

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

Multi-media Literacy Practices of Year 5-6 Children at Home

A thesis presented in partial fulfilment of the requirements for the degree of  
Master of Educational Psychology

at Massey University, Manawatu,  
New Zealand.

Susan Cummings

2015

### **Abstract**

A child's literacy development is significantly affected by factors that exist outside of educational settings. In recent decades, children's life experiences have been transformed through the increased use of technology in their everyday environment. This research project uses a social practice view of literacy to explore the literacy activities of children in everyday settings, with particular attention to how they navigate and follow their interests across different formats, from traditional media such as print to multi-media. Data was collected using a mixed methods design to answer three research questions: 1) the ways children engage in literacy activities across different formats, 2) the types of literacy activities children found engaging, and 3) the reasons children engage in literacy practices in their everyday lives. Results indicate that children engaged in a variety of literacy activities across multiple formats. Findings also indicated watching videos is a popular multi-media format and this format may be influencing the types of literacy skills children value. Children engaged in literacy related activities for a number of different reasons, including: stimulation, family practices, functional reasons, social relatedness, mastery and competence, and social participation. It was concluded that children's everyday literacy practices are influenced by a number of sociocultural and developmental factors, and that any efforts to support them will require an understanding of their complex nature and embeddedness in educational and social contexts.

## **Acknowledgments**

I am indebted to my supervisors, Tara McLaughlin and Brian Finch, whose support was essential to the completion of this research project, in so many ways.

## Table of Contents

Abstract	ii
Acknowledgments	iii
List of tables	vii
 <b>Chapter One: Introduction</b>	
1.1 Background for the study	2
1.2 Rationale for the study	5
1.3 Definition of literacy	7
1.4 Summary of chapters	7
 <b>Chapter Two: Literature Review</b>	
2.1 Introduction	9
2.2 Literacy development and reading mileage	9
2.3 Reading motivation and engagement	10
2.3.1 Reading engagement in the social context	12
2.4 Everyday literacy and funds of knowledge	13
2.4.1 Social practice view of literacy	13
2.4.2 Funds of knowledge	14
2.4.3 Popular culture as ‘funds of knowledge’	15
2.4.4 Third space and hybrid literacies	16
2.5 New literacies in the 21 <sup>st</sup> century	18
2.5.1 Home versus everyday literacies	20
2.6 Gaming, networking and informal learning	22
2.7 The complexities of adolescent literacy	25
2.7.1 Adolescent literacy and motivational theory	27
2.8 Literacy practices of preadolescent children	27
2.8.1 Preadolescent development and contemporary media use	27
2.8.2 Gender preferences	30
2.8.3 Attitude to literacy in preadolescence	30
2.8.4 Ethnographic data on everyday literacies	32
2.9 Innovative learning environments	34
2.10 Summary and aim of research	34
 <b>Chapter Three: Methodology</b>	
3.1 Introduction	36
3.2 Researcher perspective	37
3.3 Study design and research questions	38
3.4 Phase I: Survey	39
3.4.1 Survey design	39
3.4.2 Recruitment method	41

3.4.3	Ethics and consent	42
3.4.4	Administration and data collection	43
3.4.5	Data analysis	44
3.5	Phase II: Case studies	44
3.5.1	Recruitment	44
3.5.2	Ethical issues and consent	44
3.5.3	Interview procedure	46
3.5.4	Data analysis	48
3.6	Summary of methodology	49

## **Chapter Four: Results**

4.1	Phase I: Survey	50
4.1.1	Survey respondents	50
4.1.2	Access to literacy resources	51
4.1.3	Literacy activities across formats	52
4.1.4	Time spent reading and using electronic media	53
4.1.5	Following interests across media	54
4.1.6	Gaming	56
4.1.7	Online content and literacy activities	57
4.1.8	Gender differences in literacy related activities	57
4.1.9	Reading habits and attitudes	59
4.2	Phase II: Case studies	60
4.2.1	Documenting children's literacy practices	60
4.2.1.1	<i>Rusty</i>	60
4.2.1.2	<i>Gemma</i>	64
4.2.1.3	<i>Millie</i>	66
4.2.2	Engaging literacy activities	68
4.2.2.1	<i>Engaging qualities of fiction</i>	68
4.2.2.2	<i>Learning</i>	69
4.2.2.3	<i>Exploration, choice, and novelty</i>	70
4.2.2.4	<i>Gender and engagement</i>	72
4.2.2.5	<i>Internetainment</i>	73
4.2.2.6	<i>Creation and production</i>	74
4.2.3	Reasons for children's literacy practices	75
4.2.3.1	<i>Stimulation</i>	75
4.2.3.2	<i>Family practices</i>	76
4.2.3.3	<i>Functional</i>	77
4.2.3.4	<i>Social relatedness</i>	79
4.2.3.5	<i>Mastery and competence</i>	80
4.2.3.6	<i>Participation and identity</i>	81
4.3	Summary of results	82

<b>Chapter Five: Discussion</b>	<b>83</b>
5.1 Introduction	83
5.2 The everyday literacy practices of children	84
5.2.1 The challenge of defining and capturing everyday literacies	84
5.2.2 Variety and video	86
5.3 What drives children to engage in everyday literacy activities?	89
5.3.1 The experience of flow	89
5.3.2 Social interaction and development	91
5.3.3 The need for autonomy, competence, and relatedness	93
5.4 Sociocultural factors and everyday literacy practices	95
5.4.1 Symbiotic relationship between school and out-of-school activities	95
5.4.2 Modern cultural apprentices and the new literacies	97
5.4.3 Funds of knowledge	100
5.5 Implications	101
5.6 Limitations and recommendations for future research	105
5.7 Conclusion	106
 References	 108
 Appendices	 121
Appendix A: Survey	121
Appendix B: Case Study Photography Guidelines	129
Appendix C: Case Study Interview Schedule	130
Appendix D: Survey Parent Information Sheet (Passive Consent)	131
Appendix E: Survey Parent Information Sheet (Active Consent)	133
Appendix F: Survey Consent Form (Active Consent)	135
Appendix G: Board of Trustees Information Sheet	136
Appendix H: Teacher Information Sheet	138
Appendix I: Case Study Parent Information Sheet	140
Appendix J: Case Study Parent Consent Form	142

### List of Tables

Table 4.1	Demographic characteristics as a percentage of the sample	51
Table 4.2	Children's access to technological and literacy related resources	52
Table 4.3	Percentage of children reporting frequency of literacy related activities	53
Table 4.4	Percentage of children reporting time spent per day using electronic media	54
Table 4.5	Percentage of children engaging in literacy related activities as part of their interests and hobbies	55
Table 4.6	Percentage of children reporting videogame related activities	56
Table 4.7	Percentage of children reporting frequent literacy related activities per gender	58
Table 4.8	Percentage of children citing reasons they would read and write more	59



## **Chapter One**

### **Introduction**

The impact of new digital technologies across workplace, education, and everyday settings has brought about significant social change in the way people communicate and how literacy is conceptualised. These changes have impacted upon children's lives both in- and out-side of school as the range of texts and media formats they encounter have multiplied. As these new technologies have filtered into family homes, they have provided opportunities for children to engage in a wide range of multi-media activities and follow their interests across different media formats. Inherent in many of these multi-media activities and technologies is the opportunity to participate in literacy-related activities. However, the extent to which these different media formats incorporate literacy varies widely. Children's use of different media formats is also influenced by the social practices of friends, family, and wider social networks, as well as the literacy and technological skills they acquire through formal education. With increasing numbers of children accessing the internet and using online modes of communication in their everyday lives, it is important to understand both the nature of children's literacy related activities and the social context within which they occur.

The purpose of this study was to develop deeper understandings about the types of literacy related activities children choose to engage in out-side of school, the qualitative features of these activities, and the reasons why children are choosing to engage in them. The study explored the way children aged 9 – 11 years old access media across traditional and multi-media formats, with particular attention to how they navigate and followed their interests. This required a mixed methods research design to collect both quantitative and qualitative data. Quantitative data was collected by an

online survey, whilst qualitative data was collected through interviews with several participants drawn from the survey sample.

Research findings were evaluated through a social practice view of literacy to better understand how the activities fitted into the context of children's everyday lives and how they engaged in them as socially situated practices. The types of activities children engaged in provided many informal learning opportunities that contributed directly and indirectly to their literacy development. The knowledge gained from this study provides insights into how these activities can be further supported, both in- and out-of-school, and poses some important questions for future research.

### **1.1 Background for the study**

The rate that new media and communications technology has been developed and incorporated into daily lives has increased exponentially (Leu & Forzani, 2012). The last two decades have seen the introduction and rapid proliferation of devices from mobile phones, home computers, MP3 players, laptops, e-readers, and games consoles to the latest generation of multifunctional devices such as tablets, smartphones, and smart TVs. From dial-up landline connections to ultra-fast broadband, from wired to wireless, technological progress is propelling changes in social practices for the population, at large.

The introduction of new technology usually brings with it forecasts of dangerous consequences, particularly when that new technology is widely used by children. It's been over fifty years since television was enthusiastically adopted and brought into family homes but new research is still being conducted in order to tease out the myriad positive and negative effects it has had on children's behaviour and educational achievement (Linebarger, Moses, Garrity Liebeskind, & McMenamin, 2013; Robertson,

McAnally, & Hancox, 2013). Concerns over children's television watching continue, with these ranging from its contribution toward childhood obesity, displacing book reading, and increasing aggression to its role in promoting consumerism (Baiocco, D'Alessio, & Laghi, 2009; Braithwaite et al., 2013; Fali & Myoung-Jae, 2009; Koolstra, van der Voort, & van der Kamp, 1997). This disquiet is not limited to television, of course, and other media such as video-gaming and the internet are each perceived to bring their own dangers (Brooks, 2008).

Despite public discourse on the dangers of digital technology, most families purchase a number of multi-media products. A 2008 survey of 604 children aged six to 13 years and their caregivers found that virtually all New Zealand children's homes contained a television (99.5%), cellphone (96%), radio (95%), and DVD player (92%). Most homes had a computer (88%) and 35% of homes had a hand-held games console, and approximately three quarters of children used the internet (Colmar Brunton Research & New Zealand Broadcasting Standards Authority, 2008). These figures are likely to have crept even higher as the overall rate of home internet access in New Zealand has increased from 60% in 2006 to 76% in 2013 (Statistics New Zealand, 2013). The ownership of tablets for personal use has also increased from 29% in 2013 to 39% to 2014, whilst the rate of Smartphone ownership rose from 48% to 59% (Research New Zealand, 2014). These statistics reflect the broad trend of faster adoption of new technologies throughout society, which seems likely to continue for the foreseeable future.

