framework is the idea that learning is inherently a social process, where teachers act as more knowledgeable others, guiding students through their ZPD (Eun, 2017). Digital devices, as cultural tools, are integrated into this process, mediating learning and

providing scaffolding to support students' cognitive development. The theory adds complexity to the integration of digital devices into the classroom, reflecting the multifaceted nature of teaching in a technologically enriched environment.

#### **4.3.1 - Applying Vygotsky**

Vygotsky's Sociocultural Theory emphasises the importance of the social context and cultural tools in learning, with the teacher positioned as a central figure in this study. According to Vygotsky, learning is a socially mediated process, where interactions with teachers, peers, and cultural tools like digital devices play a critical role in cognitive development (Fadeev, 2019). Understanding how teachers, as facilitators of learning, navigate the integration of digital devices into literacy instruction, was essential for this study.

This research employs Vygotsky's Sociocultural Theory to investigate how teachers operate within these social and cultural contexts, to enhance literacy instruction through digital devices in Year 7 and 8 classrooms. The theory also provided the structure for the analysis and discussion chapters. Each aspect of Vygotsky's theory, including the ZPD, social interaction, and the role of cultural tools, is examined in these chapters to explore how teachers perceive they effectively integrate digital devices into their instructional practices, thereby enriching students' literacy development.

#### **4.4 - Qualitative Research**

Qualitative research is a method that positions the observer within the world, enabling a deep exploration of social reality by examining the meanings individuals attribute to their experiences in natural settings (Denzin & Lincoln, 2011). It is a diverse methodological approach that seeks to understand the complexity of human experiences, making it ideal for exploring the perceptions and practices of teachers integrating digital devices into literacy instruction in New Zealand classrooms.

According to Creswell and Poth (2016), qualitative research is particularly suited for investigating complex and context-specific phenomena, such as how teachers adapt to and implement digital technology in educational environments. This approach aligns with this study's interpretivist paradigm, which aimed to uncover the subjective realities of teachers' experiences.

By focusing on the nuanced, lived experiences of teachers, qualitative research provides the flexibility to capture the rich, diverse narratives that are essential for understanding how digital devices are integrated into literacy programs.

Qualitative research was selected as the methodological approach for this study because it allows for an in-depth examination of teachers' observations, experiences, and perspectives on the use of digital devices in literacy instruction. By gathering their insights, I aimed to understand how these devices are situated within the classroom context, drawing on teachers' professional and personal experiences. This approach helped reveal the diverse ways in which digital technology is employed in literacy education, providing a foundation for future recommendations on best practices (Charmaz, 2014).

## **4.5 - Method**

This section has outlined the methods I planned to use for gathering data in this study, focusing on understanding the experiences and perspectives of teachers using digital devices to enrich literacy instruction. I discuss the sampling techniques for recruiting participants, the rationale behind participant selection, the process of contacting participants, and my approach to conducting interviews. These methods have been carefully chosen to align with my research questions and objectives.

### **4.5.1 - Sampling**

Sampling is a critical component of qualitative research, guiding the selection of participants who can provide rich, detailed insights into the research topic (Patton, 2002). There are two main types of sampling: probability and non-probability sampling. Probability sampling, such as random sampling, gives every individual in the population an equal chance of being selected, ensuring a representative sample (Cohen, 2017).

In contrast, non-probability sampling does not involve random selection, making it more suitable for qualitative research where the focus is on in-depth exploration rather than generalisation (Suri, 2011). As Guest, Namey, and Mitchell (2013) noted, non-probability sampling is often used in qualitative studies to select participants purposefully, based on specific criteria relevant to the research question.

For this study, I chose non-probability sampling methods, specifically purposeful sampling. Purposeful sampling allowed me to deliberately select teachers who have direct experience and knowledge of integrating digital devices into literacy instruction in Year 7 and 8 classrooms. This approach ensured that the participants were well-suited to provide the insights needed to answer my research questions.

#### **4.5.2 - Selection of Participants**

The selection of study participants was not random; instead, it was guided by the principles of non-probability sampling. According to Miles and Huberman (1994), aligning participant selection with research objectives is crucial for collecting relevant data and effectively addressing research questions. In this case, I was seeking teachers who had substantial experience with using digital devices in literacy instruction, as they provided the most valuable insights into the research theme.

Teachers, particularly those working in Year 7 and 8 classrooms, were uniquely positioned to offer detailed perspectives on the integration of digital devices in literacy programs. Their regular interactions with students placed them at the forefront of understanding how these devices impact learning outcomes. By focusing on teachers as the primary participants, this study aimed to uncover the strategies they use to incorporate digital technology into their teaching practices.

#### **Contacting Participants**

To recruit participants, I sent a research invitation email to the principals of various schools on Auckland's North Shore (see Appendix Two). These emails included a Participation Information Sheet (see Appendix three) and a request for voluntary participation from teachers (see Appendix). Once principals granted approval, they were then asked to distribute the research invitation along with the participant's information sheet (see Appendix Three). I then visited the schools to present my research during staff meetings, allowing interested teachers to come forward voluntarily.

As only two participants in each school volunteered to participate in this study, no further selection process was needed.

### **Participants in the Study**

This study was conducted in three schools on the North Shore of Auckland. Six teachers agreed to participate, two participants from each school. Participants taught in the following year levels; 2 teachers taught a Year 7 class.

2 teachers taught a Year 8 class.

2 teachers taught in a composite class of Years 7 and 8.

### **4.5.3 - Interviews**

The data was collected through face-to-face semi-structured interviews with the six selected participants. Semi-structured interviews allowed for flexibility in questioning and the opportunity to explore participants' experiences in-depth (Braun and Clarke, 2006). These interviews provided opportunities for participants to share their experiences with digital device integration in literacy instruction. This approach allowed for the exploration of complex and context-specific issues that could potentially not be easily captured through more structured or quantitative methods (Lim, 2024). As Kvale (2007) noted, semi-structured interviews provide a conversational platform where the researcher can probe and clarify responses, ensuring a comprehensive understanding of the participants' perspectives.

Individual interviews were conducted with each participant in an appropriate room in the school. Interviews lasted for approximately 30-45 minutes. The interviews were recorded using a digital device, as well as field notes taken. At the end of each interview, the key points were shared with the participant to ensure the accuracy of the recording.

### **4.5.4 - Data Analysis**

Braun and Clarke's Thematic Analysis (2006) was used to analyse interview data. Thematic analysis allows the researcher to systematically identify, organise, and interpret patterns of meaning, referred to as 'themes' within a dataset (Cassell & Bishop, 2019). One of the core strengths of Braun and Clarke's approach is its emphasis on the researcher's active role in the analytic process. As Clarke and Braun (2016) emphasise, thematic analysis is not a purely

mechanical process; rather, it involves a dynamic interplay between the researcher's theoretical assumptions, the research questions, and the data itself.

Using Braun and Clarke's thematic analysis involves six steps in identifying key themes from the data. These are;

1. Familiarisation with the data, which involves reading and re-reading interview transcripts.
2. Generating initial codes.
3. Searching for themes, which involves examining the initial codes to identify patterns.
4. Reviewing and refining the themes.
5. Defining and naming themes, which involves articulating the essence of each theme.
6. Producing a report, which involves integrating the themes into a coherent narrative that addresses the research question.

### **Braun and Clarke's Thematic Analysis in Practice**

At the beginning of the analysis process, I transcribed all interview data. These transcripts were then read and re-read to immerse myself in the data. Once immersed in the data, I re-read and looked for emerging themes that could be coded which involved grouping responses into alike themes. These themes were then reviewed and were needed, split into sub-themes. Once groupings were established, appropriate labels for each group of responses were assigned. This last step allowed for the identification of themes that could be used to answer the research question; What are the experiences and perceptions of New Zealand intermediate school teachers on using digital devices to enrich literacy, specifically reading, instruction in the classroom?

#### **4.5.5 - Ethical Considerations**

Ethics approval for this study was obtained from the Auckland University of Technology Ethics Committee (AUTEC). Ethics was accepted on 16 August 2024, AUTEC reference number 24/228. The research design prioritised the well-being of participants, ensuring that their time and contributions were respected. Informed consent, confidentiality, anonymity, and the right to withdraw were key ethical considerations addressed in the study.

#### **4.5.6 - Participant Safety**

While the study posed minimal risk to participants, measures were still taken to ensure their safety and comfort. Participants provided verbal and written consent, and the researcher was attentive to any signs of discomfort during interviews. Data is securely stored, with hard copies locked in my supervisor's office and digital files protected by password-secured software.

#### **4.5.7 - Participants' Right To Withdraw**

Participants were informed of their right to withdraw from the study before the end of the data collection phase. They were assured that any contributions made up until that point would still be included in the research data unless they requested otherwise.

#### **4.5.8 - Anonymity**

To maintain anonymity, all participants were given pseudonyms, and no school names were mentioned in the research. Data collection only included responses from teachers who had provided explicit consent, and efforts were made to uphold confidentiality throughout the research process.

#### **4.6 - Research Design Conclusion**

This chapter outlined the methodology and method used for investigating teachers' perceptions of the value and role of digital devices in a literacy programme. The research is grounded in an interpretivist paradigm. The participants' responses were analysed through the use of Braun and Clarke's thematic analysis. The next chapter presents the results found through following this process.

## **Chapter 5 - Results**

In this chapter, I present the findings of my research on the integration of digital devices into literacy instruction in Year 7 and 8 classrooms in New Zealand. The results are drawn from data collected through teacher interviews and were organised into key themes using Braun and Clarke's thematic analysis process. These themes reflect the experiences, challenges, and strategies employed by teachers as they incorporate digital tools into their literacy programs. I highlight both the opportunities and barriers identified by educators, as well as the impact of digital devices on student engagement and learning outcomes. The results are presented under key themes, these are; traditional versus digital device engagement, learning using digital devices, features and benefits of digital devices in literacy instruction, assessment of learning using digital devices, examples of resources used in literacy instruction, issues, distractions, and challenges in using digital devices, the role of the teacher and skills needed, feedback from students.

As this study is focused on the voice of the participants, their words are presented in italics.

### **5.1 - Traditional Versus Digital Device Engagement**

The integration of digital devices in literacy instruction continues to be a topic of discussion among educators. While five of the participants advocated for a balanced approach that includes both traditional and digital methods, a few (only one or two) were more inclined to either rely heavily on traditional practices or explore the full potential of digital tools. This section presents the varied perspectives and experiences shared by participants regarding the use of digital devices in Year 7 and 8 classrooms, highlighting the benefits, challenges, and pedagogical considerations.

#### **5.1.1 - The Value of a Balanced Approach**

For many participants, the ideal classroom environment incorporates both traditional and digital reading methods, offering students a blend of experiences that cater to diverse learning needs. Participants who favoured this balanced approach noted that digital devices, when used in

moderation, could support and enhance traditional reading practices as shown in the statements following;

- *“We focus heavily on traditional methods, using digital tools primarily for supplementary follow-up.”* (Participant A)
- *“Many educators believe that digital tools can complement traditional methods, providing additional resources and interactive elements that enrich reading experiences.”* (Participant C)
- *“While we don’t fully rely on digital tools for assessments, for subjects like English, we have returned to a process of handwriting drafts before publishing work online, as it supports the cognitive process better.”* (Participant D)

These comments, as previously shown, suggest that traditional reading materials remain at the core of literacy instruction, with digital tools serving as additional resources to extend learning rather than replace foundational reading skills.