These significant technological changes bring into question what their impact has been on children's literacy practices and development. New technology brings with it new social practices. Most parents are acutely aware that teenagers are prolific users of internet technology, mobile phones, instant messaging, and social networking

platforms. Many social commentators voice concern that virtual communication has largely displaced normal teenage social interaction and research is cited to prove that excessive use can lead to lowered cognitive and academic achievement (Harris, 2011; Newman, 2010), while some educators express concern that text and instant messaging have resulted in declining spelling and grammatical skills (Braun, 2007).

The digital shift is not seen to be so surprising or dramatic for preadolescents and those in middle childhood. Nearly all children this age are comfortable with computers, video-gaming, and other digital technology due to opportunities to learn at home, school, or with other family and friends, but their use of technology seems moderate when compared with teens and easier for parents to place limits around. Concerns around children's online safety are now routinely addressed through schools and parent education organisations (Netsafe, 2014). And, while cyberbullying is still a prominent issue, interest has moved heavily toward a focus on two big issues in recent years: e-learning within the classroom (McDowall, 2010) and the social implications of more and more schools implementing Bring-Your-Own-Device (BYOD) schemes (Jones, 2013).

Due to their more visual, auditory, and interactive qualities, educators have long seen the potential for digital technologies to increase students' engagement with learning. E-learning is now a permanent and pivotal feature of the curriculum and the government has explicitly stated its goal to get young New Zealanders to be the most digitally literate in the world (New Zealand Government, 2013). Investigations into how children learn in digital classrooms are being conducted and followed with interest by many education professionals. McDowall (2010) collated findings from a range of recent New Zealand based projects that incorporated digital media activities into classroom literacy programmes across Year 1 to Year 11. In interviews, teachers

reported increases in motivation and engagement and parents of children in Years 1 - 4 revealed that many children independently chose to extend these types of literacy activities into their home setting. Types of literacy behaviours that spilled over into the home environment included: reading longer and more complex books, performing searches on the internet to follow-up high-interest classroom topics, and writing activities such as blogging, letter-writing, and creating books using programmes available on the internet.

These studies demonstrate that there are positive aspects of bringing technology into the classroom to aid learning in terms of motivation, engagement, and increasing the rate of school literacy activities crossing the boundary into children's homes. Given children's everyday multi-media activities contribute toward their literacy development, it is important to examine the nature of these activities in their lives out-side of school.

## **1.2 Rationale for the study**

Multiple international studies have revealed that New Zealand has a wide distribution in the literacy achievement of its students (Clark, 2014). The latest 2011 Progress in International Reading Literacy Study (PIRLS) compared the reading achievement of New Zealand Year 5 students with their grade equivalents throughout the world and found that, despite maintaining the overall level of achievement from previous PIRL studies in 2001 and 2006, the gap between good readers and poor readers has not been reduced, even with decades of policy implemented by the Ministry of Education aimed at closing the gap (Tunmer, Chapman, Greaney, Prochnow, & Arrow, 2013).

Recent government responses to this issue have included the introduction of National Standards. These 'benchmarks' were introduced in 2010 and provide a

standard expectation that students need to meet in reading, writing, and numeracy during each of their first eight years at school (Te Kete Ipurangi, 2014). The goal of the standards is to make evident those students who are struggling to achieve so that both teachers and parents know when and what extra learning support and intervention is necessary for which individuals. The Ministry of Education encourages schools and teachers to make recommendations to all parents on how they can support their children's learning at home and to formally state these recommendations in individual students' school reports (Te Kete Ipurangi, 2014). For recommendations to be useful in home contexts, teachers need information about the types of literacy-related activities that children are likely to engage in and find appealing, in their home settings.

Given children's unprecedented access to a range of media beyond that of traditional print forms as well as the ability to access and explore their interests across multiple formats such as television, websites, apps, video, and related merchandise, it is likely that literacy recommendations will need to be informed by both 1) knowledge of the affordances that these formats offer for literacy development and 2) what types of activities children prefer to engage in. Without such a multi-faceted understanding, these recommendations may lack relevance to children's and families' lives. Thus, the current research project aims to identify the literacy activities of children in out-of-school settings, with particular attention to how children navigate and follow their interests across different media formats. Information gained from this research can also be used to support teachers to incorporate and build on children's out-school literacies and interests in school settings. There is a body of research that supports educators facilitating effective learning by making connections between knowledge gained from student's everyday life and content of the curriculum (Gonzalez, Moll & Amanti, 2005; Hull & Schultz, 2002; Moje, Overby, Tysvaer, Morris, 2008).

### **1.3 Definition of literacy**

This research project uses the definitions of literacy that are currently used by the Ministry of Education (2012) and which appear on their website Te Kete Ipurangi:

“Literacy is the ability to understand, respond to, and use those forms of language that are required by society and valued by individuals and communities.

(Ministry of Education, 2007)

Forms of language: The written, oral, and visual texts that students use in their everyday lives – at school, at work, at home, and in their communities.

Text: A piece of spoken, written, or visual communication that is a whole unit, for example, a conversation, a poem, a web page, a speech, an article, or a poster.”

The Ministry of Education (2012) state that their definition of literacy is based on the understandings that literacy is an interactive tool to engage with the world and is a set of social and cultural practices that are integral to each student’s identity. Literacy is, also, a tool for learning encompassing reading, writing, and oral language that enables students to make sense of information, experiences, and ideas.

This definition is relatively broad, going beyond traditional written texts to incorporate visual and oral texts. It takes literacy as a social practice that appears across all social contexts and is intimately tied to an individual’s culture and identity. This definition of literacy will be used in the current research project.

### **1.4 Summary of Chapters**

Chapter Two of the thesis will set out the research literature that is relevant to children’s everyday literacy practices. This encompasses many related and overlapping fields, including: reading research, research on motivation and engagement, sociocultural understandings of learning, understanding everyday practices as funds of

knowledge, the social practice view of literacy, and the field of new literacies.

Developmental theory related to middle childhood and adolescence will be discussed, along with what is known about the literacy related practices of older children and youth's in everyday settings.

Chapter Three outlines the quantitative and qualitative methodologies used across the two phases of the research project. The process of developing the survey and recruiting a sample will be described for the first phase, along with the method of data analysis. This will be followed by a description of the second phase, including procedures for selecting participants, use of a photo elicitation technique during the interview, and data analysis.

Chapter Four presents the results from both phases of the research. Survey data from phase one will be described, beginning with the demographic characteristics of the sample. Phase two data will be set out in sections to address the three research questions.

Chapter Five will discuss the themes found in the qualitative data and integrate these with findings from the survey. Key areas of importance will be discussed with reference to relevant research literature. The implications of the findings will be considered and areas for further research will be suggested.



## **Chapter Two**

### **Literature Review**

#### **2.1 Introduction**

Children's everyday literacy practices are affected by numerous elements across multiple domains. A review of the research literature reveals that cognitive, emotional, social, cultural, educational, and technological factors all play a part in influencing the nature and form of children's activities. This literature review describes the contributions of the many different fields of research that have informed understandings of the children's everyday literacy. It will start with a brief review of the roles of reading, motivation, engagement, and the social context in children's literacy development. A short discussion of the sociocultural perspectives on everyday literacies and informal learning will follow. The field of 'new literacies' has contributed to an understanding of how new information and communication technologies have altered conceptions of what counts as literacy. Insights from research into new literacies will be presented, along with how they are viewed across education and everyday settings. A discussion of research into video-gaming, social networking, and informal learning will highlight the rich contexts within which children practice literacy in everyday settings. This will be followed by a detailed discussion of adolescents' and children's everyday literacy practices, with reference to relevant psychological and developmental theory. The chapter will conclude with the research questions for the present study.

#### **2.2 Literacy development and reading mileage**

Mol and Bus (2011) conducted a meta-analysis of a large number of studies and found that the amount of leisure reading children do out of school contributes significantly toward academic reading achievement. Children who had higher abilities

in comprehension and technical reading skills read more than their less proficient peers, which had the effect of improving their skills with each academic year.

This ‘reading mileage’ effect underpins efforts by many educators and librarians to promote the amount of leisure reading that children engage in. Groups that have been found to have more negative attitudes to reading, such as older children, boys, and poorer readers (McKenna, 2001), are often the recipients of the most concerted efforts in the promotion of reading. It is theorised that, if children read enough, they will develop the fluency that allows them to read with ease, which in turn makes reading enjoyable and increasing the likelihood that they would read more in the future (Catts & Kamhi, 2005). Under this cognitive motivational approach, reading promotion often involves offering children a range of popular novels matched to their reading age and developmental stage in the expectation that they will, with enough practice, develop the fluency to spontaneously unlock the experience of intrinsic joy in reading and create a pleasurable lifelong habit.

### **2.3 Reading motivation and engagement**

Motivation is a complex area of psychological and education research, but it is well recognised as an important part of an individual’s literacy development; having an effect on both the amount of reading and reading achievement (Ellis & Coddington, 2013; Guthrie, Hoa, Wigfield, Tonks, & Perencevich, 2006). Motivational factors affect the amount of persistence and level of engagement children apply to a reading task (Chapman & Tunmer, 1995; Guthrie & Knowles, 2001).

While better readers usually have more positive attitudes to reading in and out of school, there are exceptions – with cases of poorer readers who have positive attitudes and good readers with negative attitudes to reading (McKenna & Kear, 1990). A study

by Martinez and colleagues (2008) found fourth grade students' attitude to reading to be an important predictor of their fifth grade reading achievement, accounting for 22% variance in their reading scores. Students can also have differing motivational levels across settings and many reading attitude and motivational measures contain separate scales for academic and recreational reading (De Naeghel, Van Keer, Vansteenkiste, & Rosseel, 2012; Guthrie, Coddington, & Wigfield, 2009; McKenna & Kear, 1990).

Motivation tends to increase in conditions when a person is engaged in tasks that are of high interest or reward (Guthrie & Knowles, 2001). Ryan and Deci's (2002) self-determination theory has influenced much of the research into reading motivation and focuses largely on the conditions that promote intrinsic motivation (Guthrie et al., 2009). Intrinsic motivation refers to the desire to be engaged in a task for its own sake rather than because of external rewards or pressure and it is highly correlated with the amount of children's leisure reading (Guthrie & Knowles, 2001).

De Naeghel and colleagues proposed a theoretical model of the relationship among reading motivation, behaviour, and performance (2012). In this model, reading, self-concept, recreational reading motivation, and academic reading motivation all make independent contributions to the frequency of reading and reading engagement, which both contribute toward reading comprehension (De Naeghel et al., 2012). Other studies suggest that there is a reciprocal relationship between reading engagement and reading achievement, with highly engaged readers reading more texts overall, as well as a greater diversity and more challenging range (Ellis & Coddington, 2013). Situational interest can be a powerful motivator to create engagement for both skilled and struggling readers; research has found that struggling readers can employ deep reading strategies with challenging texts when they are highly interested in a topic and the text is just within their skill level (Guthrie & Davis, 2003).

### **2.3.1 Reading engagement in the social context.**

Literacy is not just a cognitive or psychological skill but is significantly mediated by the social environment. The social context has been found to be a significant factor affecting motivation for reading and the level of engagement and learning in schools (Byrnes & Wasik, 2009). Studies show that students play an active role in managing their identity within the social context of school (Blair & Sandford, 2004; Dyson, 1997; Hall, 2006).

According to McKenna's (1994) reading acquisition model, the individual's desire to conform with their socialiser's beliefs about reading is a determining factor in whether those socializing agents will have any influence (Klauda, 2009). Socializing agents can take the form of teachers or peers. Parents are also key socialisers of literacy practices (Mol & Bus, 2011; Villiger, Niggli, Wandeler, & Kutzelmann, 2012) and can provide positive or negative conditions for children's literacy development. Mellon and Moutavelis (2009) conducted research that found some parents undermined their children's motivation to engage in educational tasks at home by acting in ways that their children experienced as aversive, such as using punishment or not responding to requests for help.

Usually, however, parents exert a far more positive influence. Parents are pivotal in providing opportunities and motivation for their children to read at home, and they are especially important in supporting struggling readers (Baker, 2003). In a study of thirty nine avid and non-avid leisure readers, Shapiro and Whitney (1997) found that those who enjoyed reading were more likely to have been: given books as gifts; taken to the library; encouraged to read; and read to earlier and for longer than those who were not avid readers. In Biddulph et al.'s (2003) best evidence synthesis, active parental support and provision of a range of quality experiences, activities, and interactions with

the family were some of the major positive influences on children's achievement. This report also found that family practices of literacy varied significantly with ethnicity and socioeconomic status. Some families engaged in literacy practices that supported children in making sense of their world and the texts they encounter. However, some families had literacy practices that did not encourage meaning-making, which had a limiting effect on their children's development.

## **2.4 Everyday literacy and funds of knowledge**

Rogoff (1990) claims that all cultures apprentice younger members into the practices of the community and, while particular practices may vary between cultures, the process of learning is similar and can be understood in terms of an apprenticeship model. Children engage in observations of the behavioural practices of others and move through a process of guided participation with adults and/or peers until they have acquired sufficient skill and knowledge to independently perform activities themselves. This is learning through interaction and practice, and is a framework of understanding that recognizes that cognitive development always occurs within a sociocultural milieu.

### **2.4.1 Social practice view of literacy.**

The social practice view considers literacy in a much wider sense than do cognitive theories, with their emphasis on literacy as a collection of standalone skills and knowledge. Hamilton (2006) states that literacy is a part of social practices which can be observed in literacy events and that these are patterned by social institutions and power relationships. This sociocultural orientation acknowledges that literacy practices are not neutral, that they are inexplicably tied up with historical and ideological perspectives, and that they contribute to the reproduction of social and material divisions within societies (Black, 2008). The social practice view uses an ethnographic

approach to understand what people do with literacy, with whom, where, and how, defining literacy as culturally embedded and socially regulated (Barton & Hamilton, 1998).

In many families, literacy is perceived as being largely about literacy practices that are valued by educational institutions. Cairney (2005) found that school literacy dominated the home literacy practices of many families with school aged children. Observations and interviews with parents revealed how strongly their beliefs and practices about literacy were shaped by their own experiences of school. A case study of 8-year-old Rajan's literacy practices in and out of school revealed his family's distinctive separation of the two (McTavish, 2009). School work was considered a serious matter and school literacy was viewed as a set of skills to be learned and used in isolation. Homework was conducted at a distinct time and place within the home and it took precedence over other types of home literacy activities. This contrasted with how the family actually used literacy in their everyday lives; Rajan used a variety of multi-media resources to produce posters about his family's religious life and, with his father's help, constructed specialized charts to follow different soccer teams' performance within a widely televised and reported on tournament. Nonetheless, school literacy is considered by many groups of people to be the dominant and most important literacy even though a wide range of literacy practices exist within families' everyday lives (Barton & Hamilton, 1998).

#### **2.4.2 Funds of knowledge.**

'Funds of knowledge' is a concept that is based on the belief that people are competent, they have knowledge, and that their life experience has given them that knowledge (González, Moll, & Amanti, 2005). This concept evolved out of ethnographic research with mostly Mexican-American students and their families in the

United States and represents an attempt to re-position non-mainstream students in relation to the dominant culture and classroom practices. Exploring the nature of knowledge these immigrant working-class families possessed, the researchers discovered a wealth of knowledge and practices that were derived from their productive and labour activities – both paid and unpaid (González et al., 2005). Other research has demonstrated the benefits of utilizing these funds. One study found that Latino high school students often had multiple sources of knowledge to draw on to make connections that helped deepen their understanding of scientific concepts in the classroom (Moje et al., 2004).

Gonzalez and colleagues' (2005) research has inspired many other education researchers who seek to use a socio-cultural orientation in order to build on the experiences, resources, and knowledge of diverse families and bolster children's academic achievement (Moll, Soto-Santiago, & Schwartz, 2013). They recommend that educators increase their knowledge of their students' backgrounds and, where necessary, make connections with families so that their funds of knowledge can be identified and utilized within class instruction (González et al., 2005).

#### **2.4.3 Popular culture as 'funds of knowledge'.**

Children's experiences of popular culture can also be considered a fund of knowledge. Moje and colleagues (2004) conducted ethnographic research, over five years, within a low income Latino community and found that adolescents' possessed everyday funds of knowledge from a variety of sources, which could be categorized into four funds - family, community, peer, and popular cultural. Popular culture refers to the way people experience the world mediated by forms of media technologies, including books, newspapers, magazines, popular music recordings, radio, film, and television (Benson & Chik, 2014). Children consume a wide variety of popular cultural forms,

both corporate-produced culture as well as user produced forms such as YouTube (Brooks, 2008). Popular literacies are deeply intertwined with identity and social issues including gender, race, class, and/or style of being – for example, hip-hop or sci-fi fan, video-game player, or sports fan (Dyson, 2006).

Children's engagement with popular cultural forms has a long history of marginalization in the sphere of education. It has, throughout the decades and centuries, been characterized as a valueless, passive diversion capable of mis-educating or conditioning vulnerable children into antisocial or mindless habits (Benson, 2014). Even early childhood education, whose curriculum actively seeks to bridge the home-school settings, still emphasizes and privileges 'quality' traditional print literacy representations of middle-class cultural norms (Marsh, 2003). Gee (2008a), among others (Antin & Ito, 2010; Apperley & Walsh, 2012; Benson & Chik, 2014; Honan, 2006; Lewis & Fabos, 2008), has challenged the notion that it is of little value by asserting that popular culture is now more complex than ever before and that young people sometimes seem to engage in deeper learning in their popular culture than they do in school. This is especially evident when considering the kind of high level cognitive demands of activities such as digital gaming, creating fan fiction, or the use of creative digital software programmes to remix forms of popular culture (Gee, 2008b; Knobel & Lankshear, 2008).

#### **2.4.4 Third space and hybrid literacies.**

The resources and abilities children have at home and in the community can often be overlooked in the educational setting (Fox, 2013). Hull and Schultz (2002) assert that bringing out-of-school literacies into the classroom allows children to demonstrate and share the skills and knowledge that they have gained in their families and communities. Moje (2013) expands on the idea of literacy practices simply



crossing the boundaries between home and school settings, instead referring to the concepts of third space and hybridity. Third space refers to going beyond binary divisions of official versus everyday and, instead, allowing the space and opportunity for new practices to emerge out of the combination of distinct entities. It is theorised that these new ‘hybrids’ have a distinctive qualitative difference from merely a combination of the original elements, as the process has generated something wholly new (Moje, 2013). Examples of some of these literacy practices include fan fiction and ‘mash-ups’ that mix two or more different content items (e.g., songs or texts). Hybrid literacies are a result of a social process and interaction between participants or types of practice where both parties or ways of doing are respected and accepted as being of value (Cushman & Emmons, 2002).

Popular culture is a potential entry point for learning experiences in the classroom but Powell (2014) cautions that this must be carefully managed. Formal and informal literacies must be equally valued and the learner must be centrally positioned within a topic in order for the effective utilization of their background knowledge to occur. How teachers think about the value of popular culture affects the ways in which it is used in the classroom, which, in turn, communicates to students the cultural norms and values of education and its relation to popular culture (Benson & Chik, 2014). Teacher attitudes about the potential for popular culture as an educational resource largely depend upon its role in their own lives and the degree of distance between their own interests and that of their students. Its entertainment value can be used to motivate or reward students in the pursuit of some more ‘serious’ purpose – for example, watching an entertaining video clip or playing a song just prior to introducing a curricular topic, or watching a movie version to reward finishing reading a set book,

whilst a deeper engagement with popular culture texts implies the value judgment that popular culture itself can be taken seriously (Benson & Chik, 2014).

Taken together, key literature discussed thus far indicates that teaching and learning of literacy is not neutral. Children's cultural identities, interests, and funds of knowledge provide many opportunities to bridge the gap between school literacy practices and everyday literacies. This is especially so in the modern globalized digital environment, where children's popular culture can also be seen as a fund of knowledge that can be drawn on in the classroom (Apperley, 2014). The online world has brought with it an exponential increase in the amount of knowledge and resources available to anyone to be accessed anywhere, wherever there is a digital device and internet connection.

## **2.5 New literacies in the 21<sup>st</sup> century**

The discourse of a globalised knowledge economy has become firmly entrenched in both the field of education and the wider public sphere (Coiro, Knobel, Lankshear, & Leu, 2008; Davies & Merchant, 2014). The 21<sup>st</sup> century has focused on a knowledge economy which emphasizes developing creativity, strategic thinking, and active learning (Carrington & Dowdall, 2013). This discourse argues that children need to be educated in a particular way so that they are ready to take their place in the modern knowledge society (Sefton-Green, 2003). In a knowledge economy, education is seen in a utilitarian light as another form of capital – 'lifelong learning' and 'learning to learn' are now important mantras in the pursuit of education systems' new goals of producing innovative cognitive workers that can meet modern workforce demands (Rutar, 2013).

This view of a knowledge economy is reflective of the complex world that children's development and education is now shaped within. The boundaries between private and public lives are increasingly blurred by social forces at the macro level and these forces are not easily untangled from one another. The internet, with its rapid dissemination of new technologies, new content, and new social practices, has forever changed the way people interact and communicate with one another and the adoption of technology in different spheres of life and by different groups in society can profoundly reshape the relationships between them.