The value of a balanced program was further reinforced by statements where participants commented on when and/or how often digital tools were used, highlighting the importance of integrating a variety of methods and maintaining a thoughtful approach to technology in education. This was revealed in the following statements;

- *“We use a mix of methods; we incorporate a mix of reading strategies. Digital tools are used sparingly.”* (Participant D)
- *“Progress is tracked through a combination of digital and offline assessments, including E-Asttle administered at the beginning and end of the year.”* (Participant F)
- *“We prefer not to use devices for assessments. Good for snapshots of progress. Kahoot for book assessments. Handwriting is better for demonstrating comprehension.”* (Participant A)
- *“ We have a Tumble rotation: A method used to ensure balance in device usage across groups, preventing any group from having more screen time than others.”* (Participant F)

Educators showed how they catered for the different learning preferences within their classrooms. This included combining the structure and depth offered by traditional texts with the interactive potential of digital devices and was highlighted by participants when they stated;

- *“We as teachers prefer a combination of traditional and digital texts, as some students engage more with digital platforms while others benefit from physical books.”* (Participant A)
- *I teach novel studies as a mixture; students have physical books and can research the themes digitally, which keeps engagement high.”* (Participant C)
- *“Digital devices offer diverse learning experiences. For some tasks, like reading comprehension, I use both traditional and digital methods to allow students to choose what works best for them.”* (Participant D)
- *“I try to incorporate interactive activities like quizzes and videos, alongside traditional books, to support different learning preferences.”* (Participant E)

Based on the statements prior, participants saw an advantage of this blended approach because it encourages students to develop a broader range of literacy skills. As noted in the statements previously, participants identified that traditional reading methods, such as reading novels and completing written comprehension tasks, help build foundational skills like vocabulary development, critical thinking, and in-depth analysis of text.

In contrast, digital devices have been proven to introduce students to tools like online reading apps, multimedia content, and interactive writing platforms, which can enhance engagement and encourage more active participation in literacy tasks. As four of the participants explained;

- *“A successful balance between digital and traditional methods is important.”* (Participant E)
- *“The blended approach enables the development of a wide array of literacy skills, catering to the multifaceted nature of literacy in today’s world.”* (Participant A)
- *“Traditional methods, such as reading novels, lay the groundwork for essential skills like vocabulary expansion and critical analysis, fundamental for academic success.”* (Participant B)
- *“We emphasise the importance of finding a harmonious balance between digital and traditional methods to foster well-rounded literacy development.”* (Participant D)

As a result of the feedback, this demonstrates how participants strive to combine the strengths of both approaches to ensure students are developing both their digital and traditional literacy skills.

However, achieving this balance of using traditional methods and digital devices, requires careful planning. Participants described their classroom practice as an intentional integration;

- *“We make sure to use a range of methods so that students aren’t overwhelmed by devices but still get the opportunity to explore digital platforms in short, targeted sessions.”* (Participant B)
- *“Digital devices are incorporated selectively, with targeted, brief sessions to maintain focus and prevent device fatigue.”* (Participant E)
- *“We as teachers balance digital device usage with traditional activities to avoid overloading students while still integrating technology.”* (Participant A)
- *“We do screen-free days sometimes because we don’t want them constantly on devices, but we also see the benefit in short, purposeful digital activities.”* (Participant B)

These comments reflect the strategies participants use to balance digital tools with traditional methods, emphasising the importance of planning. As previously mentioned, the careful integration of digital devices is seen as essential in avoiding potential pitfalls like over-reliance, distractions, or disengagement.

### **5.1.2 - Diverging Views on Digital Devices**

While two participants embraced the potential of digital devices, others expressed strong preferences for traditional methods of reading and literacy instruction. Four out of the six participants emphasised that many students still preferred hard copies over digital devices when it came to reading. As four of the participants reported;

- *“Over half of the class prefers hard copies over digital devices.”* (Participant B)
- *“Only use pen and paper for assessment. Want to find out how they can do it without the extra help.”* (Participant C)
- *“While we don’t fully rely on digital tools for assessments, for subjects like English, we have returned to a process of handwriting drafts before publishing work online, as it supports the cognitive process better.”* (Participant D)

- *"We prefer not to use devices for assessments. Good for snapshots of progress. Kahoot for book assessments. Handwriting is better for demonstrating comprehension."*  
(Participant A)

The participant's preference for traditional methods reflected a belief that physical books provide a more immersive and tactile reading experience, which can lead to better comprehension and retention of information. For five of the participants, traditional reading materials continue to play a crucial role in literacy development. As demonstrated in the following comments;

- *"Digital platforms often lack the same depth of engagement that printed books offer."*  
(Participant C)
- *"There is a notable difference between working on a device compared to reading or engaging with traditional paper-based activities."* (Participant C)
- *"I believe that reading should be a hands-on experience... digital devices limit this interaction"* (Participant D)
- *"There is a better engagement with written texts over digital devices."* (Participant B)
- *"Traditional reading can be more engaging if structured well, while digital devices can lead to distractions. Some tools mitigate distractions but result in less intense engagement."* (Participant A)
- *"Improved progress and outcomes have been noted with reduced digital reliance."*  
(Participant A)
- *"I still favour traditional methods over digital, noting that a balance is important, but they lean towards traditional methods for deeper engagement."* (Participant A)
- *"After observing some students' success with traditional learning, I saw less benefit from full digital integration."* (Participant F)

As noted earlier, five of the participants mentioned that they emphasised that traditional texts encourage students to slow down and engage more deeply with the content. This was supported by two participants (Participants D and A) who expressed that digital tools can sometimes feel *"repetitive"* and *"boring"* for students, ultimately leading their schools to stop using certain digital reading tools altogether.

In contrast, two participants saw digital devices as offering unique opportunities that traditional methods could not match. Several participants noted that digital tools allowed for more

*“polished” and “professional student work.”* This was highlighted in comments by three participants;

- *“Digital outcomes appear more professional and meaningful compared to paper-based work.”* (Participant F)
- *“Digital tools let students achieve more impressive, polished results, especially in presentations and project-based tasks.”* (Participant F)
- *“I see digital learning as advantageous for students' work presentations. The results look cleaner and more refined than traditional paper-based projects.”* (Participant B)
- *“Using digital tools allowed students to create work that was polished, as opposed to the limitations seen in traditional formats.”* (Participant B)
- *“Digital platforms enable students to add a level of professionalism to their work that wouldn't be possible with handwritten or printed materials.”* (Participant D)

The comments made by the participants suggest that the creative possibilities offered by digital platforms can inspire students to take pride in their projects. For these participants, digital devices were seen as offering new ways to engage students in the writing process, with tools that allow for easy editing, multimedia integration, and more visually appealing presentations of work. Five out of six of the participants commented that digital platforms were recognised for providing students with access to a wider range of reading materials. These were expressed by stating;

- *“Digital platforms give students access to more diverse reading materials, which helps broaden their understanding and ideas.”* (Participant E)
- *“Digital platforms provide access to a broader selection of reading materials, including resources that might otherwise be unavailable in traditional libraries.”* (Participant C)
- *“Digital tools offered a wealth of reading options, including interactive and personalised content, which many students found engaging, especially those with diverse learning preferences.”* (Participant B)
- *“Digital platforms allow students to explore different genres and forms of literature, enhancing their overall learning experience and catering to various reading interests.”* (Participant D)

- *"While digital platforms offer extensive resources, I believe there are doubts about whether students would choose these digital tools for recreational reading, noting a preference for traditional books in fostering a love for reading."* (Participant E)
- *"Despite the range of materials available through digital platforms, many students didn't opt to use these tools for pleasure reading, suggesting that traditional books still played a crucial role in nurturing a passion for reading."* (Participant F)

The participants highlighted that, despite the wide array of materials available through digital platforms, these tools were seen as particularly beneficial for students who might not otherwise have access to certain types of literature or who prefer content that is more interactive or personalised.

Despite these advantages, participants remained sceptical of the impact of digital devices on students' reading habits. One participant shared that they "never use digital devices for pleasure," pointing out that even when students were proficient with digital tools, they often did not choose to use them for reading outside of classroom tasks. This suggests that while digital platforms can be effective in certain structured settings, they may not foster the same love of reading that traditional books can inspire.

### **5.1.3 - Opportunities and Challenges of Digital Devices**

The results of this study showed that digital devices offer significant opportunities to engage students, particularly those who might struggle with traditional texts. Five out of the six participants highlighted the effectiveness of digital tools in reaching students who may not otherwise engage in reading activities. However, participants noticed that the benefits of digital devices are balanced by several challenges, including concerns over screen time and the reduction of collaborative learning experiences.

One of the main benefits of digital devices is their ability to engage "*reluctant readers*" as participants C and D stated. Participants highlighted how these tools, through their interactive and multimedia features, helped capture the attention of students who may not be drawn to traditional books. These are shown and can be revealed through the following comments;

- *“Digital devices engage reluctant readers... some students prefer reading on devices over books.”* (Participant C)
- *“The use of gamified reading apps and digital storytelling tools helped students interact with content in a way that traditional texts couldn’t match. Reluctant readers were able to benefit from this.”* (Participant D)
- *“For students with reading difficulties, features such as adjustable font sizes and audio versions can make reading more accessible and enjoyable.”* (Participant F)

These features allowed reluctant readers to feel more comfortable and confident, ultimately improving their literacy engagement in ways that traditional reading methods might not achieve.

The participants appreciated how digital platforms offer greater accessibility and personalisation, making reading more inclusive for a diverse range of learners. From the feedback received, digital devices can adapt to individual student needs, which helps overcome barriers to literacy for those who may struggle with traditional methods. Two participants mentioned that;

- *“The ability to adjust font sizes or switch to an audio format helped students with reading challenges engage more deeply with the material.”* (Participant F)
- *“The interactive quizzes and embedded videos in digital platforms can support comprehension for students who struggle with lengthy texts.”* (Participant E)

The customisation of digital devices enables participants to tailor reading experiences to meet the needs of diverse learners, ensuring that every student can access content in a way that suits their preferences and abilities.

Despite these benefits, the issue of screen time management was a significant concern for many participants. Prolonged use of digital devices could lead to distractions, decreased attention spans, and reduced motivation for reading. Several participants expressed worries about the amount of time students spent on screens when stated;

- *“Screen time management is a constant battle.”* (Participant A)
- *“While digital devices are useful in the short term, they might not foster a love of reading in the same way that traditional books do.”* (Participant B)

- *“Digital devices are not particularly beneficial for slower students. They cause a lot of distractions for these students and always end up off task.”* (Participant B)
- *“Not a huge fan of digital devices in reading programmes... focus shifts away from learning.”* (Participant D)
- *“Risk of distraction; some students get lost online”* (Participant E)

The concerns revealed prior, prompted many participants to consider how to balance the use of digital tools with traditional reading methods, ensuring that students are not overwhelmed by the digital environment.

In response to the concerns raised by participants with screen time management, three participants described strategies they had implemented to regulate screen time and ensure that students still engaged with traditional reading materials;

- *“The library has an expectation that students must read a book... and we adapt lessons based on student input.”* (Participant A)
- *“We have limited screen time during the day and set specific times for students to engage with traditional reading materials to avoid over-reliance on digital tools.”* (Participant B)
- *“We schedule dedicated reading sessions throughout the week where students can only use physical books, encouraging them to disconnect from screens and immerse themselves in print.”* (Participant C)

These kinds of approaches, as shown prior, help students maintain a connection with physical books, promoting a balanced literacy experience that leverages the best of both digital and traditional resources.

In contrast, five of the participants expressed concerns that digital platforms could reduce collaborative reading experiences, which are a key part of literacy development. Traditional classroom activities, such as group discussions and peer editing, foster communication and interaction among students. However, digital tools can sometimes encourage more individualised learning.

One participant (Participant B) observed that while digital platforms allowed students to work independently and produce “*polished,*” professional work, it came at the expense of collaborative discussions that are common in traditional literacy lessons. As a result, half of the participants noted that they needed to rethink how they structured literacy lessons, ensuring that digital tasks still allowed for collaborative learning and critical thinking.

While half of the participants found that digital platforms could elevate the professionalism of student work, others noted that engagement with these tools did not always translate to long-term reading habits. As one participant commented, “*there was a significant increase in students using digital platforms for projects, but they still preferred books when it came to reading for pleasure*” (Participant C). This suggests that while digital devices may be effective for short-term engagement, their impact on fostering a lasting interest in reading remains uncertain.

## **5.2 - Learning Using Digital Devices**

Digital devices have become an integral part of literacy instruction in many New Zealand classrooms. Their ability to cater to a wide range of learner needs, particularly in diverse and inclusive learning environments, has positioned them as crucial tools in supporting students’ educational journeys. This section examined how participants leverage digital devices to meet the abilities and needs of their students, the balance they aim to maintain between technology and traditional methods, and the specific challenges faced when integrating digital tools into classroom instruction.

### **5.2.1 - Supporting Diverse Learners With Digital Devices**

A significant benefit of using digital devices in the classroom is their ability to cater to diverse learners; students with varied cognitive, physical, and emotional needs. Diverse learners include students with learning disabilities, gifted students, those who require differentiated instruction, and students who may struggle with traditional learning methods. Participants recognised that diverse students often benefit from the adaptability and accessibility that digital devices offer. All of the participants commented on how digital devices support a range of diverse learners. The following comments benefit this;

- *“Digital devices provide significant value, particularly for students who are away from school.”* (Participant B)
- *“Devices often identify student gaps and areas of excellence.”* (Participant E)
- *“HERO platform is used to log and track individual student progress, allowing both teachers and parents to monitor a child's development over the year.”* (Participant F)
- *“Devices help students with messy handwriting but create expectations for instant answers.”* (Participant B)
- *“Devices can cater specifically for a student. It can help them to gain confidence.”* (Participant C)
- *“Offer diverse resources for varied interests and learning styles, enabling personalised instruction.”* (Participant A)

These comments shown previously, reveal how digital devices can bridge the gap for students who may not be physically present in the classroom, allowing them to remain engaged in their learning despite barriers like illness or other external challenges.

Digital devices are widely appreciated for their capacity to offer personalised learning experiences, enabling participants to adapt instruction to suit the unique needs of each student. Most of the participants emphasised how digital devices allow them to differentiate tasks, adjust the level of challenge, and cater to diverse learning styles, fostering more targeted and effective instruction. The flexibility and adaptability of digital resources were particularly valued for supporting students with varying abilities, ensuring that each learner receives appropriate guidance and support. This is reflected in the comments shared by the participants as mentioned further;

- *“Digital devices remove barriers of handwriting and spelling.”* (Participant C)
- *“Devices help students with messy handwriting but create expectations for instant answers.”* (Participant B)
- *“Talk-to-type function helps students express understanding.”* (Participant E)
- *“AI tools simplify text for struggling readers, enhancing accessibility.”* (Participant E)
- *“Devices can cater specifically for a student. It can help them to gain confidence.”* (Participant C)
- *“There is a huge range of apps that read text aloud for struggling readers.”* (Participant E)

- *“Digital devices are adaptive, allowing students to work independently.”* (Participant F)

As shown within the comments prior, there is a significant advantage for students who may struggle with fine motor skills. The ability to adjust text size, use text-to-speech functions, and access customised learning tasks ensures that students who face challenges with traditional text-based learning can participate more fully in literacy activities. Additionally, features like talk-to-type functions enable students to express their understanding without the constraints of physical writing, thereby promoting greater engagement and inclusivity in the classroom.

For higher-ability students, digital devices provide the opportunity to engage in more challenging, self-directed learning tasks. Digital devices enable students to explore advanced concepts independently, deepening their understanding through activities that are tailored to their skills and interests. As five of the participants highlighted;

- *“Students are more confident when they are in charge of their own learning with devices.”* (Participant A)
- *“Devices encourage students to work together... we as teachers act as facilitators.”* (Participant D)
- *“Peer learning is encouraged... students help each other when using devices.”* (Participant E)
- *“Collaborative digital tasks promote teamwork and allow students to guide each other.”* (Participant F)
- *“Students can access a range of resources online, allowing them to work at their own pace.”* (Participant B)
- *“Talk-to-type function helps students express understanding independently.”* (Participant E)

Such an approach, as revealed in the statements previously, not only facilitates differentiation in the classroom by catering to the diverse needs and abilities of students, but it also fosters a sense of ownership over their learning. By offering students the ability to select tasks or challenges that align with their current skill level and interests, they become more active participants in their educational journey. This personalisation encourages greater engagement, as students feel empowered to take responsibility for their progress. Additionally, it promotes a

more dynamic and flexible learning environment where students can push themselves further or revisit foundational concepts, depending on their individual needs.

The value of digital devices extends beyond just supporting diverse learners; they help students feel more confident in their abilities. *“It can help them to gain confidence,”* as participants A, E and B remarked, emphasising the empowerment that comes with technology. Digital devices provide students with opportunities to succeed in ways that traditional methods might not.

### **5.2.2 - The Importance of Balance**

While digital devices offer numerous benefits for supporting diverse learners, four participants also stress the importance of maintaining a balanced approach. These participants explained;

- *“Digital devices are an enhancement tool, not a replacement.”* (Participant D)
- *“Digital devices are seen as a tool to enhance learning. We emphasise the importance of using technology ethically.”* (Participant D)
- *“Digital devices serve as a support tool. They offer a variety of learning opportunities.”* (Participant F)
- *“Digital devices provide scaffolding and boost engagement levels. They offer differentiation through various platforms, accommodating diverse learner needs.”* (Participant F)
- *“Digital devices support learning but should complement teacher guidance. This indicates the importance of a balanced approach.”* (Participant A)
- *“The aim is to maintain a balance between traditional reading methods (e.g., physical books, printed materials) and digital reading. This shows that both methods should coexist to enhance learning.”* (Participant E)
- *“Balance is key. Even when using devices, students are also required to have books for writing notes or to check out books from the library.”* (Participant F)

The reflected comments, as shown earlier, suggested that while technology can serve as a valuable tool to enhance traditional teaching methods, it should not overshadow or replace the importance of direct instruction. Fundamental literacy skills, such as reading comprehension, critical thinking, and writing, are often best developed through non-digital approaches, which provide more focused, hands-on learning experiences. Balancing the use of digital devices with

traditional methods ensures that students benefit from the strengths of both, fostering a well-rounded educational experience that promotes deeper engagement and long-term skill development.

It was demonstrated throughout the interview responses, that such a balance is essential to ensure that digital devices do not become a distraction or a crutch. Three participants expressed concern that students might become overly reliant on devices for instant answers or engagement. As these participants pointed out;

- *“Devices help students with messy handwriting but create expectations for instant answers.”* (Participant B)
- *“Technology can aid students with poor penmanship but fosters a culture of immediate feedback.”* (Participant E)
- *“Digital devices assist learners with handwriting difficulties while promoting a demand for rapid responses.”* (Participant C)

The immediacy of digital devices, while beneficial in some contexts, can also lead to *“unrealistic expectations”* regarding the pace of learning and the development of critical thinking skills, as Participant B expressed. Participant A, therefore, emphasised the importance of *“guiding students in using digital devices purposefully,”* ensuring that they remain tools for learning rather than distractions. Moreover, while digital devices can help students engage with a wider range of texts and formats, participants were mindful of the potential drawbacks. Four of the participants remarked;

- *“High-ability students tend to excel when using digital devices in their learning.”* (Participant C)
- *“Advanced learners benefit significantly from the use of technology in the classroom.”* (Participant D)
- *“Digital devices can enhance the learning experience for students with higher abilities.”* (Participant E)
- *“Higher-achieving students are more likely to engage with and take advantage of digital resources.”* (Participant F)

These remarks made previously, suggest that lower-ability students might struggle to maintain focus and engagement when using digital devices. The dynamic and often interactive nature of these devices can sometimes lead to distractions. Additionally, students with special needs may encounter specific challenges when navigating digital devices, particularly if the devices are not adequately adapted to meet their unique learning requirements. As four of participants noted;

- *“Students with special needs face distractions when on devices.”* (Participant A)
- *“Digital devices are not particularly beneficial for slower students as they cause distractions.”* (Participant B)
- *“Those who struggle with self-management receive closer monitoring and have limited freedom until they can prove their responsibility.”* (Participant E)
- *“Trust and clear expectations are central to maintaining focus. We emphasise the importance of setting goals when using devices.”* (Participant F)

The distractions and difficulties associated with digital devices can hinder students with lower abilities from staying engaged with learning tasks, as revealed in the previous statements. This underscores the need for participants to carefully monitor and guide the use of technology, ensuring that it “complements traditional instruction rather than becoming a source of disruption or a replacement” (Participant F).

Three participants also raised concerns about the long-term impact of digital devices on literacy development. While students might engage with digital texts more readily, the participants noted;

- *“Students enjoy using digital devices but learn more when devices are used less frequently.”* (Participant A)
- *“We focus heavily on traditional methods, using digital devices primarily for supplementary follow-up.”* (Participant A)
- *“Traditional reading can be more engaging if structured well, while digital devices can lead to distractions.”* (Participant A)
- *“Traditional methods are the primary approach, with digital used as support.”* (Participant B)
- *“Better engagement with written texts over digital devices.”* (Participant B)

- *“Feedback from boys: they enjoy digital devices, but many prefer hard copies.”*  
(Participant E)

These previous statements suggested that while digital devices can serve as valuable supplementary tools, there remains a place for traditional, focused reading activities that promote deep comprehension and critical analysis. Participants, therefore, strive to integrate digital devices in a way that enhances learning without diminishing the essential skills developed through traditional literacy practices.

### **5.2.3 - Opportunities and Challenges For Learners With Diverse Needs**

Digital devices provide valuable opportunities to scaffold learning for students with varied abilities, offering them differentiation through multiple platforms tailored to individual needs. Digital devices allow participants to customise lessons and activities, providing additional support for students who may need it while offering advanced challenges to those who are ready to move ahead. By leveraging the versatility of digital platforms, educators can create personalised learning experiences that cater to different learning styles, paces, and levels of understanding. This level of differentiation not only helps students grasp complex concepts more effectively but also fosters greater engagement, motivation, and independence in their learning journey. Moreover, digital devices can provide real-time feedback and adaptive learning opportunities, enabling students to progress at their own speed while receiving the support they need to succeed. As five of the participants explained;

- *“Devices ease cognitive load... removes barriers of handwriting and spelling.”*  
(Participant C)
- *“Digital devices are adaptive, allowing students to work independently. When a student struggles, there’s always someone available to help, whether it’s the teacher or a peer.”*  
(Participant F)
- *“Digital devices provide scaffolding and boost engagement levels. They offer differentiation through various platforms, accommodating diverse learner needs.”*  
(Participant F)
- *“Digital devices are more beneficial for higher-ability students.”* (Participant B)
- *“Devices are very beneficial for comprehension.”* (Participant E)

- *“Digital devices support learning but should complement teacher guidance.”* (Participant A)
- *“Devices can cater specifically for a student. It can help them to gain confidence.”* (Participant C)

The availability of digital devices like text-to-speech, interactive e-books, and multimedia resources plays a crucial role in removing barriers of literacy, particularly for students who may struggle with traditional books and paper-based tasks, as the participants have shown. Digital devices provide new ways to access and engage with content, making learning more inclusive and better suited to different learning styles and abilities. For instance, text-to-speech software can support students with reading difficulties, allowing them to follow along with the text while listening, thus improving comprehension and retention. Interactive e-books and multimedia resources, on the other hand, can make reading a more dynamic and engaging experience, using visuals, animations, and audio to bring stories and concepts to life. By offering diverse resources, such as interactive tools and apps, digital devices can help create a more equitable learning environment where students of all abilities can thrive and actively participate in literacy activities without feeling limited by traditional methods, which has been made clear throughout the feedback received. As five of the participants shared;

- *“Digital devices provide scaffolding and boost engagement levels. They offer differentiation through various platforms, accommodating diverse learner needs.”* (Participant F)
- *“Devices ease cognitive load... removes barriers of handwriting and spelling.”* (Participant C)
- *“Digital devices are adaptive, allowing students to work independently. When a student struggles, there’s always someone available to help, whether it’s the teacher or a peer.”* (Participant F)
- *“Digital devices enable access to different types of learning activities.”* (Participant D)
- *“Digital devices support learning but should complement teacher guidance.”* (Participant A)
- *“Devices are very beneficial for comprehension.”* (Participant E)
- *“Devices can cater specifically for a student. It can help them to gain confidence.”* (Participant C)

Such opportunities can enable students to access texts that are appropriate for their reading level, ensuring that they engage with materials that both challenge and support their growth. By incorporating interactive elements, such as multimedia features and customisable settings, digital devices provide students with various ways to practise literacy skills that are tailored to their unique needs. This dynamic approach not only makes the learning process more enjoyable but also fosters a deeper connection to the material. As students interact with content in more engaging and individualised ways, they are more likely to experience success, which in turn builds their confidence. Over time, this increased confidence encourages them to take further ownership of their learning, seek out new challenges, and develop a more positive attitude towards reading and literacy activities. Ultimately, these digital opportunities create an environment where students can thrive academically and personally.