The field of New Literacies attempts to keep abreast with these changes to literacy practices across a wide range of settings, from homes to workplaces and classrooms to communities, and definitions of literacy are changing in response (Lankshear, 2011; Leu & Forzani, 2012). It is argued that, to become a literate person in the 21<sup>st</sup> century, individuals need to develop a skill set that goes beyond the traditional print based conceptions of reading and writing to incorporate a range of skills, including the navigation and comprehension of multimodal texts, critical analysis of texts within sociocultural and political contexts, and participation in the exchange of information and ideas across multiple boundaries within a global environment (Coiro et al., 2008; Hall, Cremin, Comber, & Moll, 2013). Children must now develop proficiency in literacy over an increasing number of information channels and also develop awareness of the structural and ideological elements of the texts themselves (Mackey & Shane, 2013).

Researchers attempting to understand the literacy practices of children propose a multidisciplinary approach that incorporates social practice theories of literacy, popular culture, and frameworks that investigate the multimodality of new media texts (Coiro et al., 2008; Pahl & Burnett, 2013). It is argued that only with a multi-lens theory that

such profound and rapidly changing practices can be made sense of in relation in the broad field of education (Coiro et al., 2008).

Definitions of what constitutes new literacies are varied, depending upon the particular theoretical and methodological focus of the researcher. Lankshear and Knobel (2007) regard literacy practices that integrate new technology with the new values of participation, collaboration, distributed expertise, innovation and evolution, experimentation, do-it-yourself creativity, relationships, and personal identification as characteristic elements of new literacies. They state that these values constitute the ethos of the new literacies and caution against interpreting any literacy activity using new technology as a new literacy practice unless it embodies this ethos. For example, simply copying and pasting pictures or downloading video without modification to be used in a presentation does not embody this new ethos, whereas participation in a multiplayer online game or fan-fiction site is (Lankshear & Knobel, 2007). They argue that these powerful new literacies are often evident in out-of-school settings.

### **2.5.1 Home versus school literacies**

Marsh (2009) describes many differences between literacy as experienced between home and school. Home literacy practices are more often characterized by: extensive on-screen reading, non-linear pathways, boundary-crossing, links to production, embedded in communities of practice, multiple or unknown authorship, shaped by media-scapes, reading as integral part of identity construction, and situates child as a social reader. School practices typically are characterized by being largely print based texts with linear reading pathways, known and mostly singular authorship, individualistic, assessed, with little reference to media-scapes, and production separated from analysis. In everyday settings, children often interact with digital technologies and popular culture in ways that support and extend their literacy development, with little

resemblance to school practices (Benson & Chik, 2014; Gee, 2008b; Marsh & Millard, 2006). Because teachers are not always familiar with these practices, they may be unaware of how they could be used within the classroom to support literacy instruction, resulting in a sharp divide between settings, with traditional print based texts occupying a privileged position in school.

Lankshear (2006), however, argues against thinking that there is a single divide between everyday and school literacy. Many researchers now realize that the old assumptions about a binary divide between static, dull, and un-engaging print based school literacies and creative, engaging, and technological everyday literacies are not an accurate description of the reality (Bulfin & Koutsogiannis, 2012; Lenters, 2007; Marsh & Millard, 2006). Crossover does occur and children frequently try to weave their own interests and everyday literacies into assigned literacy work, where they can, to increase their interest and enjoyment of the task (Blair & Sanford, 2004).

Hull and Schultz (2002) argue that by enlarging definitions of what counts as literacy and making room in the classroom for children to practice the literacy activities that they find meaningful out of school, all children can be regarded as competent and their identity as literate people affirmed. When thinking about the everyday versus school literacy, Lankshear (2006) states it is more useful to think about literacy practices being shaped by school defined purposes or self-selected purposes, regardless of the setting.

The teaching of literacy as a social practice within the context of constantly changing technological society is complex and demanding. Teachers need to be very skilled in multiple pedagogical forms of knowledge in order to develop engaging classroom literacy programmes for a diverse range of students. A sound understanding of what students are capable of doing and enjoy doing outside the classroom can help

improve the likelihood of teachers developing a programme that both engages and challenges.

## **2.6 Gaming, networking, and informal learning**

Technology allows children to learn and develop skills outside of school in largely independent, self-selected, and self-directed ways. Whereas children have traditionally relied on an adult or skilled peer being available to learn from in their immediate environment (Rogoff, 1990), the internet and new media enable children access to a vast repository of resources and experiences that they can potentially tap into, at any time. Internet search engines, video sharing platforms such as YouTube, virtual worlds, and social networking sites are frequently used by children (Agee et al., 2009; Blackwell, Lauricella, Conway, & Wartella, 2014; Marsh, 2011; Takeuchi, 2011). These sites provide seemingly endless opportunities for interaction, entertainment, and informal learning.

Many children (and adults) enjoy playing video games that challenge them in multiple ways. These games often involve the use of skilled reflexes, high levels of concentration, problem solving, strategic thinking, and the management of limited virtual resources. Gee (2008a) has researched what makes a good video game and has found they have a number of common principles. He states that, despite common stereotypes depicting a loner immersed in solitary fantasy play for hours on end, video games have turned out to be surprisingly social and provide an array of learning opportunities (Gee, 2008b). Good video games offer players strong identities and a sense of agency, ownership, and control over ‘their’ game. They provide pleasantly frustrating do-able challenges with a well ordered sequence of problem-solving situations where previous, present, and future events are linked. This encourages players to strategise and plan for the future and encourages them to explore their

environment thoroughly before proceeding onwards – thinking laterally as well as linearly. Good games makes players think like scientists, making hypotheses and using trial and error methods. Thus, gaming has the potential to offer many opportunities for cognitive and social growth for children.

The challenging, immersive qualities of activities like gaming, have the potential to create an experience known as ‘flow’ (Abuhamdeh & Csikszentmihalyi, 2012). Flow is a multi-faceted experience with components including a centering of attention, loss of self-consciousness, feeling of control in the task, and of the activity being enjoyable or satisfying in itself (Engeser, 2012). Flow occurs when the demands of the activity are in balance with the individual’s abilities. Too much challenge relative to skill results in anxiety and disengagement, whilst too little challenge can lead to boredom and alienation. Feeling good about one’s performance while engaged in intrinsically motivated activities has been found to be positively related to enjoying that episode of engagement (Abuhamdeh & Csikszentmihalyi, 2012).

Apperley (2014) is an advocate of the need to understand students’ literacy practices outside of formal schooling. He stresses that educators and researchers need to develop activities and curriculum that strongly resonates with students’ digital experiences and affirm and build on their informal literacies within the classroom. He suggests one way to achieve this is by conceptualizing their experiences with video games as ‘gaming capital’ and capitalizing on it in formal learning. The concept of gaming capital involves more than possessing mastery of a particular game. It also includes the state of being perceived as knowledgeable by others and the ability to actively share that knowledge with others. In a survey of 1,254 US middle school children (aged 12-14 years) who played video games, Olsen (2010) noted gaming was seen as an intensely social activity which regulated time spent with friends, provided

content for much of peer conversations, and was frequently used as both a conversation starter with unknown others and a means to develop friendships (the latter was especially important for children with mild learning disabilities). Moreover, more than half of children surveyed agreed that they liked to learn new things from video games, indicating that video games are a powerful resource for children's learning and development in multiple areas.

There are many other online platforms that allow users to create as well as to consume. Children, including very young children, are not just using new digital media as their original developers intended but are re-appropriating, remixing, and transforming them for their own purposes (Knobel, 2006; Pahl & Burnett, 2013). This often involves the transfer of skills or background knowledge learnt in one setting or context and transforming and applying it for a different self-selected purpose. Technology and virtual environments often provide the flexibility and choice for this type of self-directed engagement (McTavish, 2014).

Even social networking (since its' inception, mostly the preserve of teenagers and then adults) has been growing in popularity in younger children, as dedicated virtual spaces are increasingly being developed for these age groups. There is evidence that many children, even as young as three, use websites that have opportunities for social networking or interaction embedded into them (Marsh, 2009). Sefton-Green (2003) argues that children's use of digital games and chatrooms create cultural learning, where, through participation, imitation, and observation, children learn and teach other children how to use these media and the associated modes of discourse.

This rich mix of popular culture and technology provides a range of content, opportunities, and resources for literacy practices both in- and out-of-school, and also has the potential to engage and motivate students who feel that their cultural interests



are excluded from the mainstream curriculum (Marsh, 2006). However, it is important that the context within which children engage with popular culture and informal learning is well understood. In everyday contexts, qualitative features such as high levels of personal choice, control over what types of practices are engaged in, for how long, and with whom, as well as whether the activity is goal or non-goal directed, are all under the individual's direction. This level of autonomy and self-direction are not usually features of formal schooling, where a teacher-led curriculum is taught and assessed, and much use of technology is simply the high-tech version of traditional print activities (McKenna, Conradi, Lawrence, Jang, & Meyer, 2012). It appears that, regardless of the particular setting, when looking to provide environments where literacy activities engage and motivate children, both the content *and* context need to be paid close attention.

## **2.7 The complexities of adolescent literacy**

Recent studies on the everyday literacy of adolescents have found a complex picture of practices and motivations (Alvermann et al., 2007; Bulfin & Koutsogiannis, 2012; Conradi, Jang, & McKenna, 2014; Ito & Martin, 2013; Knobel, 1999; Leander & McKim, 2003; Moje, Overby, Tysvaer, & Morris, 2008). Hughes-Hassell and Rodge (2007) found that a sample of 584 adolescents from a large US urban middle school, in a lower income community, reported a wide range of leisure reading practices and reasons for why they did or did not like to read. Moje and colleagues (2008) investigated the everyday reading and writing of 716 adolescents in sixth-, eighth-, and ninth-grades in one US lower income and ethnic minority community, using a mixed method design that included surveys, interviews, and observations. In describing what kind of texts adolescents found motivating, the researchers state that the youths read and wrote when they had a well-articulated purpose, usually centered in a network of social

activity (Moje et al., 2008). These social relationships are commonly friendships, affinity groups, or family relationships, with a lot of their reading and writing dependent upon the social context and their identity within the context. Literacy activities were related to racial and ethnic identities, as well as gender and sexuality. Mostly males preferred literacy activities involving vehicles and gaming, while females were more likely to read and discuss novels, be members of book groups, write for pleasure, and share poetry. Popular culture forms such as movies and anime shows watched on television provided motivation for some students to read the book or manga version. Thematic interests such as music artists, actors, and video games could lead youth to read across genres and platforms.

Another significant finding was the amount of literacy activities that generated social capital and psychosocial development (Moje et al., 2008). Often, youth sought out informative texts that enabled them to learn more about their cultural heritage or current events related to their ethnic identity. Some reading choices reflected the desire to see their experiences mirrored or bond with the group members who generated the text. Others read or wrote texts for the purpose of self-improvement. Writing was a cathartic experience for some, whilst others used it as a form of self-expression. The reading and writing down of inspirational quotes was another example of youth using literacy for self-improvement, as was selecting texts and novels that served to remind them of the consequences of bad choices or inspired them to consider alternative courses of action they had not considered possible.