Despite the benefits noted, four participants acknowledged that digital devices could not fully address every student's needs. These four different participants noted;

- *“The effectiveness of digital devices varies by specific needs but is generally helpful.”* (Participant B)
- *“Devices ease cognitive load.”* (Participant C)
- *“Digital devices support learning but should complement teacher guidance.”* (Participant A)
- *“Digital devices benefit learning but need balance to be effective. Too much or inappropriate use can be detrimental.”* (Participant B)
- *“Devices are used to help with reading and writing for those students who require them.”* (Participant C)
- *“Digital devices enable access to different types of learning activities.”* (Participant D)

The comments, as earlier mentioned, highlight that while digital devices are valuable, they must be used thoughtfully and in alignment with the needs of individual learners. Participant A noted that some students may *“thrive when using digital platforms for reading and writing tasks,”* while others may require more *“structured, traditional approaches to fully engage with the material.”* This variation reinforces the need for participants to take a flexible, student-centred approach when integrating digital devices into their literacy instruction.

One specific benefit noted by three participants was the ability of digital devices to provide differentiated, independent tasks with minimal participant workload. For instance, three different participants remarked;

- *“When using digital devices, students engage in tasks that foster independence.”* (Participant A)
- *“Digital devices allow students to complete their work independently, giving teachers time for other tasks.”* (Participant A)
- *“Digital devices enable access to different types of learning activities, supporting independent student work.”* (Participant D)
- *“Students use digital devices for independent research projects, freeing up the teacher's time for one-on-one support.”* (Participant B)

These previous statements subsequently highlight the efficiency and autonomy that digital platforms can offer. Tools like Google Classroom allow some participants to assign reading and writing tasks that cater to individual student's needs while maintaining oversight of students' progress. Additionally, systems like Hapara provide participants with the ability to monitor students' screen activities, ensuring that they remain on task and allowing for timely intervention if necessary. As four of the participants explained;

- *“The Hapara system allows us to monitor students' screen activities, enabling immediate intervention if students are off-task.”* (Participant E)
- *“We monitor work through Google Classroom.”* (Participant C)
- *“Proficiency in using Google Classroom as a foundational tool for delivering and managing assignments is important.”* (Participant E)
- *“Audio files and Google Classroom for easy reference and support.”* (Participant F)
- *“Reading materials are often made available online, with follow-up assignments using Google Forms, Google Classroom, Google Docs, or Google Slides.”* (Participant E)
- *“We use a lot of Google Classroom.”* (Participant C)
- *“Google Classroom practice sets are used for vocab and comprehension assessments.”* (Participant E)
- *“Lessons start with students listening to texts, followed by teacher-led workshops, independent learning, and activities on Google Classroom. The structure helps guide*

*students through different phases of learning with both digital and traditional resources.”*  
(Participant F)

- *“By monitoring students closely, both in person and through tools like Google Classroom, we ensure that devices are being used effectively.”* (Participant D)

The increased independence also requires careful monitoring to ensure that students remain engaged with appropriate content. Online safety and responsible use of technology are paramount concerns for five of the different participants, who must balance giving students autonomy with ensuring that they use devices ethically and effectively. As five of participants emphasised;

- *“Online safety is a priority, and clear guidelines are in place to ensure students navigate the internet safely.”* (Participant A)
- *“It is crucial to monitor student activity and teach online safety to protect them while using digital devices.”* (Participant C)
- *“Ensuring students are aware of safe practices online is a critical part of integrating digital devices.”* (Participant D)
- *“Digital literacy includes an emphasis on teaching students about safe online behaviour.”* (Participant E)
- *“We have implemented online safety protocols to ensure that students are protected while using technology.”* (Participant B)

The balance, as illustrated in the previous comments, between fostering student independence and providing necessary oversight, highlights the complexity of integrating digital devices into the classroom in a way that supports both academic growth and responsible digital citizenship. On one hand, digital devices offer students the opportunity to take greater ownership of their learning, allowing them to explore content at their own pace and develop critical thinking skills. On the other hand, participants must ensure that students are using digital devices appropriately and effectively, guiding them toward responsible digital behaviour and helping them navigate potential distractions or misuse of technology. Achieving this balance requires careful planning, ongoing support, and clear guidelines, ensuring that the use of digital devices enhances the learning experience while also promoting safe, ethical, and responsible use of technology. Through this, educators can harness the benefits of digital devices while maintaining a structured, supportive environment that prioritises student development in all areas.

### 5.3 - Features and Benefits of Digital Devices in Literacy Instruction

Throughout the interview responses, it was evident that participants considered that digital devices in literacy instruction offer a variety of features that significantly enhance reading engagement, accessibility, independent learning, and instructional efficiency. The participants in this study highlighted the impact of digital devices on making reading more interactive, accessible, and relevant for modern learners, underscoring their role in fostering both foundational literacy skills and digital literacy.

#### 5.3.1 - Promoting Engagement in Reading

Digital devices have been reported to significantly improve student engagement with reading materials, providing alternative ways to interact with texts that go beyond traditional print-based methods. Five out of the six of the participants observed that digital platforms allow students to engage with reading in more stimulating ways. This is exemplified in the following comments;

- *“YouTube enhances understanding and engagement.”* (Participant B)
- *“Easier collaboration and editing.”* (Participant C)
- *“Curriculum-levelled tools: Many digital devices are levelled according to the curriculum or student ability.”* (Participant D)
- *“Increased interest in digital reading workshops.”* (Participant E)
- *“Quicker completion of digital tasks versus paper.”* (Participant E)

The participants' comments illustrated the diverse ways in which digital devices support student engagement with literacy. From enhancing understanding through multimedia platforms like YouTube to providing curriculum-level tools that cater to individual learning needs, digital technology offers a variety of interactive experiences. The ease of collaboration and editing on digital platforms was particularly highlighted, making tasks more efficient and fostering a more collaborative learning environment. Moreover, the increased interest in digital reading workshops underscores the potential for digital devices to motivate students, while the faster completion of tasks suggests that technology can streamline learning processes without sacrificing depth of engagement. These insights demonstrated the positive impact of digital

devices on students' literacy experiences, enabling a more dynamic and tailored approach to reading instruction.

### **5.3.2 - Accessibility and Customisation for Reading Comprehension**

An additional benefit of digital devices is their ability to enhance the accessibility of reading materials, particularly for students with specific learning needs. Two participants noted how digital devices provide customisable features that support reading comprehension. These are represented in the following quotes;

- *“Zooming in/out on texts or activities helps make tasks more accessible.”* (Participant B)
- *“Text adjustment for accessibility.”* (Participant B)
- *“Speak to text or text to speak... change fonts and size of a text.”* (Participant C)
- *“Easier collaboration and editing.”* (Participant C)
- *“Digital devices can scaffold a text, change vocab, alter sentences.”* (Participant C)

These comments highlight the flexibility of digital devices in supporting students with varying learning needs, particularly those who may struggle with traditional text formats. Customisable features such as zooming in on texts, adjusting fonts and text size, and utilising text-to-speech or speech-to-text functions allow students to access content in a way that suits their individual needs. This adaptability not only enhances comprehension but also fosters a more inclusive learning environment. Additionally, the ability to scaffold texts and alter vocabulary provides further opportunities for differentiation, ensuring that all students can engage with reading materials at their appropriate level. Through these features, digital devices offer personalised learning experiences that cater to diverse abilities, empowering students to take control of their reading journey.

### **5.3.3 - Supporting Independent Reading and Learning**

Three participants agreed that digital devices significantly promote independent reading and learning. They observed that digital devices provide students with more opportunities to work autonomously, encouraging them to take ownership of their reading journeys. Based on the feedback given by these three participants, various apps and digital platforms can access a

wider range of reading materials to students, tailored to their individual levels and interests. This is revealed in the following statements;

- *"Students enjoy the digital PAT assessment and the use of Reading Eggs to build confidence. Digital devices support independent learning by giving students a platform to work autonomously."* (Participant E)
- *"Quicker completion of digital tasks versus paper."* (Participant E)
- *"Access to a wider range of materials strengthens students' understanding."* (Participant B)
- *"Digital devices provide scaffolding and boost engagement levels."* (Participant F)
- *"The feedback from students enjoying digital vocab activities in a digital format supports the idea that digital devices appeal to students who might otherwise be disengaged with print materials."* (Participant E)

The ability of digital devices to offer instant access to additional reading resources was another factor that promoted independent learning among three different participants. As seen in the following comments;

- *"Read Theory is a new tool. It allows us to monitor students and track progress."* (Participant B)
- *"There is a wide range of apps that read text aloud for struggling readers."* (Participant E)
- *"The utilisation of Epic Books is good for level-appropriate texts."* (Participant E)
- *"Platforms like Reading Eggs and Epic Books allow for personalised assignments."* (Participant E)
- *"Reading materials are often made available online, with follow-up assignments using Google Forms, Google Classroom, Google Docs, or Google Slides."* (Participant E)
- *"Kiwi Kids News engages students by providing relatable and current events, helping them apply reading to real life."* (Participant F)

The feedback from these participants demonstrates that digital devices not only support independent learning but also enhance students' ability to engage with diverse reading materials in meaningful ways. By offering devices that cater to varying literacy levels and interests, students are empowered to explore reading at their own pace and in formats that suit

their learning needs, as demonstrated through the participants' feedback. Furthermore, the ability to personalise assignments and track progress fosters a sense of accomplishment and motivation, reinforcing the role of digital platforms in fostering both engagement and literacy growth, as expressed. This personalised approach helps teachers better meet the individual needs of their students, ultimately promoting more effective independent reading and learning experiences.

#### **5.3.4 - Efficiency in Reading Instruction and Professional Development**

Digital devices improve the efficiency of reading instruction, as noted by five of the participants. Participant D mentioned how digital devices allowed participants to streamline reading tasks and assessments, enabling them to devote more time to direct literacy instruction.

Participant E observed that online self-marking reading quizzes reduced participant workload while giving students immediate feedback, which can reinforce comprehension and retention of reading materials.

The role of professional development in ensuring the effective use of digital devices for reading instruction was another important theme that showed throughout the feedback received. For instance, Participant E described how a school-based digital technology lead participant supported staff in integrating new tools that enhance literacy instruction.

Schools that offer regular professional development, often through collaborations with external organisations like Cyclone, equip participants with the skills needed to use digital devices effectively in reading lessons, as stated by Participant A.

These efforts not only improve instructional strategies but also create an environment where staff feel empowered to experiment with new approaches that may further enhance student reading engagement and outcomes, as Participant C emphasised.

#### **5.3.5 - Importance of a Balanced Approach To Reading**

While participants recognised the clear benefits of digital devices in literacy instruction, five of the participants emphasised the need for a balanced approach that integrates both digital and traditional reading methods.