Moje and colleagues (2008) argue that, for youth, everyday literacies should not be valued as just a means to raise educational achievement. They have a significant and powerful effect in their lives in terms of psychological wellbeing and the strengthening of social relationships and participation. They summarise their findings by stating “our

data suggests that social networks, identities, and established goals are key motivators for youth reading outside of school” (Moje et al., 2008, p. 148), noting similarities with Gee’s (2003) claim that video-game programmers have become skilled in building social worlds and networks that draw youth into them. These games offer not only worlds to gamers, but also identities, personal development, and goals.

### **2.7.1 Adolescent literacy and motivational theory**

Many adolescents use digital technologies and multi-literacies in participatory culture and it may be this participatory aspect of new literacies that is motivating, rather than technology itself (Jacobs, 2012). In understanding both online and offline literacy practices, researchers need to be aware of the complex interplay between the individual’s knowledge and interests, textual factors, and the social and cultural contexts (Moje et al., 2008). Self-Determination Theory (SDT) is a motivational theory developed by Deci and Ryan (2000) that helps to explain why some individuals develop an intrinsic motivation to engage in activities. They maintain that intrinsic motivation is a necessary condition of optimal growth and development, and that when social contexts support satisfaction of the three basic psychological needs for competence, autonomy, and relatedness, there is an increase in motivation, performance, and wellbeing.

## **2.8 Literacy practices of preadolescent children**

### **2.8.1 Preadolescent development and contemporary media use.**

For youth in middle childhood and the preteen years, developmental factors also influence the shape of literacy practices. Children aged between 8 - 13 years of age can vary significantly in the stage of their development. The age at which the onset of puberty occurs is usually between the ages of 9-13 years for girls and 10-14 years for

boys, although some children do start puberty earlier or later (Bitar, Vernet, Coudert, & Vermorel, 2000). Throughout middle childhood and early adolescence, there are important changes in children's sense of identity, as they become aware of themselves in relation to others and begin to compare themselves with their peers in domains such as achievement, personality, and physical characteristics (Eccles, 1999). Peer relationships become increasingly important as independence from the family toward increasing autonomy begins to happen in early adolescence. Increasing cognitive abilities and social skills also enable new ways to interact with the wider world. In Erikson's (1998) stage theory of human development, children in middle to late childhood are in the stage characterized by the need to feel competent and industrious. If they don't develop feelings of competence, they are likely to enter adolescence with an insecure sense of identity.

In a large study of US 8-to 18-year olds, Rideout and colleagues (2010) discovered an increasing trend in the amount of time young people spent using media each day. Average use totaled seven hours and 38 minutes – an increase of one hour and 17 minutes per day from the previous study, five years previously and many youth used more than one type of media at a time. The only type of media that hadn't increased over the prior five years was the reading of traditional print media. Reading books for pleasure remained stable, although data was consistent with other research showing decreasing time spent reading print as children age. Time spent reading decreased from an average of 46 minutes reading daily (books: 33 minutes) for 8 to 10-year-olds compared to 37 minutes for 11 to 14-year-olds (books: 25 minutes). Rideout and colleagues (2010) noted the trend for media use to increase with age. Children aged 11 to 14 years spent a greater amount of time using all types of digital media than did 8

to 10-year-olds. However, the study found that time spent using screen media did not displace time spent with print media.

Blackwell and colleagues (2014) compared the website preferences of 8 to 12-year-olds in a survey of 442 US children and found that 11 to 12-year-olds spent more time on websites than did 8 to 10-year-olds. Both age groups favoured YouTube and Facebook, despite Facebook's age restriction to individuals aged 13-years-old and over. Children aged 8 to 10-years-old showed a preference for watching TV shows and virtual world websites, while significantly more 11 to 12-year-olds preferred video clips, social network sites and general game websites. The researchers discovered a marked lack of websites that catered for children aged 8 to 10-years-old. The 11 to 12-year-olds favoured websites that were more age-appropriate for children aged 13-years-old, while the younger children were split between websites more suitable for 7 to 9-year-olds or teenagers (Blackwell et al., 2014). Blackwell and colleagues believe their data supports the idea that media use has a bidirectional relationship with development and they speculated whether preadolescent children are being exposed to internet content and platforms (i.e. social networking sites) that may speed up their social development, outpacing their emotional and cognitive development.

A 2009 study comparing the computer use of 189 US middle class 6<sup>th</sup> and 7<sup>th</sup> graders found differences between the amount of time and the way they used computers out-of-school (Agee et al., 2009). Seventh graders were much more likely to engage in online literacy practices that provided social interaction and entertainment, and spent more time, overall, using computers. However, the types of activities 7<sup>th</sup> graders engaged in was related to their reading level. Students who were less skilled at reading traditional texts preferred games and visual websites, while skilled readers engaged in

instant messaging and conducting searches on a variety of topics related to personal interest.

### **2.8.2 Gender preferences**

Most research conducted through surveys have found significant consistent gender patterns in preference of content and format (Clark, 2014; Rideout et al., 2010) and that boys tend to have less positive attitudes to reading than girls (McKenna et al., 2012). With online activities, girls showed a preference for TV shows and virtual worlds, while boys showed a significant preference for general game websites. Girls showed a trend of preferring websites in the 7 to 9-year-old range, while boys preferred websites for 13-year-olds (Blackwell et al., 2014). It was reported that this finding is in line with previous research showing boys out-grow younger programmes more quickly than girls.

### **2.8.3 Attitudes toward literacy in preadolescence.**

The local and international research into children's attitudes toward reading and writing both reflect the same trend – attitudes show a decline throughout middle childhood and adolescence and more able readers reporting more positive attitudes than less able readers (Clark, 2014; Gilmore & Smith, 2010; McKenna, 2001; McKenna et al., 2012; Sainsbury & Clarkson, 2008).

In the New Zealand National Education Monitoring Project (NEMP) survey conducted in 2010, Year 4 students were more positive than Year 8 students in their overall attitudes to reading, with over 80% of Year 4 students reporting they enjoyed reading at home compared to 66% of Year 8 students (Gilmore & Smith, 2010). The 2010/11 PIRLS study found that New Zealand Year 5 students had relatively positive attitudes to reading when compared to students from other countries, however almost

one in five boys and one in ten girls reported not liking reading (Chamberlain, 2013). With regard to ethnicity, the PIRLS data revealed that Maori and Pasifika students liked reading less than Pākehā/European and Asian students. Reading achievement levels were linked to measures of both liking reading and motivation to read (Chamberlain, 2013).

These findings are interesting when considering that the NEMP study, described above, found that reading achievement was significantly linked to perception of reading ability and attitudes about non-academic literacy at Year 8 but not Year 4 (Gilmore & Smith, 2010). This suggests that children in levels above Year 4 become increasingly aware of their reading performance and that this has an increasingly negative effect on the attitudes of less able students. The positive associations children have associated with recreational reading seem to be the key factor in whether they engage with reading outside of school on a regular basis. Avid readers make time for reading no matter how busy they were with other activities because they enjoy it so much, whereas children who do not like to read see it as something that is a virtuous and admirable activity rather than an enjoyable one, regardless of their ability (Strommen & Mates, 2004).

It is important to point out that the research literature investigating reading attitudes and their relation to everyday literacy practices is complicated by the different definitions that researchers and participants assign to the term ‘reading’ and what constitutes literacy. The lack of clear definitions of motivational terminology has also been identified as a complicating factor in conducting and interpreting reading research, with the terms motivation, attitude, and interest frequently being used without clear distinctions (Conradi et al., 2014). Additionally, McKenna and colleagues (2012) found that adapting existing measures of recreational and academic literacies to encompass academic digital, academic print, recreational digital and recreational print was not a

straightforward process as items did not always have a similar corresponding one across print and digital domains. Many platforms and websites have multiple ways for children to consume and interact with content.

While contemporary approaches to understanding children's attitude and motivation toward reading incorporates children's self-concepts of being a reader, intrinsic motivation, reported enjoyment or interest in reading, as well as desire and tendency to read, there has not been much attention paid to the particular qualities of the reading experience that contribute toward them (Sainsbury & Clarkson, 2008). Studies attempting to collect data that captures more qualitative aspects, such as emotional engagement or contextual factors can be even more difficult. McKenna and colleagues (2012) state the importance of the sociocultural context to understanding literacy means that surveys can only be a first step. While acknowledging that the quantitative data surveys yield is useful, they recommend the undertaking of qualitative research that establishes how children practice literacy as members of social groups, as well.

#### **2.8.4 Ethnographic data on everyday literacies.**

Ethnographic research conducted in everyday settings has yielded a finer grain understanding of how children practice literacy outside of school contexts. Lenters (2007) conducted a detailed case study of an eight-year-old boy, Max, and his middle class family using Rogoff's sociocultural framework. Observations of Max's interactions with his family revealed that he was apprenticed into a range of literacy practices with print and on the family's computer. In a family rich with resources, Max was observed extending experiences and recombining elements of literacy practices from multiple sources and across multiple settings. He became so familiar with the plotting, tone, and language features of one particular book series that it spilled over into play with his friends – the boys enjoyed their role-playing games so much that they



decided to start writing their elaborated and remixed versions into text form (Lenters, 2007).

A case study examining the media literacy practices of two eight-year-old girls in their own homes found that they had also been apprenticed into using computers by family (Takeuchi, 2011). They both engaged in a variety of game play on a variety of devices and gaming consoles and were relatively technologically confident, but observations revealed that the activities they described as ‘being creative’ were fairly constrained and highly gendered website games. Takeuchi (2011) concludes that children of this age are still heavily influenced and reliant on the nested ecologies of family, friends, school, and mainstream media, within which they develop, and that it may be too much to expect them to use technology in ways that adolescents can to express themselves artistically or participate in civic engagement.

Marsh (2011) investigated the literacy practices of children aged 5-11 as they engaged in online virtual worlds. A multi-method design surveyed 175 English primary school children, followed by interviews with 26 children, and observations of three 11-year-old children as they engaged in the Disney owned virtual world, *Club Penguin*. Reading and writing were central to the practice of establishing and fostering relationships within *Club Penguin* and the maintenance of a social interaction order. Despite the lack of facial expression, location in space, and body language that is available in real world social interactions, Marsh noted the similarity of online interactions to their offline counterparts.

The number of virtual worlds for children has grown rapidly in the last decade and *Club Penguin* is a successful example of an engaging platform for children to enjoy reading and writing for authentic purposes. They also represent another way of how children can be apprenticed into the more socially complex world of adolescent and

adult social networking, but at a developmentally appropriate level. A considerable amount of social learning seems to occur in children's virtual worlds and these skills may be a positive foundation for practicing the performance of public online identities, before the major social challenges of adolescence.

## **2.9 Innovative learning environments**

New Zealand, like many other developed nations, has come to recognize that the constant technological change and the demands of the 'knowledge economy' require substantial changes to the education system (Bolstad, 2012). Innovative Learning Environments (ILE) have been introduced to New Zealand schools as a way to implement the curriculum and its focus on developing the key competencies that individuals will need to succeed in the 21<sup>st</sup> century. These competencies include a wide range of thinking skills, the ability to manage oneself and be self-directed, strong communication skills and an ability to use a wide range of texts, and the ability to relate well with others, as well as participate and contribute (Ministry of Education, 2007). ILE schools aim to continuously invest in and develop flexible learning spaces, infrastructure, and teacher professional development that allow for collaborative learning across multiple media formats. ILE schools, often, require students to bring their own electronic device to use in the learning programme. While some communities and children have access to ILE, most do not at the time this research project was conducted.

## **2.10 Summary and aim of research**

The development of literacy is more than the acquisition of specific reading and writing skills. It encompasses a range of skills and competencies that underlie multiple ways to communicate. Children, today, are growing up in a multi-media environment

that is increasingly communicating information, ideas, and experiences across many formats. To participate fully in educational and everyday settings, children need to develop proficiency across formats such as traditional print, online written texts such as webpages, social networking platforms and other within platform environments, as well as video and audio. Everyday activities and literacy practices are important forms of multi-literacy learning. To understand how educators, parents, and communities can support these practices, it is necessary to investigate what types of out-of-school literacy related activities children prefer and what factors influence their choices,.

The aim of this research is to develop an in-depth understanding of the everyday literacy practices of children aged between nine and eleven years old. The following research questions guided the study:

1. In what ways do 9 to 11-year-old New Zealand children engage in literacy activities across different formats?
2. What types of literacy activities do children find engaging?
3. For what reasons do children engage in literacy practices outside of school?

## **Chapter Three**

### **Methodology**

#### **3.1 Introduction**

This study used a mixed methods research design to examine the everyday literacy behaviours of children, enabling both quantitative and qualitative data to be gathered to answer the research questions. Mixed methods design provides the advantages of both qualitative and quantitative methods and allows the two types of data to be integrated and interpreted in light of each other (Cresswell, 2015). In exploring a phenomenon such as children's everyday literacies, mixed methods enables 1) the ability to gather data on a large group of children about the type of behaviours they engage in, and 2) capturing the voices and perspectives of a few representative children and their experiences with everyday literacy practices within the broader context of their lives.

In the current study, an explanatory sequential design was employed, which collected quantitative data prior to the collection of qualitative data. Quantitative data was generated by administering a survey to students during Phase I of the research project. The survey questions were devised to capture the diversity, frequency, and type of literacy activities that children practise in the course of their everyday lives, outside of school. In Phase II, qualitative data was collected during interviews using a photo elicitation technique with several participants, who were drawn from the survey respondents. These interviews expanded upon the breadth and depth of data collected from the survey, to give a more detailed explanation of the phenomenon of children's everyday literacy practices.

Throughout this research project, literacy has been operationally defined in accordance with the Ministry of Education's (2012) definition:

*"Literacy is the ability to understand, respond to, and use those forms of language that are required by society and valued by individuals and communities."*

In this chapter, a statement of the research perspective will be described, along with detailed descriptions of the methodology used in the two phases of the study. An outline of the process for the first phase of research will include the development and design of the survey, recruitment process, ethics and consent process, administration, and data analysis. This will be followed by a description of the second phase, including the recruitment process, ethics and consent, interview procedure, and method of data analysis.

### **3.2 Researcher Perspective**

The present research takes a pragmatic approach and is conducted within both the positivist and constructivist paradigms. A positivist epistemology assumes that the researcher can gain objective knowledge of the world through defining and measuring phenomenon, whereas a constructivist epistemology assumes that knowledge can be gained by the meaning individuals attach to phenomena (Cresswell, 2015; Klingner & Boardman, 2011). The researcher believed that both these worldviews provided valuable ways of understanding children's everyday literacy practices as both 1) discrete behaviour and 2) subjective experiences.

Literacy activities were determined by the researcher to be discrete events with distinctive features that could be counted and compared to one another. Literacy activities were also conceptualised as having qualitative features, however these qualitative features were deemed to exist only in relation to the subjective experiences

of individuals. To gain knowledge of another individual's subjective experience, a co-construction of meaning must occur through a process of open exploration and negotiation of joint understanding (Denzin & Lincoln, 2008), therefore a constructivist methodology was also necessary.

### **3.3 Study Design and Research Questions**

To answer the research questions, positivist and constructivist methodologies were both used. A positivist methodology was required to answer the first research question: "In what ways do children engage in literacy activities across different formats?" Literacy activities were able to be identified in both phases of the research. In phase one, a quantitative survey method was used to count the percentage of children who engaged in certain literacy related practices, whilst in phase two open-ended questions yielded data that identified new types of literacy activities as they arose in the interview discussion.

Research question two required qualitative data from a constructivist approach. "What types of literacy activities do children find engaging?" is a question requiring the subjective interpretation of specific events and emotion states in order to elicit the data needed to answer it. A qualitative method using open-ended questions in an interview was chosen as the best method for co-constructing the nature of what constituted an engaging activity.

Research question three asked "For what reasons do children engage in literacy practices outside of school?" A mixed methods approach was needed to answer this across the phases. Questions were included in the survey to identify the range of reasons and quantify the number of children, where appropriate. Qualitative data gathered in the interview was yielded by open-ended and exploratory questions.

While frequency data was the most useful in answering the quantitative question, interpretative phenomenological analysis (IPA) was viewed as the method most helpful to interpret the qualitative data collected in the interviews. IPA can help researchers to understand an individual's experiences through their own perspective and is useful for exploring in detail phenomenon from samples with a small number of participants (Smith, Larkin, & Flowers, 2009). When used with a relatively homogenous small sample, similarities and differences can be carefully examined across participants. IPA is compatible with the constructivist approach in that it places the participant's experience at the heart of analysis. It was judged to be the best interpretative method to answer the research questions in this study.

### **3.4 Phase I: Survey**

#### **3.4.1 Survey design.**

A survey was developed to collect data on the range, frequency, and type of literacy activities. Survey development followed a four step process. First, a number of recently developed questionnaires and surveys exploring the literacy and media practices of children and adolescents throughout New Zealand, UK, and USA were reviewed in the development of the survey (Blackwell, Lauricella, Conway, & Wartella, 2014; Broadcasting Standards Authority, 2015; CensusAtSchool NZ, 2015; Clark, 2014; Rideout, Foehr, & Roberts, 2010). Common literacy activities across traditional print and digital formats were identified, as well as frequently mentioned digital applications, physical resources, and digital devices. Research literature from qualitative case studies investigating contemporary children's and youth's literacy and media practices was also reviewed to help identify a range of literacy activities across physical and digital formats.

Second, a pool of survey questions were developed to address the research questions and collect demographic data. These were developed in collaboration with the research supervisors. Content validity was developed by researching multiple recent media and literacy surveys and research reports in order to represent as much of the possible range of literacy related activities and factors that could be associated with engagement with everyday literacy practices. A thorough review of the related qualitative research literature was also done, prior to the development of the survey questions.

In order to protect the construct validity of the survey, attempts were made to reduce the rate of social desirability bias by advising participants that there were no right or wrong answers to the survey questions and that honesty was the most important factor when answering questions. Items were predominately closed questions in multiple choice, rating scale, or matrix rating scale formats. These formats reduce writing demands for respondents, enable answers to be quantified, and capture frequency data that can be easily compared. Limited use of open-ended questions and comment boxes allowed a diversity of responses, in order to capture uncommon literacy activities, record the range of website or videogame titles used by respondents, and enabled the use of piping individual responses to subsequent questions in the survey.

Third, the survey was constructed on the online platform Survey Monkey. The benefit of an online format enabled the survey to be streamlined by skipping the presentation of irrelevant questions based upon each respondent's answers. It was, also, thought to reduce the likelihood children would experience fatigue while writing and encourage higher participation rates.

Fourth, the survey was piloted, prior to use, on six children aged between eight and thirteen years old. Data from the piloting phase was used to modify items on the



survey to ensure that items revealed content relevant to the research questions, were readily understood, allowed respondents to complete the survey easily, and ensured completion was possible for most individuals within the selected timeframe of 15 to 20 minutes. Following the four step process, the final survey consisted of 25 questions (see Appendix A).

### **3.4.2 Recruitment method.**

Seven primary schools were approached to participate in the research project. Schools were approached based on their size (medium to large), decile<sup>1</sup> (low to mid), and proximity to the researcher. The initial approach was made by the researcher, who visited each school to introduce the project and distribute a flyer with the researcher's contact details, should the school wish to participate. Follow up emails or phone calls were made to the schools that had not volunteered within 2-3 weeks after the initial approach. Two schools volunteered to participate from the initial pool of selected schools. One had three Year 5-6 composite classrooms and the other school had a Year 6 cohort of approximately twenty students in a mixed level innovative learning environment.

During the recruitment process, a Resource Teacher of Learning and Behaviour (RTLb) working within local schools was contacted through informal research networks to assist in recruiting suitable schools. The RTLb successfully approached one mid-decile school, with one Year 6 classroom teacher agreeing to participate in the research project. Altogether, three schools participated in the survey.

Following recruitment of schools, the researcher visited participating classrooms to introduce the survey and explain the conditions of informed consent to students, prior

---

<sup>1</sup> In New Zealand, a schools decile indicates the extent to which the school draws its students from low socio-economic communities. Decile 1 schools are the 10% of schools with the highest proportion of students from low socio-economic communities, whereas decile 10 schools are the 10% of schools with the lowest proportion of these students.

to the distribution of information sheets and consent forms. This allowed children the opportunity to ask questions about the research project and reduce any perceptions of coercion that might arise from using the school as the site for data collection. Verbal and written information was given to students, explaining that participation was voluntary, anonymous, and that their answers would only be seen by the researcher. An estimation of the time the survey would take was given, as well as reassurance that there were no right or wrong answers. It was explained that participants could stop doing the survey, at any time, or, if they did not wish to answer a particular question, that they could skip to the next question without providing an answer. Children were advised that the last two questions on the survey asked them if they would like to be invited to participate in the second phase of the research project. A brief explanation was given about what that would involve. Children were instructed that they did not need to give their name, if they did not want to opt-in. Finally, as the survey was to be administered during class-time, children were reassured that the teacher would provide another activity, if they did not wish to participate.

### **3.4.3 Ethics and consent.**

Ethical issues that arose around participation in the survey were addressed with the research supervisors prior to an application for ethics approval being sought from the Massey University Human Ethics Committee (MUHEC). Key ethical issues included privacy, confidentiality, informed consent, and the minimisation of harm. It was anticipated that minimal harm would be likely to occur from participation in the survey. A slight risk of some participants experiencing negative emotions to multiple questions about access to media devices was identified as a possibility, especially for children from homes with fewer material resources compared to their peers. A balance

of traditional and newer media resources were included in questions in the survey to help mitigate this, as well as ensuring confidentiality and anonymity for participants.