Participant F stressed that while digital devices offer valuable support for reading, physical books remain an essential part of literacy development. Participant C echoed, *“the tactile experience of handling a physical book and engaging with printed texts fosters different cognitive processes that are integral to a comprehensive reading education.”*

Participant F described a *“tumble rotation”* approach that ensures students are exposed to a variety of reading formats, both digital and traditional, preventing overreliance on screens while still making use of digital devices for engagement. Participant E echoed this sentiment, emphasizing that students must *“develop both digital literacy and traditional literacy skills.”*

*“The ability to critically read and analyse both digital texts and print-based materials is essential for students to navigate an increasingly complex information landscape”* Participant A commented.

Five out of the six of the participants agreed that the right balance between digital and traditional methods in reading instruction ensures students develop a robust set of literacy skills, enabling them to adapt to diverse reading environments.

#### **5.4 - Assessment of Learning Using Digital Devices**

When using digital devices for the assessment of learning, key areas identified by five of the participants included accessibility, engagement, and the efficiency of progress tracking. Multiple-choice assessments were noted as particularly suitable for digital platforms, with Participant B emphasizing this format's compatibility with device-based learning. Additionally, tools such as Read Theory, highlighted by Participant A, have emerged as valuable resources for monitoring student progress over time, allowing participants to track performance and identify areas for improvement. However, despite the advantages of digital assessments, challenges revealed through participant voice, that they remain, particularly in terms of parental involvement. Participant C pointed out that many parents prefer less digital work, as they struggle to track their children's progress when assessments are primarily conducted online, highlighting a gap in communication and transparency regarding student learning outcomes.

The balance between digital and traditional assessment methods was a recurring theme among participants. While digital platforms like Google Classroom and Reading Eggs are utilised for assessing vocabulary and comprehension, as noted by Participant E, many participants continue to incorporate pen-and-paper assessments to ensure that students are capable of demonstrating their knowledge without relying solely on digital support. For instance, Participant C explained that handwriting tasks are employed for assessments to provide a more accurate measurement of students' understanding and skill acquisition. Additionally, Participant D mentioned that although digital devices facilitate the publication of final work, the process of handwriting drafts before digital publication supports cognitive development in subjects like English, reinforcing the idea that traditional methods still hold significant value.

In terms of tracking student progress, digital tools such as Google Practice Set and HERO have been instrumental in efficiently collecting and analysing data, according to three participants. Participant E described how Google Practice Set offers a clear overview of student performance in vocabulary tasks, tracking progress in a user-friendly spreadsheet format that can be downloaded for in-depth analysis. Participant D mentioned that, *“this system, combined with self-marking features for multiple-choice questions, alleviates the grading burden on participants, enabling them to concentrate on targeted instruction that addresses individual student needs.”* Furthermore, platforms like HERO, utilised by Participant F, allow both participants and parents to monitor individual student progress throughout the academic year, enhancing visibility regarding student achievement and supporting collaborative efforts in fostering student growth.

Despite these benefits, it was proven that there are limitations to relying solely on digital assessments for literacy development. Participants such as D emphasised that while digital devices can facilitate learning, they have not observed significant improvements in reading comprehension resulting from digital resources alone. Instead, five of the participants revealed that they underscored the importance of supplementary strategies, such as group work, individualised instruction, and hands-on support from participant aides, in deepening understanding and developing literacy skills. This is shown in the comments of participants who highlighted the need for a balanced approach. Consequently, many schools, as mentioned by Participant F, continue to employ a blend of digital and offline assessments, including E-Asttle, to ensure a comprehensive evaluation of student progress in literacy. This approach not only *“supports diverse learning needs but also helps prepare students for real-world reading*

*challenges, fostering a holistic understanding of literacy that extends beyond digital environments”, as mentioned by Participant A.*

## **5.5 - Examples of Resources Used In Literacy Instruction**

A diverse array of digital resources have been identified as instrumental in enhancing literacy instruction and supporting student learning in various contexts. For instance, YouTube emerged as a significant asset, with Participant B highlighting its role as the most beneficial feature due to the visual aids it provides. These visual components not only enhance understanding but also boost student engagement during lessons, making complex topics more accessible, as identified by Participant E. Additionally, resources such as Read Theory and Writer's Toolbox, as noted by Participant B, offer structured, interactive learning opportunities tailored to the varied needs of students. The positive feedback surrounding tools like Immersive Reader, shared by Participant F, further underscores the potential of digital resources to improve comprehension and facilitate differentiated instruction.

It has been proven through participant responses that the availability of a wide range of materials plays a crucial role in enriching students' understanding and fostering a more engaging learning experience. For example, Participant D emphasised that having access to diverse resources strengthens students' ability to connect with content on a deeper level. Successful lessons have shown the effectiveness of combining multiple resources, such as the World War One lesson described by Participant B. In this lesson through using a digital device, students were allowed to watch a YouTube video as part of their research. The integration of platforms like Google Classroom, as indicated by Participant C, further streamlines the organisation and distribution of educational resources, enabling students to manage assignments and track their progress efficiently.

*“Research tools are particularly prominent in supporting literacy development, as they equip students with essential skills necessary for navigating the digital landscape” (Participant C).*

Participant D highlighted the value of digital devices in teaching critical technological skills such as typing, editing, and crafting written work, all of which contribute to enhancing students' overall literacy capabilities. Furthermore, the use of collaborative tools like Google Docs and Google Slides facilitates the provision of online reading materials, allowing for follow-up assignments that enable students to engage in inquiry-based projects, as mentioned by

Participant B. This fosters essential research skills while ensuring that students have access to reliable information through curated links, as emphasised by Participant E.

Specialised resources designed to support struggling readers were also noted as key components in literacy instruction. Participant E discussed the effectiveness of applications that read text aloud, which significantly aids comprehension for students who require additional support. Resources such as Epic Books and Reading Eggs allow for level-appropriate texts and personalised assignments, ensuring that each student can work at their own pace and skill level, as commented on by Participant A and F. Additionally, AI tools, as mentioned by Participant E, simplify text for struggling readers, enhancing accessibility and facilitating a more inclusive learning environment.

Moreover, resources catering to specific populations have proven invaluable. For instance, Lexia, highlighted by Participant F, is particularly effective in helping students improve their literacy skills, while Dreamsake is tailored for ESOL students, adapting to individual learning needs and providing editing capabilities for customised learning experiences. Kiwi Kids News, referenced by Participant F, engages students by presenting relatable content about current events, helping them apply reading skills to real-life contexts. Collaborative platforms like Canva, as shared by Participant F, facilitate project-based learning, enabling students to present their work in visually engaging formats through shared projects on Padlock.

## **5.6 - Issues, Distractions, and Challenges In Using Digital Devices**

While digital devices offer numerous benefits in educational settings, they also present a range of issues, distractions, and challenges that educators must navigate, as recognised by five of the participants. This is represented within the following statements;

- *“Digital devices are not particularly beneficial for slower students, they offer distractions.”* (Participant B)
- *“Balancing screen time is important. Encourage breaks from screens.”* (Participant C)
- *“I am not a huge fan of digital devices in reading programmes, the focus shifts away from learning.”* (Participant D)
- *“Risk of distraction, some students get lost online.”* (Participant E)

- *“Online learning sessions need to be shorter, as students tend to get distracted. Digital devices provide initial engagement but require more focus management.”* (Participant F)

These five participants shared their insights regarding the difficulties associated with the use of technology in the classroom, highlighting both the distractions that can arise and the strategies employed to mitigate these challenges. Based on the feedback received from these participants, recognising these obstacles is essential for creating a productive learning environment where students can thrive.

### **5.6.1 - Monitoring and Engagement**

The integration of digital devices into literacy instruction has been presented throughout the feedback received, that several challenges that can significantly affect student engagement and learning outcomes. Participants highlighted various issues related to technology use in the classroom. This can be observed in the following comments;

Participant B noted the *“lack of monitoring technology”* often leads to *“decreased engagement with written texts”*, stating, *“students’ focus shifts away from essential reading materials.”* This sentiment was echoed by Participant B, who commented that *“digital devices are not particularly beneficial for slower students, they offer distractions”* which can impede their learning progress. Similarly, Participant C emphasised that for students with special needs, digital devices are *“seen as ineffective due to distractions.”*

The issue of distraction is *“compounded when every student has their own device”*, as Participant A commended. Participant B remarked on the *“challenge of distraction when each student has their own iPad,”* while Participant D expressed frustration with students who *“automatically open devices at the start of lessons.”* Participant B also highlighted the ongoing struggle of *“managing classroom behaviour and focus when using devices.”*

As Participant F made apparent, *“effective management of digital tools is crucial.”* As Participant B pointed out, *“managing digital devices effectively is crucial”* to maintaining engagement. Participant E additionally added that *“monitoring in real-time is unavailable, so the process relies on trust and observation,”* indicating a reliance on students’ self-regulation.

Distractions from social media were also a concern, with Participant C noting the impact this has on student focus. Participant D mentioned the *"overload of available content,"* which adds complexity to lesson planning. To mitigate these distractions, Participant C added the importance of *"balancing screen time"* and encouraging *"breaks from screens."*

### **5.6.2 - Distraction Management**

*"The challenge of managing distractions is exacerbated when each student possesses their own device,"* Participant D commented. Similarly, Participant B highlighted the difficulties that arise when *"students automatically open their iPads at the start of lessons,"* which complicates classroom management.

Participant F stressed the importance of *"effectively managing classroom behaviour and maintaining focus, as monitoring the use of digital devices is crucial for creating a productive learning environment."*

However, as Participant A pointed out, *"the inability to observe all students in real-time means that participants often rely on trust and indirect observation to assess student engagement, leading to potential gaps in oversight."*

### **5.6.3 - Balancing Screen Time and Traditional Learning**

In addition to the distractions posed by the devices themselves, the influence of social media and the overwhelming amount of online content can create additional challenges in lesson planning, as Participant D and F touched base on.

Participant C recognised social media as a *"significant distraction that diverts students' attention from educational tasks."* Similarly, Participant A observed that the *"abundance of online resources adds complexity to lesson preparation, making it difficult for educators to curate effective learning experiences."*

Furthermore, Participant C suggested encouraging *"regular breaks from screens,"* highlighting the importance of *"maintaining focus and avoiding screen fatigue."*

#### **5.6.4 - Classroom Management and Individual Needs**

*“Effective classroom management requires a keen awareness of individual student needs and behaviours,”* Participant F stated. Furthermore, Participant C stated that *“managing all students simultaneously presents challenges”*, as some may choose to disengage from their work. In such cases, *“communication with parents about distractions may become necessary,”* as commented on by Participant A.

Moreover, the necessity of fostering *“direct engagement between participants and students in a hands-on learning environment is paramount,”* as Participant C mentioned.

Lastly, Participant D raised concerns that *“digital devices often shift focus away from learning,”* emphasising the value of direct interaction, which is sometimes limited in a digital context.

#### **5.6.5 - Adaptability to Technological Advancements**

*“The rapid pace of technological advancements can feel overwhelming for teachers,”* as highlighted by Participant D. This challenge, the pressure to keep up with constant technological changes while ensuring effective teaching, is compounded by the need to prioritise face-to-face teaching, as indicated by Participant E, which aligns with educators’ preferences for fostering strong connections with students.

*“Despite the initial engagement that digital devices can provide, maintaining focus and effectively managing distractions is crucial for successful learning outcomes,”* Participant A noted. Additionally, Participant C stated, *“some students can easily become lost in online content, emphasising the necessity of closely monitoring their device usage to ensure proper engagement.”*

#### **5.6.6 - Fostering Independence and Responsibility**

While *“minor issues can often be resolved with reminders and warnings,”* as described by Participant E, fostering student independence while overcoming the fear of relinquishing control presents a delicate balance for participants.

Participant D pointed out that students who struggle with self-management may require “*closer monitoring and limited freedoms*” until they can demonstrate responsibility.

*“Trust-breaking behaviours can lead to significant consequences, such as the loss of learning licences, underscoring the need for effective classroom management strategies that promote accountability and engagement”* Participant F stated.

## **5.7 - The Role of the Teacher and Skills Needed**

As digital integration becomes increasingly prevalent in educational settings, it was revealed from the feedback from four of the participants that the role of being a teacher has evolved significantly. Participants are now tasked with not only delivering content but also facilitating student engagement through the effective use of digital tools. This was revealed through the following statements;

- *“I believe that reading should be a hands-on experience, and digital devices can limit this interaction, highlighting the need for teachers to find ways to engage students effectively.”* (Participant D)
- *“We as teachers stay informed through continuous professional development, indicating the need for us to adapt to new digital trends and tools.”* (Participant D)
- *“We still conduct workshops and engage in one-on-one interactions, emphasising the role of the teacher in guiding student learning, particularly with digital tools.”* (Participant F)
- *“We map out schedules that balance traditional and digital activities, reinforcing the teacher’s role in structuring learning experiences.”* (Participant F)
- *“Flexibility and openness to change are vital for teachers to embrace digital tools, showing how teachers must evolve their practices.”* (Participant E)
- *“We use monitoring strategies to keep students focused and accountable, highlighting the need for active involvement in students’ digital learning processes.”* (Participant C)

These insights, as shown previously, reveal that teaching with digital tools requires a diverse set of skills, including technological proficiency, adaptability, and the ability to guide students in navigating digital landscapes, as revealed through the comments made by the participants. It was even revealed that educators must also be prepared to embrace ongoing changes in

technology and pedagogy, fostering an environment that encourages both teaching and learning in innovative ways.

### **5.7.1 - Adapting to Digital Integration**

The role of the participant in integrating digital devices into the classroom is multifaceted and increasingly complex. While some educators, like Participant B, expressed a preference for traditional methods by stating, *“I believe that hands-on experiences and face-to-face interactions are more effective for student learning than relying solely on digital tools,”* the landscape of education continues to evolve rapidly. Participants saw themselves as now expected to seamlessly blend traditional practices with modern technology to enhance learning outcomes. As Participant C commented *“teachers need to be open to using digital tools creatively while also being mindful of their limitations,”* which requires a willingness to embrace digital tools and adapt instructional strategies to meet the diverse needs of students. As emphasised by Participant E, *“flexibility and an open mindset are crucial as they navigate the changing educational environment.”* This was further reinforced by Participant C when they stated, *“embracing change can empower educators to engage students in new and innovative ways, fostering a more interactive and dynamic learning experience.”*

### **5.7.2 - Professional Development**

Continuous professional development is essential for participants to stay informed about the latest digital trends, tools, and resources. Participant C commented on the importance of actively participating in professional learning groups when stated, *“being part of these groups helps us share best practices and strategies to effectively manage AI and technology tools in the classroom.”* Moreover, Participant A noted, *“engaging in ongoing training and development not only helps acquire new skills but also fosters a culture of collaboration among educators.”* Furthermore, Participant D noted, *“trial and error is a key component of professional growth, allowing experimentation with new approaches and refining practices over time.”* Expanding on this, Participant A mentioned, *“hands-on demonstrations, such as creating a Google Site, enable us as educators to learn alongside our students, fostering a collaborative environment where both teachers and learners can explore new technologies and their applications in various subjects.”*

### 5.7.3 - Monitoring and Accountability

Based on the responses received by five of the six participants, effective monitoring of student activities is crucial for ensuring that digital devices are used appropriately and productively in the classroom. As noted by Participants D and E, implementing systems to manage and monitor student engagement with devices can help educators identify challenges and address them proactively. By closely observing students both in person and through tools like Google Classroom, participants ensure that resources are utilised effectively and that students remain focused on their learning tasks. This was revealed in the following statements;

- *“I monitor student activities through Google Classroom to keep them accountable and ensure they stay on track.”* (Participant D)
- *“Observing students in real-time allows me to quickly address any distractions and guide them back to their tasks.”* (Participant E)
- *“Using tools like Google Classroom helps me see where students are struggling and adjust my support accordingly.”* (Participant C)
- *“Being present in the classroom while also utilising digital platforms lets me maintain a balance between engagement and oversight.”* (Participant F)

Participant E emphasised the importance of teaching students self-management skills and establishing a culture of accountability from an early age. Participant C noted, *“this proactive approach helped students understand the significance of responsible device use and its impact on their learning outcomes.”* By instilling the essential skills of self-management and accountability, Participant F identified that educators can, *“prepare students for a future where digital literacy is part of everyday life.”*

### 5.7.4 - Selecting Quality Resources

Choosing high-quality digital resources is vital for enhancing the learning experience and achieving educational goals, as noted by five of the participants. Participant A underscored the significance of effective resource selection and use, as the quality of digital materials can directly impact student engagement and comprehension. This was further reinforced through the following comments;

- *“Choosing high-quality digital resources is essential; they can make a real difference in how engaged students are with the material.”* (Participant A)
- *“I find that when I select resources thoughtfully, students are more likely to grasp complex concepts and stay motivated.”* (Participant B)
- *“The right tools can enhance understanding and spark curiosity, making the learning experience much more dynamic.”* (Participant C)
- *“It’s crucial to collaborate with colleagues to identify effective resources; sharing insights helps us all improve our teaching practices.”* (Participant D)

Participant A recognised that, *“collaboration among educators is crucial for staying current with technological advancements and effectively integrating new resources.”* Participant B noted, *“This collaborative approach not only facilitates knowledge sharing but also empowers educators to make informed decisions about the tools they implement in their classrooms.”* Participant C reinforced this when they emphasised the importance of teamwork, stating, *“Sharing resources and strategies with colleagues helps us all grow and adapt to the changing landscape of education.”* Meanwhile, Participant D pointed out, *“when we work together, we can find the best tools that truly benefit our students’ learning experiences.”* Finally, Participant E encapsulated this sentiment by saying, *“It’s all about leveraging our collective knowledge to enhance what we do in the classroom.”* Together, these voices highlighted the value of collaboration in fostering an enriching educational environment.

### **5.7.5 - Setting Clear Expectations**

Five out of the six participants in this study held strong feelings about setting high expectations. *“Establishing clear expectations and consequences for digital device use is essential for maintaining focus, engagement, and productivity in the classroom”* (Participant B). In this context, Participant A emphasised the need to teach appropriate device usage, noting that *“clear guidelines help students understand what is acceptable and what is not, which ultimately supports their learning.”* Further comments supporting this were revealed;

- *“Monitoring software not only keeps students accountable but also allows us to intervene when they stray from their tasks”* (Participant D).
- *“Limiting digital assignments helps prevent burnout and ensures that students engage meaningfully with the content”* (Participant E).

- *“By establishing routines around device use, we create an environment that promotes focus and minimises distractions”* (Participant F).

These insights highlight the importance of establishing clear expectations, routines, and limits around device use to create an environment that promotes focus, accountability, and meaningful engagement in learning. *“When we all follow the same expectations, it creates a sense of community and responsibility among students”* (Participant A). *“Establishing these practices not only helps with accountability but also empowers students to take ownership of their learning”* (Participant E). Ultimately, by *“fostering a culture of respect and responsibility around technology, we can enhance the overall educational experience”* (Participant D).

## **5.8 - Feedback from Parents and Students**

Based on participants' responses, it was evident that feedback from the students in their class played a crucial role in shaping their implementation of digital devices in educational settings. Participant B noted that many students *“appreciate the use of digital tools, as they often find them engaging and beneficial for their learning experiences.”* Participant B reported that *“while boys appreciate the engagement that digital devices offer, many still express a preference for hard copies of reading materials.”* Participant C added that digital tools *“allow for a more interactive learning environment,”* which helps to maintain student interest.

While recognising that students saw benefits in using digital tools, participants also recognised that some students in their classes expressed a preference for traditional hard copies in reading. This was reinforced when Participant B noted that, *“while they enjoy using digital devices, sometimes I just want them to flip through a book.”* Participant D saw this as indicating a *“desire for balance in their learning resources.”* Participant F further emphasised the need for offering a range of approaches, saying, *“having options is key. Some days they thrive on technology, and other days, I believe they enjoy the simplicity of paper.”* This variety in feedback underscored the necessity of a well-rounded approach to resource implementation in education.

Along with commenting about students' reactions to using digital devices, the participants also noted that at times parents shared their concerns about their children using digital devices. Participant B reported that parents did not only express concern about the amount of screen time their children were engaged in but also noted that, *“parents appreciate seeing glued work*

*in exercise books and prefer less digital homework.*” This would indicate a need for schools and parents to work together to develop a shared understanding of the value and place of digital devices.

## **5.9 - Chapter Summary**

This chapter presented the findings of this study through the use of sharing the participants' voices and perceptions on how they feel about digital devices in reading instruction.

In the following chapter, the perceptions expressed by participants are discussed and related to current literature.

## **Chapter 6 - Discussion**

In today's educational landscape, the use of digital devices in classrooms has become a topic of significant debate, stirring a wide array of opinions and practices among educators. (Puentedura, 2013). This study aimed to present another lens on the role and value digital devices play in supporting the learning of reading in Years 7 and 8, that of the teacher.

The teachers' perceptions of the place of digital devices in a reading programme were explored by asking the following research question;

“What are the experiences and perceptions of New Zealand intermediate school teachers on using digital devices to enrich literacy, specifically reading, instruction in the classroom?”

This chapter discusses the findings presented in Chapter 5 in relation to existing literature using the following key themes.

### **6.1 - Traditional Methods Still Hold Value**

As seen in international studies, such as those by Voogt & Knezek (2008) and Beauchamp & Thomas (2022), the teachers in this study consistently reinforced the ongoing value of traditional teaching methods, particularly when it came to assessments and fostering meaningful student engagement. In the interviews with teachers in this study, it was clear that many found themselves returning to time-honoured techniques like group discussions and written summaries of reading materials, despite the proliferation of digital tools in classrooms. As seen in international studies, such as those by Wedemeyer (2010) and Sprenger (2008), traditional methods weren't merely nostalgic preferences; they were seen as essential strategies for creating a deeper, more reflective learning experience.

Face-to-face interactions, paired with handwritten work, was seen as important because they provided students with a more meaningful educational experience. This approach encouraged a richer engagement with the material, particularly when students had to take the time to summarise, reflect, and process information independently. This finding, aligned with the research conducted by Mangen, Walgermo and Brønnick's (2013) study, was echoed by five out of the six teachers in this study, who believed that writing by hand prompted more active engagement and a deeper understanding of the content compared to typing or using digital assessments. This belief was rooted in the notion that handwriting requires a level of thought and focus that digital tools often bypass, creating an opportunity for students to develop more nuanced cognitive skills.

While digital devices undoubtedly offer convenience and efficiency, several teachers in this study pointed out that traditional assessment methods, such as essays and paragraph analyses, were indispensable for helping students organise and express their thoughts. As Langer (2011) and Tilahun (2021), highlight that structured writing tasks remain crucial for assessing comprehension and critical thinking. Teachers in this study noted that using pen and paper for assessments allowed them to gain a clearer insight into how students were thinking, free from the distractions or "the help" that digital tools can sometimes offer. In a world of instant information and automated tools, there is something fundamentally valuable about the process of manually drafting work. It's not just about getting the task done, but about the cognitive work involved in drafting, editing, and refining ideas by hand (Gregg, 2016). This process, according to the teachers interviewed in this study, is essential not only for showing students' thinking but also for reinforcing their critical thinking skills and fostering deeper cognitive processing.

## **6.2 - The Role of Digital Devices: A Supplement, Not a Substitute**

Powell and Kusuma-Powell (2011) and Hwang et al., (2015), emphasised the undeniable benefits of digital tools in education, particularly in terms of enhancing both efficiency and personalisation in the classroom. Platforms like Google Classroom, Kahoot, and Read Theory have received widespread acclaim for their ability to streamline communication, track student progress, and offer individualised learning experiences (Zhao & Frank, 2003). These tools make it easier for teachers to keep tabs on student performance in real time, which is especially valuable in large classroom settings. The teachers interviewed in this study highlighted that digital tools not only simplify record-keeping, such as tracking grades and storing them in one

easily accessible location but also support continuous, real-time feedback. Teachers saw that the ongoing assessment process allows for timely interventions, which can be critical for helping students who might be struggling. One teacher explained, *“I use Google Forms for self-assessments. This way I can give students immediate feedback. It is an opportunity for them to reflect on their strengths and areas for improvement, while also providing me with valuable data.”* This real-time feedback loop, as this study shows, enhances both teaching and learning by making the process more responsive and individualised.