MUHEC approval was gained with the provision for participating schools to nominate whether active or passive consent would be required for their students. The passive consent option required Parent Information Sheets to be sent home but no signed Parent Consent Forms were needed, prior to student participation. Principals were given a Board of Trustees Information Sheet (see Appendix G) that explained the research process and gave them the option of choosing passive or active consent as a condition of participation. In this research project, two schools opted for passive consent, while one school opted for active consent. Classroom teachers were also given a Teacher Information Sheet (see Appendix H), which outlined the research and consent processes.

For schools opting for passive consent, Parent Information Sheets (see Appendix D) were sent home for children to read with their parents or guardians. Parent Information Sheets (see Appendix E) and Parent Consent Forms (see Appendix F) were sent home for children in the school opting for active consent and the classroom teachers were instructed to collect consent forms signed before allowing their students to participate. Information sheets for both active and passive consent specified that information for the survey would be kept for three years in secure storage, before being destroyed.

#### **3.4.4 Administration and data collection.**

The research protocol and consent process stipulated that the survey would be administered during class time. This was done to maximise participation and gain a sample with a broad cross-section of characteristics and attitude toward literacy related activities. Classroom teachers were given a web-link generated by Survey Monkey that

students could enter into the web browser address bar on their computer or electronic tablet, which would take students directly to the first question on the survey. The classroom teacher was given a written list of reminders to read to students just before completing the survey, including an instruction that students were able to ask the teacher for help, if they did not understand a particular question.

Participating teachers and classrooms administered the survey on different dates. Data was stored in the online survey system until all survey sites administered the survey. Following the final administration, the survey link was disabled.

#### **3.4.5 Data analysis.**

Data collected via the online platform Survey Monkey was exported in two formats – PDF files and SPSS files. Descriptive statistics were generated by the use of frequency distributions, percentages, and cross-tabulations. As participants were able to skip questions they did not wish to answer, percentages were created using the number of responses for each question, rather than the total number of survey respondents.

Demographic data and frequency percentages will be presented in table format in Chapter Four, while data from open-ended questions or free-text boxes will only be referred to in the supporting text.

### **3.5 Phase II: Interviews**

#### **3.5.1 Recruitment**

The final survey question asked students, if they would like to participate in the second phase of the research project. From the pool of survey respondents, fifteen children opted in to the second phase of the research project. Of the fifteen who opted in, twelve children were selected for invitation to participate in an interview on the basis

that they were relatively typical respondents, were ten or eleven years old, and had reported engaging in a variety of literacy activities across print and digital formats.

The final selection of the three interview participants was made by accepting the signed and returned consent form by the first boy and first girl, followed by the next signed and returned consent form, regardless of gender. This recruitment process created a sample of one boy and two girls.

### **3.5.2 Ethical issues and consent.**

Parent Information Sheets were written in age appropriate, child friendly language (see Appendix I) and were distributed with Parent Consent Forms (see Appendix J) to children in the three participating schools in named, sealed envelopes by the classroom teacher. Parents and guardians were required to sign the attached consent form before their child participated in the interview procedure. Parental consent included consent for the interview to be sound recorded and participants sharing photographs with the researcher about their activities in their own time.

Several ethical issues were identified that could have the potential to cause risk of harm or distress to participating children. There was potential for some participants to experience hunger, tiredness or physical discomfort during the interview session, which could last up to 90 minutes. This was addressed in the study by the researcher providing a snack for participants and asking if they required a short break during the interview. There was also the potential for participants to feel uncomfortable sharing personal details about their everyday activities with a researcher who was unfamiliar to them. To reduce discomfort, participants were informed that they could have a parent, friend, or relative present at the interview and that they were free to refuse to answer any question or halt the interview, at any stage, without repercussion. Finally, the research procedure required participants to take photographs of their activities and

interests in the week prior to the interview. This had the potential for participants to take inappropriate photographs or themselves or others. To reduce the likelihood of this occurring, a set of written guidelines were provided to participants in child friendly language (see Appendix B). These guidelines were developed based upon literature in a research methods review paper on visual ethics by the Economic & Social Research Council's National Centre for Research Methods in the United Kingdom (Wiles et al., 2008).

Cultural consultation was sought to ensure the research process was culturally safe for Māori children and whānau, prior to the selection of participants for this phase. The individual who provided this consultation was employed by one of the participating schools as a teacher aide. She had previously been involved in the school's kapa haka group for approximately four years and was well-known in the wider school community. The general research protocol was discussed with her and several specific recommendations for making home visits to whānau were given to the researcher.

To ensure children's identity is protected, children are referred to by pseudonyms throughout the research report. Any identifying information has been altered or removed, including names of siblings, friends, clubs, and schools.

### **3.5.3 Interview procedure.**

Qualitative interviews were chosen as a method to gather sufficient breadth and depth of detail about the literacy related activities of participating children, without the lengthy intrusion of the researcher into the daily life and activity of the family/whānau that ethnographic or observational methods require. Interviews were judged as an appropriate method as children this age are able to recall, organise, and retell their daily activities with an adequate degree of accuracy and reliability. An informal, semi-structured interview approach was used (see Appendix C for the interview schedule),

which is a method that allows the researcher and participant to check and negotiate meanings and subjects as they arise in the course of discussion (Fontana & Frey, 2008).

A photo elicitation procedure was also used during this phase of the research project. Photo elicitation studies use photographs to stimulate a quality of memory that word-based interviewing does not (Denzin & Lincoln, 2008; Harper, 2002). It can also serve as an ‘ice-breaker’ to build trust and rapport when used at the beginning of the interviews, situates participants as experts in their own lives and reduces the power differential between the researcher and researched subject, especially when research participants are children (Prosser, 2011; Harper, 2008; Reavey, 2011; Epstein, Stevens, McKeever & Baruchel, 2006).

In the current study, children were asked to take photos of the activities they usually enjoy doing in their spare time, in the week prior to the scheduled interview. Participants could take the photos on a camera provided by the researcher or one of their own. Photos remained the property of the participants and were not collected as data by the researcher.

All three families nominated to do the interview at their home. Interviews lasted between 60 to 90 minutes and were conducted during the mid-year school holidays. All three families had consented to the interview being sound recorded and transcribed to produce a written record of the conversation. The three children used their own cameras and devices to take photographs of their interests and activities in the week or two prior to their interview.

At the beginning of the interview, the photos were viewed and discussed on the participant’s electronic tablet or computer. The order of photos was determined by the participants prior to the interview and participants were given the opportunity to present and organise the discussion of the photos without interruption from the researcher. After

discussion of participants' photographs, the researcher began to pose a range of questions that linked children's interests and activities to the research questions. These questions were largely non-linear and exploratory in nature. Throughout the interview, physical and digital resources and objects were referred to by participants or shared with the researcher as part of demonstrations of specific activities. Towards the end of the interview, the researcher reviewed each participant's survey responses and sought clarification or expansion for responses that were unclear or had not, yet, been discussed. Data was recorded as a sound recording of the discussion.

To check veracity of participants' responses throughout the interview, photographs discussed during the photo elicitation method section of the interview were compared with data derived from direct questioning and visual demonstrations of activities and materials by participants. Physical and digital artefacts observed by the researcher included: books participant's reported reading, crafts made by participants, demonstrations of video-gaming, YouTube clips and channels watched by participants, examples of websites visited, video clips made by participants, demonstrations of the procedure for posting images to Instagram and audio-recording tools used.

#### **3.5.4 Data analysis.**

Discussion data was transcribed into written text by the researcher whilst listening to the sound recorded interviews. Transcripts of the interview were then analysed using interpretative phenomenological analysis (IPA) following a number of steps outlined by Smith et al. (2009). The first step involved repeated close readings of the transcript to become familiar with the flow of data and the underlying structure across the duration of the interview. The second step involved a detailed reading and note-writing alongside transcript data. Comments included descriptive features,



comments on language use, and conceptual level notes based on the children's actual words.

Step three consisted of developing emergent themes by creating concise statements of the most important points from the extensive note-taking in step two. While creating these themes, the researcher reflected on concepts from the research literature that may help explain the data into organising categories. The aim was to reduce the volume of data to make it more manageable without losing the complexity that was needed to answer the research questions.

Step four involved collating these hand-coded themes into a table that listed themes from all three participants. Each participant had their themes listed under their own column, allowing easy comparison of data across participants and the identification of broader categories specific to each research question.

### **3.6 Summary of methodology**

A pragmatic mixed methods research design was chosen to investigate the research questions. Data was collected using a sequential design across two phases of the research project. The first phase involved the administration of an online survey, which collected mostly quantitative data on the types of literacy activities children reported engaging in during their everyday lives. The second phase focused on collecting data that could describe the qualitative features of the case study participants' literacy related activities and explore their subjective experiences. Results were analysed using descriptive statistics in Phase 1 and the qualitative method of interpretative phenomenological analysis in Phase 2. This design enabled the strengths of each method and allowed data from each phase to inform and help explain the other. This meant that both positivist and constructivist knowledge about children's everyday literacy practices could be combined to answer the research questions.

## **Chapter Four**

### **Results**

The mixed methods research design across the study phases provided both quantitative and qualitative data to better understand children's everyday literacies. The results section begins with knowledge gained from the survey, followed by knowledge gained from the interviews. The survey provided data to document which types of literacy activities were most prevalent for this age group, as well as reporting on literacy related attitudes and habits. Case study data revealed the qualitative features of literacy related activities the children found engaging and their reasons for engaging in literacy practices in their lives outside of school.

#### **4.1 Phase 1: Survey**

Three of the seven schools that were approached to take part agreed to participate in the survey. The survey was administered during class-time using the online platform Survey Monkey. Seventy students aged between nine and eleven years participated. Survey questions were designed to elicit data on the percentage of children who had access to print and digital literacy related materials and chose to engage in a range of literacy related activities across these formats.

##### **4.1.1 Survey respondents.**

Seventy children from three different schools completed the online survey. One respondent answered only demographic questions and was therefore excluded, leaving a sample size of 69 children. The sample had a greater number of girls (n=40) than boys (n=28), with the majority of children aged 10-years-old (see Table 4.1).

Table 4.1  
*Demographic Characteristics as a Percentage of the Sample*

Characteristic	Percent
Gender	
Boy	41.2
Girl	58.8
Age	
9-years-old	5.8
10-years-old	75.4
11-years-old	18.8
Ethnicity <sup>a</sup>	
NZ European/Pākeha	90.8
Māori	26.2
Pasifika	7.7
Asian/Indian	7.7
Other/Not specified	3.1

<sup>a</sup>Participants were able to select multiple ethnicities, thus totals exceed 100%.