While the advantages of digital tools are widely acknowledged (Churchill, 2017), there was a consensus among the teachers in this study, that these tools should be seen as a ‘supplement’ to, not a ‘replacement’ for, traditional instructional methods. One teacher put it succinctly; *“Digital tools are fantastic for reinforcing knowledge, but they shouldn’t be relied upon to introduce complex concepts.”* This sentiment reflects a broader belief that digital tools are most effective when they are used to consolidate existing knowledge rather than replace foundational teaching practices. Research by Artal-Sevil & Romero (2019) reinforces this idea, arguing that the success of digital tools in the classroom hinges not on the specific technology used, but on how it is integrated into teaching practices.

Five of teachers in this study pointed out that direct, hands-on methods, such as group discussions, oral presentations, and guided reading, remain indispensable for fostering critical literacy skills. This aligns with Puentedura’s (2013) work, which suggests that while digital tools can be invaluable for reinforcing and enriching existing content, they are far less effective when used as substitutes for active, direct instruction. In other words, technology should complement rather than replace traditional teaching strategies, ensuring that students receive a well-rounded educational experience.

### **6.3 - Issues and Distractions with Digital Devices**

Although digital devices have the potential to enhance learning (Bergdahl et al., 2020), they also introduce significant challenges, particularly in terms of student engagement and the increased risk of distractions. A key concern raised by the teachers interviewed in this study was the difficulty in monitoring student activity, especially when every student has a device. As one teacher put it, *“It’s hard to keep track of what students are doing when they’re on their own devices. They’re constantly getting distracted by social media, games, or browsing other*

*websites,*" rather than focusing on the work set. This sentiment is echoed across literature, with multiple studies (for example, Wood et al., 2012; Rosen et al., 2013), documenting how digital devices can lead to decreased attention and an increase in off-task behaviour. While digital tools can enhance student engagement, they also provide a wealth of opportunities for students to stray from the lesson, which can undermine the overall effectiveness of a digital learning environment. The sheer number of distractions available when using a device makes it increasingly difficult for teachers to maintain control over how students engage with the content, and the more autonomous students are with their devices, the greater the potential for disengagement.

The opportunity for distraction is particularly pronounced for students with special educational needs, where digital tools designed to promote autonomy can unintentionally exacerbate existing challenges (Cranmer, 2020). Many teachers in this study noted that for students with learning disabilities, the digital tools meant to empower them often have the opposite effect, making it harder for them to stay on task. *"For students with special needs, digital devices are often more of a distraction than a tool,"* explained one teacher. They noted that *"the options and opportunities to deviate from the task are just too tempting."* This perspective is backed by research, such as Bol and Garner's (2011) study, which found that while technology can offer valuable support for students with disabilities, it can also present new challenges, especially around self-regulation. When these students are given too much freedom with digital devices, it can be overwhelming and lead to an increase in distractions, making it difficult for them to focus on their work. This suggests that a careful balance is necessary, as devices that offer flexibility may inadvertently contribute to disengagement, particularly for those who struggle with focus.

To address concerns relating to distractions, many of the teachers interviewed have adopted structured strategies to manage screen time and encourage better focus. A common approach has been to implement time limits on device use and to integrate regular breaks throughout the day. These strategies reflect a growing recognition that, while technology has the potential to enhance learning, its overuse can undermine students' ability to engage meaningfully with the material (Zhou & Wei, 2018). By setting clear boundaries around screen time, teachers in this study aimed to create a balanced environment that fosters both focus and productivity. As one teacher explained, incorporating screen-free times during the day helps ensure that students stay *"focused and engaged without feeling overwhelmed by technology."* This approach not only

helps students maintain attention but also combats mental fatigue, which can be a common side effect of extended screen use.

This structured approach of limiting screen time and integrating breaks is supported by existing research on the impact of technology in education. Selwyn (2016), for example, highlights the importance of maintaining a balanced approach to technology use, warning against the cognitive overload that can result from excessive screen time. As with the teachers in this study, Selwyn (2016) also noted that too much screen time can hinder students' ability to engage deeply with content, particularly in the context of complex learning tasks. Further reinforcing this view, studies by Madaus et al., (2020) suggest that setting limits on screen time and incorporating regular breaks can help mitigate the negative effects of digital distractions, especially for students who have difficulty maintaining focus. The findings of this study underscore the importance of planning and moderation when it comes to integrating technology into the classroom, ensuring that devices are used in a way that supports, rather than detracts, the learning process.

#### **6.4 - Parental Feedback and Preferences**

While students often embrace the engaging and interactive nature of digital learning, many parents are more inclined to stick with traditional methods, as noted by the teacher in this study. This finding supports Downes & Bishop (2012) study about digital natives and learning from their experiences with technology. This preference is particularly evident when it comes to tracking their children's progress. Teachers in this study believed that parents wanted clear, tangible evidence of how their child is doing, such as physical work that can be seen and touched. The teachers in this study reported that being able to see written work in a traditional method, enabled them to both understand what their child is learning and the level they are learning at. One teacher shared, *“parents often tell me they prefer seeing ‘glued work’ in exercise books. They feel more connected to their child’s learning when they can physically see and hold their work.”* This highlights how important it is for parents to feel involved in their children's education in a concrete way.

The teachers in this study reported that parents held similar concerns in relation to screen time. They noted that parents shared concerns about the amount of screen time their children were exposed to, especially for younger students. Feedback from parents often points to a worry that

extended screen use might not be beneficial. This fear was also recognised by LeBlanc et al., (2015) whose studies showed that, when not carefully managed, excessive screen time can have negative impacts on students' attention spans and overall physical health. Teachers in this study recognised these concerns and noted parents were looking for reassurance that screen time is being appropriately balanced with other learning activities, in the classroom.

To support parents' understanding of the use of digital devices, teachers in this study shared how their schools made efforts to involve parents more directly by organising annual meetings where they explain how digital tools are integrated into the curriculum. These meetings aimed to provide transparency about how technology is being used and the steps taken to monitor screen time and ensure it remains productive. However, despite these efforts to bridge the gap, the teachers in this study believe that there remains a tension between the undeniable benefits of digital learning and the parents' strong desire for more traditional, tactile forms of student work. It is clear that while digital tools can enhance learning, parents still place great value on seeing their child's progress in ways that feel more tangible and grounded in the physical world.

## **6.5 - Finding the Right Balance: A Blended Approach**

A key takeaway from this study is that teachers largely agree that a blended approach, integrating both traditional and digital methods, is the most effective strategy for enhancing student engagement and improving learning results. In Years 7 and 8, students are transitioning from learning to read to reading to learn. This shift marks a pivotal point in their educational journey. As Pennington (2008) noted, students start tackling more advanced cognitive tasks, including synthesising information from multiple sources, conducting research, and making cross-disciplinary connections. During this phase, students begin to engage with more complex tasks, such as researching topics, synthesising information from various sources, collecting data, and participating in individualised learning activities. The teachers in this study all agreed with Dede's (2009) view that digital tools, when used alongside traditional methods, greatly enhance the learning process by promoting deeper cognitive engagement.

One teacher shared a practical example of how they blend these approaches in their classroom: *"I start each lesson with paper-based activities, reading, writing, and problem-solving, then introduce digital tools for more specific tasks, like vocabulary practice or research. This strategy keeps students engaged without overwhelming them with too much technology at once."* The

teacher in this study recognised that combining learning approaches struck a careful balance. The tactile nature of paper-based tasks offered students a solid foundation in essential skills, while the digital tools introduced an element of efficiency and interactivity. This teacher's approach revealed the importance of pacing, gradually incorporating technology to support specific learning goals, rather than relying on it as the primary mode of instruction. By beginning with hands-on activities, students were given the space to strengthen their foundational skills before moving to more specialised tasks that the digital tools facilitated. Teachers in this study recognised that using a combination of traditional and digital learning, ensured that technology was used to supplement learning, not dominate it, maintaining both engagement and a measured integration of digital tools.

Reinforcing the importance of using a combination of traditional and digital methods, another teacher described their approach; *"We follow a structured routine where both traditional and digital methods are used. Students read physical books, but we also use digital tools for certain assignments and interactive learning tasks. It's about being flexible while ensuring that the core learning happens through hands-on, teacher-led instruction."* This comment highlights the belief that creating a hybrid learning environment allows for flexibility and enriches a learning environment. This teacher values the role of physical books in promoting focused, independent reading while leveraging digital tools to enhance interactive learning experiences. By striking a balance, this approach caters to diverse learning styles, ensuring that technology is used purposefully to complement, rather than replace, traditional teaching methods. Ultimately, the aim is to offer a range of learning experiences that address the needs of all students, acknowledging that different learners may respond better to different methods of engagement.

The integrated approach emphasised by the teachers in this study aligns with the findings of Fullan and Langworthy (2014), who argue that successful technology integration is not about replacing established teaching practices, but about creating an environment where digital tools work in tandem with, and enhance, traditional instructional methods. This balanced approach ensures that technology serves as a powerful support tool, reinforcing core learning while preserving the essential value of face-to-face, teacher-guided instruction in a learning area such as reading.

## **6.6 - Conclusion and Implications: The Future of Classroom Learning**

This study set out to answer the following question;

What are the experiences and perceptions of New Zealand intermediate school teachers on using digital devices to enrich literacy, specifically reading, instruction in the classroom?

The teachers in this study reinforced the findings in earlier studies, such as those by Voogt & Knezek (2008) and Beauchamp & Thomas (2022), that a blended approach, one that combines both traditional and digital tools, is the most effective way to foster student engagement and optimise learning outcomes.

While digital devices undoubtedly bring significant advantages, boosting efficiency, enhancing engagement, and streamlining data collection (Srivastava, 2025), the findings of this study underscore that traditional methods still play a vital role in effective teaching. These methods, particularly those centred on direct instruction, face-to-face interaction, and written work, remain essential. This indicates that for digital tools to be genuinely transformative, they need to be integrated thoughtfully into the curriculum as complementary assets, not as replacements for time-tested pedagogical practices.

As technology continues to evolve, it is clear that the role of the teacher will remain central in guiding students through this blend of traditional and digital methods (Charmaz, 2014). Teachers must not only master the use of these tools but also know when and how to incorporate them in a way that enriches, rather than undermines, the learning experience. To be effective in reading today, the challenge lies in striking the right balance, ensuring that technology is used to support core teaching practices, while still preserving the irreplaceable value of human interaction, personalised instruction, and the critical thinking that written work fosters.

Equally important is the collaboration between teachers, parents, and students in navigating this evolving landscape. By working together, these stakeholders can ensure that students benefit from both the innovative possibilities of digital tools and the grounded, relational approach that traditional methods offer. In this sense, it's not about choosing between the two, but rather about finding a harmonious balance, one that maximises the potential of both worlds, while never losing sight of the fact that meaningful, lasting learning is built on the foundation of personal connection and thoughtful guidance.

These findings collectively provide a deeper understanding of how intermediate teachers perceive and navigate the integration of digital devices within reading instruction. The research question; *What are the experiences and perceptions of New Zealand intermediate school teachers on using digital devices to enrich literacy, specifically reading, instruction in the classroom?*; is addressed not through a single stance, but through a spectrum of nuanced views that reflect the complexity of today's educational environment.

The voices of the teachers in this study reveal that digital devices are valued primarily as tools of enhancement rather than replacement. Teachers appreciated the efficiency, accessibility, and engagement potential offered by platforms like Google Classroom and ReadTheory but were clear in their belief that such tools should support, not replace, traditional pedagogical approaches. This perspective highlights the professional judgement teachers apply when integrating technology, ensuring it aligns with their learning goals and the developmental needs of their students.

Furthermore, the importance placed on traditional methods, including handwriting, oral discussions, and paper-based comprehension tasks, indicates that teachers still associate these approaches with deep learning and cognitive engagement, especially in reading. Rather than viewing traditional and digital methods as mutually exclusive, teachers described a preference for a blended model, recognising the strengths and limitations of each.

Ultimately, the perspectives shared by participants in this study suggest that the effectiveness of digital device use in reading instruction is highly dependent on how and when it is applied. Teachers emphasised purposeful integration, guided by student needs, curriculum demands, and professional expertise. In doing so, they positioned themselves not just as facilitators of digital learning, but as thoughtful designers of balanced, responsive literacy programmes. These insights contribute meaningfully to the wider conversation about technology in education and reaffirm the central role of teachers in shaping how digital tools are used to support student learning.

## **6.7 - Future Research**

The findings of this small-scale study, based on the perspectives of six New Zealand intermediate school teachers, have generated valuable insights into how digital devices are currently integrated into reading instruction. However, the study also highlights several areas

that would benefit from further exploration to deepen our understanding and strengthen future educational practice and policy. The following research directions are proposed, each emerging directly from the outcomes of this study.

### **Investigating the Integration of Digital Devices Across Different Year Levels**

This study focused specifically on Year 7 and 8 classrooms, where students are transitioning from learning to read to reading to learn. Teachers in this study frequently discussed the developmental shift occurring at this stage and how it influenced their choice of tools and methods. Future research could extend this investigation to younger year levels (e.g., Year 4-6) or older cohorts (Year 9-10 or even University Students) to explore how the role of digital devices evolves across age groups. This would help educators and policymakers understand whether a blended approach is equally effective across developmental stages or whether different strategies are needed depending on age, cognitive development, and reading proficiency.

### **Exploring the Role of Digital Devices in Cross-Curricular Reading Tasks**

Several teachers in this study spoke about using digital devices for research, data collection, and vocabulary development, tasks that often span across learning areas. Future studies could investigate how digital tools support reading in other curriculum areas, such as science, social studies, or technology, where students are expected to interpret texts, synthesise information, and evaluate sources. This direction stems from the current study's finding that digital tools are most effective when used for specific, targeted purposes. Understanding their role beyond the English curriculum could help educators design integrated programmes that promote critical literacy across disciplines.

### **Examining the Experience of Students with Learning Needs**

Teachers in this study consistently expressed concern that digital devices may exacerbate challenges for students with learning differences, especially in terms of attention, self-regulation, and task completion. These concerns echo existing literature but require deeper, focused research from the perspectives of students, specialist teachers, and whānau. Future research could examine which digital supports (e.g., text-to-speech, visual scaffolds, gamified reading

tools) are most effective, and under what conditions, for students with diverse learning needs. This would offer more targeted strategies for inclusive digital literacy instruction.

### **Investigating Effective Classroom Management Strategies for Digital Learning**

The issue of distraction and off-task behaviour was a recurring theme in this study. Teachers described difficulties in monitoring device use and ensuring students remained focused. This raises the need for future research on effective management techniques that maintain student engagement while minimising digital distractions. Research could explore how teachers implement screen-time policies, classroom routines, and digital literacy norms, and whether certain approaches (e.g., software monitoring, structured device-free breaks, or peer accountability) are more effective than others. This direction would provide practical guidance for teachers seeking to integrate technology without compromising classroom control.

### **Professional Development and Teacher Confidence in Digital Pedagogy**

While teachers in this study demonstrated thoughtful use of digital tools, their confidence and competence were often developed through personal trial-and-error or school-based support. Future research could explore what types of professional development most effectively equip teachers to integrate digital devices into reading instruction. This includes examining the role of mentorship, peer collaboration, and ongoing training in digital pedagogy. Research in this area would contribute to the design of professional learning models that are responsive to teacher needs and grounded in classroom realities.

Each of these research directions stems from the practical experiences, reflections, and challenges raised by teachers in this study. They highlight the need for a nuanced and evolving understanding of digital integration in education, one that considers age appropriateness, learning diversity and teacher capacity. As digital tools continue to shape the educational landscape, future research should focus not just on what technology is used, but on how, why, and for whom it is used, ensuring that every student's reading journey is enriched, not hindered, by the tools at their disposal.

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# **Appendix**

## **Appendix One - Interview Questions**

### **Section One;**

What do you as a teacher see/perceive as the value of digital devices in reading programmes?

What specific features of digital devices do you find most beneficial for engaging students?

How do you compare the engagement levels when using digital devices versus traditional reading methods?

Can you provide examples of how digital tools accommodate students with varying reading levels or learning needs?

How effective are digital devices in supporting students with special educational needs or disabilities in reading programmes?

What types of assessments do you find most effective when using digital tools?

How do digital devices aid in tracking and analysing student progress over time?

Are there particular digital resources that you find significantly improve reading comprehension?

How do students' outcomes using digital reading programmes compare to those using traditional methods?

### **Section Two;**

What role do you as a teacher see digital devices having in the teaching and learning of reading?

How has your role evolved with the integration of digital devices in your teaching?

What new skills or knowledge have you needed to acquire to effectively use digital devices in teaching reading?

Can you describe specific digital tools that have had a positive impact on your students' reading skills?

How do you decide which digital resources to incorporate into your reading curriculum?

What strategies do you use to encourage collaboration among students using digital devices?

Can you provide examples of successful collaborative reading projects that utilised digital tools?

How do you address issues such as screen time, accessibility, and digital literacy in your classroom?

What solutions have you found to overcome these challenges?

### **Section Three;**

How do digital devices support children's learning?

Can you provide examples of how digital tools have allowed for more personalised reading instruction?

How do you use data from digital devices to tailor instruction to individual student needs?

How do students generally respond to using digital devices for reading compared to traditional methods?

What voice have you received from students regarding their experiences with digital reading tools?

Can you share examples of digital activities that promote higher-order thinking skills in reading?

How do digital devices support the development of students' ability to analyse and interpret texts?

How do you incorporate diverse and multicultural texts available through digital platforms into your reading curriculum?

What benefits do you see in students having access to a broader range of reading materials?

#### **Section Four;**

What changes in pedagogy do you as a teacher see as needed to effectively use digital devices in a classroom?

What specific skills or knowledge areas are most crucial for teachers to learn?

How do you stay updated with the latest digital tools and best practices for teaching reading?

What techniques do you use to manage a classroom where digital devices are frequently used?

How do you ensure that digital devices are used effectively and not as distractions?

Can you provide examples of successful lesson plans or activities that integrate digital devices?

How do you balance traditional and digital reading methods in your instruction?

What metrics or criteria do you use to assess the impact of digital tools on student learning?

How do you gather and use feedback from students and parents regarding the use of digital devices?

## Appendix Two - Email To Request Access To Teacher's In Schools

Kia ora,

I hope this email finds you well. My name is Bianca Ness, and I am currently pursuing my Master of Education degree at Auckland University of Technology. I am reaching out to you as I am researching an area that I believe is of great importance to modern education which is the integration of digital devices in reading programmes.

Having worked as a reliever for a couple of years I am now pursuing advanced studies, I have developed a keen interest in understanding how digital technology can enhance student learning outcomes, in the context of reading. Specifically, my research aims to explore teachers' perceptions of the influence of digital devices and the benefits and challenges on student learning in reading within Year 7 and 8 classrooms.

In selecting potential schools for collaboration in my research project, I have prioritised institutions that are intermediate schools and integrate technology into their educational practices. I am particularly drawn to your school, [name of school], as I admire its commitment to innovation and excellence in education. The use of devices by students along with the qualities noted above make your school ideal for my study.

I am asking permission to interview two teachers at your school who are interested in using digital devices in their reading programmes. Teachers do not need to be currently using devices but are prepared to share their perceptions and experiences regarding the use of digital devices in a reading program. The interviews would take approximately 40 – 45 minutes and be scheduled for a time that is convenient to the teacher so as not to interfere with their school commitments. If you agree to let me interview two teachers at your school, I will take your advice on the best way to identify possible teachers.

I would be honoured to have the opportunity to collaborate with your school on this research project. I have attached the research Information Sheet which provides further information about this study. If you are interested in participating, I would greatly appreciate the opportunity to discuss the details further at your earliest convenience. Please let me know a suitable time for us to connect, whether in person face-to-face or via a virtual meeting.

Thank you for considering this collaboration. I look forward to the possibility of working together and contributing to the advancement of educational practice and knowledge.

If you need to contact me, feel free to contact me as below:

Email: [nqp1082@autuni.ac.nz](mailto:nqp1082@autuni.ac.nz) (University)

Warm Regards.

**Appendix Three - Participant and Principal Consent and Information Forms**

**Teacher Consent and Information Form**



## Consent Form - Teacher

**Project title:** *The Value of Using Digital Devices for Reading: Teachers Perspective*

**Project Supervisor:** *Pamela Perger*

**Researcher:** *Bianca Ness*

- I have read and understood the information provided about this research project in the Information Sheet dated 1/7/2024
- I have had an opportunity to ask questions and to have them answered.
- I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.
- I understand that if I withdraw from the study then I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.
- I agree to take part in this research.
- I wish to receive a summary of the research findings (please tick one): Yes  No

Participant's signature: .....

Participant's name: .....

Participant's Contact Details (if appropriate):

.....  
.....  
.....  
.....

Date:

**Approved by the Auckland University of Technology Ethics Committee on 16 August 2024 AUTEK Reference number 24/228**





## Permission to Access – Principal

**Project title:** *The Value of Using Digital Devices for Reading: Teachers Perspective*

**Project Supervisor:** *Pamela Perger*

**Researcher:** *Bianca Ness*

- I have read and understood the information provided about this research project in the Information Sheet dated 1/7/2024
- I have had an opportunity to ask questions and to have them answered.
- I understand that two teachers in my school will be interviewed as part of this study.
- I understand that taking part in this study is voluntary (my choice) and that any teacher may withdraw from the study at any time without being disadvantaged in any way.
- I understand that if a teacher withdraws from the study, they will be offered the choice between having any data that is identifiable as belonging to them removed or allowing it to continue to be used. However, once the findings have been produced, removal of their data may not be possible.
- I agree to allow two teachers in my school to take part in this research.
- I wish to receive a summary of the research findings (please tick one): Yes  No

Participant's signature: .....

Participant's name: .....

Participant's Contact Details (if appropriate):

.....  
.....  
.....  
.....

Date:

**Approved by the Auckland University of Technology Ethics Committee on 16 August 2024 AUTEK Reference number 24/228**

*Note: The Participant should retain a copy of this form.*



**What opportunity do I have to consider this invitation?**

As noted above your school has been identified as having teachers who might be interested in participating in this study. I would ask that you consider all the information and ask any questions. Then let me know if you are willing to allow me to conduct this research in your school or not within two weeks of considering this invitation.

**Will I receive feedback on the results of this research?**

Once all the data from all participants has been analysed and written up, I will offer a presentation to share the findings of the full study.

**What do I do if I have concerns about this research?**

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Dr Pamela Perger [pamela.perger@aut.ac.nz](mailto:pamela.perger@aut.ac.nz) (+649) 921 9756 ext 9756

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEK, [ethics@aut.ac.nz](mailto:ethics@aut.ac.nz), (+649) 921 9999 ext 6038.

**Whom do I contact for further information about this research?**

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the researcher as follows: Bianca Ness [Nqp1082@aut.ac.nz](mailto:Nqp1082@aut.ac.nz)

**Researcher Contact Details:**

Bianca Ness [Nqp1082@aut.ac.nz](mailto:Nqp1082@aut.ac.nz)

**Project Supervisor Contact Details:**

Dr Pamela Perger [pamela.perger@aut.ac.nz](mailto:pamela.perger@aut.ac.nz) (+649) 921 9756 ext 9756

***Approved by the Auckland University of Technology Ethics Committee on 16 August 2024 AUTEK Reference number 24/228***