All three schools were ranked as mid-decile. School One (decile 4) and School Two (decile 5) were traditional learning environments using ICT as a support to learning. School Three (decile 4) had an Innovative Learning Environment (ILE) consisting of three teachers and 79 Year 4-6 students in a shared physical space, using one-to-one digital devices throughout their learning programme. Twenty-one Year 6 students from School Three completed the survey.

#### **4.1.2 Access to literacy resources.**

Most children (84%) reported being able to access either a computer or electronic tablet in their own time, each week (see Table 4.2). This was significantly more than the percentage of children reporting access to traditional print related literacy materials such as books (45%), magazines (22%), and pens, pencils and paper (46%).

Table 4.2  
*Children's Access to Technological and Literacy Related Resources*

Resource	Total <i>N</i>	Total %	ILE Students ( <i>n</i> =21)	Non-ILE Students ( <i>n</i> =48)
Computer <sup>a</sup>	44	63.8	81.0	56.3
I-Pad/Tablet <sup>b</sup>	35	50.7	52.4	50.0
TV	33	47.8	52.4	45.8
Pens, pencils, and paper	32	46.4	47.6	45.8
Books	31	44.9	47.6	43.8
Internet	27	39.1	42.9	37.5
I-Pod/MP3 player	19	27.5	38.1	22.9
CD/Music player	16	23.2	33.3	18.8
Gaming console	15	21.7	23.8	20.8
Magazines	15	21.7	38.1	14.6
Mobile Phone	10	14.5	9.5	16.6
Smartphone	8	11.6	9.5	12.5

*Note.* Percentage with access to either <sup>a</sup> or <sup>b</sup> = 84.1%.

Children in the ILE class were more likely to report having access to computers in their own time (80%) than were children in traditional classrooms (56%), with 20 out of 21 ILE students reporting access to either a computer or electronic tablet. The ILE children also reported slightly higher access to iPods/MP3 players, CD/music players, and magazines.

#### **4.1.3 Literacy activities across formats.**

Children reported engaging in many different types of literacy activities, across print and digital formats (see Table 4.3). Watching, listening, speaking, and reading activities were reported more frequently than writing activities, regardless of digital or print format. Watching YouTube was the most frequent literacy related activity, with nearly all respondents reporting that they do this 'often' (49.3%) or 'sometimes' (44.8%). Reading books was the second most frequent literacy activity with most children reporting that they do this 'often' (39.7%) or 'sometimes' (55.9%). Talking on

the phone, downloading music, video-calling, and watching the same DVD more than once were also popular activities.

Table 4.3

*Percentage of Children Reporting Frequency of Literacy Related Activities*

Activity	Often	Sometimes
<b>Reading</b>		
Books	39.7	55.9
Blogs	20.6	47.6
Comments on websites	16.4	41.0
Comics	9.1	34.8
Manga/Graphic novel	6.1	31.8
e-Books	4.7	45.3
Facebook	3.3	13.3
<b>Writing</b>		
Email	19.0	49.2
Text on phone	17.2	31.3
Blogs	14.3	38.1
Comments on websites	11.3	33.9
Diary/journal	9.7	35.5
Instant message online	9.7	29.0
Letters	8.2	47.5
Twitter	3.3	3.3
Facebook	1.6	9.8
<b>Watching/Listening</b>		
Watch YouTube	49.3	44.8
Download music	29.5	39.3
Watch DVD more than once	26.6	60.9
Watch DVD ‘making of movie’	9.2	40.0
<b>Speaking/Performing</b>		
Talk on phone	30.8	47.7
Skype or video-call	27.7	29.2
Post on YouTube	10.9	20.3

#### **4.1.4 Time spent reading and using electronic media.**

The majority of children reported choosing to read every week (86.6%), with one-fifth of children reading every day (19.4%) and about half of all children reporting reading most days (49.3%). While most children reported regular reading habits, they

also indicated spending significant amounts of time consuming and using electronic media (see Table 4.4). Just over half of children reported spending two or more hours on weekend days using electronic devices (54.7%), while slightly more children (58.1%) reported watching television or movies for two or more hours. One-fifth (20.4%) of children reported watching TV/movies for two or more hours a day on school days, with this figure rising for time spent on electronic devices (29.2%).

Table 4.4  
*Percentage of Children Reporting Time Spent Per Day Using Electronic Media*

Media	<i>n</i>	None	< 1 hour	1 hour	2-3 hours	>3 hours
TV/Movies						
School Days	64	18.8	25.0	35.9	14.1	6.3
Weekend Days	62	1.6	12.9	27.4	43.5	14.5
Devices <sup>a</sup>						
School Days	65	12.3	29.2	29.2	15.4	13.8
Weekend Days	64	10.9	12.5	21.9	37.5	17.2

<sup>a</sup> Electronic devices included computers, Xbox, Playstation, iPod/MP3 player, iPad/tablet, and mobile phones.

For this sample, using or watching multi-media takes up a considerable amount of children's time outside of school. More children nominated using electronic devices (58%) and watching TV or movies (50.7%) as something they spend a lot of time doing than spending time with friends (17.4%) or family (26.1%), playing team sport (42%) or doing jobs/chores (37.9%).

#### **4.1.5 Following interests across media.**

Children were asked to nominate up to six interests, before being asked whether they engage in literacy related activities as part of those interests (see Table 4.5). Of those that responded, over half reported watching a video or YouTube clip about their interest (55.2%), with the number rising to three-quarters for children's first nominated

interest (75%). Approximately 40% of children reported reading something about their interest across both print and digital formats. A third of children reported writing something about their interest, while a small number had made a video or YouTube clip (12.1%).

Table 4.5  
*Percentage of Children Engaging in Literacy Related Activities as Part of Their Interests/Hobbies*

Interest	<i>n</i>	Read book, magazine, newsletter	Read on device	Write something	Watch video / YouTube	Make video / YouTube
Interest One	44	43.2	43.2	31.8	75.0	15.9
Interest Two	39	43.6	30.8	35.9	53.9	7.7
Interest Three	35	45.7	45.7	28.6	62.9	14.3
Interest Four	33	36.4	36.4	39.4	39.4	12.1
Interest Five	28	42.9	42.9	42.9	50.0	7.1
Interest Six	26	42.3	38.5	38.5	50.0	15.4

When asked what they would do, if they wanted to find out more about something they were interested in, nearly two-thirds said they would look on the internet (64.2%), followed by asking an adult or coach (59.7%), and asking another child (44.8%). Finding a book or magazine to read was the least popular strategy with only 37.3% of children nominating this option.

A consistent pattern across all six interests was found when children were asked to report if other people they knew had the same interest as them. Approximately 70% of children reported that they had friends who had the same interest. Just over half reported that their siblings or cousins shared their interest (54.4%), while just under half reported that a parent had the same interests (45.8%). One quarter reported that their aunt/uncle or grandparent shared their interest (25.5%), while a fifth reported a club/team (21.3%) or someone else they knew (21.4%).

#### 4.1.6 Gaming

Several survey questions explored whether an interest in video-games provided reasons for children to engage in literacy related activities. Seventy-one percent of children reported enjoying video-games ( $n=49$ ). Of these, nearly one-third reported reading tips or cheats and reading/writing messages to other players (see Table 4.6). A number of children reported playing online with various people, including friends (58.1%), others they know (32.6%), and people they have not met (27.9%). Nearly forty percent reported talking to other players online during video-games.

Table 4.6  
*Percentage of Children Reporting Video-game Related Activities (n=43)*

Activity	<i>n</i>	%
Mostly play by self	23	53.5
Play with friends or family in the same room	28	65.1
Play online with friends	25	58.1
Play online with others you know	14	32.6
Play online with people you have not met	12	27.9
Talk to other players online	17	39.5
Read tips or cheats	13	30.2
Read/write messages to other players	13	30.2

The most popular videogame nominated by children was *Minecraft*. Three-quarters nominated this as one of their five favourite games (77.1%). A range of video-games including, for example, *SimCity* (classified G) and *Sonic the Hedgehog* (classified G/PG) through to *Call of Duty* (classified R16) and *Grand Theft Auto* (classified R18) were, also, reported as favourites. A wide variety of games played across different types of devices were nominated, including those better suited to computers and laptops, as well as those usually played on gaming consoles and those played on smaller handheld devices, such as MP3 players or tablets.



#### **4.1.7 Online content and literacy activities.**

Children nominated 233 favourite websites, covering a vast range of different types and functions. Of these, approximately thirty percent were educational websites, such as *Cool Math Games*, *Prodigy*, class blogs, Google Drive, and *Studyladder*. Gaming sites such as *Animal Jam*, *Kizi*, *Friv*, *Roblox*, *Minecraft* servers, and *Happy Wheels* were frequently nominated, as well as Google and YouTube. Websites with a variety of functions from media sharing apps such as Instagram and Snapchat through to shopping websites and *Wikipedia* were, also, nominated. The range of sites reflected a diverse range of purposes for engaging with online content. These covered communication, information seeking, education, entertainment, and functional tasks such as shopping or accessing technological tools such as *Photovisi* or *Audiotool*.

#### **4.1.8 Gender differences in literacy related activities.**

While boys and girls in this sample were equally as likely to report reading books, traditional gender patterns were found in many other types of literacy related activities (see Table 4.7). Girls were more likely than boys to report engaging in writing related activities, across both traditional print and digital formats. They were much more likely to report that they often engage in emailing, instant messaging, talking or texting on phones, downloading music, and making video calls. They were, also, more likely to read and write comments on websites, as well as choosing to do more traditional print based activities such as letter or diary writing. The only literacy related activity boys were more likely to report frequently engaging in with a significant margin was reading comics (Boys 20%, Girls 2.6%).

Table 4.7  
*Percentage of Children Reporting Frequent Literacy Related Activities per Gender*

Activity	% Often		% Sometimes	
	Girls	Boys	Girls	Boys
Reading				
Books	40.0	42.3	60.0	50.0
Blogs	24.3	16.6	43.2	54.2
Comments on websites	21.6	9.1	35.14	50.0
Comics	2.6	20.0	23.1	56.0
Manga/Graphic novel	5.1	8.0	30.8	36.0
e-Books	8.1	0.0	45.9	44.0
Facebook	2.8	4.5	16.7	9.1
Writing				
Email	25.0	9.1	45.0	54.5
Text on phone	26.3	4.2	34.2	29.2
Blogs	18.4	8.3	39.5	37.5
Comments on websites	16.2	4.4	27.0	43.5
Diary/journal	13.5	4.3	51.4	13.0
Instant message online	13.5	4.3	32.4	21.7
Letters	13.8	0.0	52.8	43.5
Twitter	5.7	0.0	2.9	4.3
Facebook	2.8	0.0	16.7	0.0
Watching/Listening				
Watch YouTube	53.8	46.0	38.5	50.0
Download music	38.8	17.4	41.6	39.1
Watch DVD more than once	27.0	24.0	62.2	64.0
Watch DVD ‘making of movie’	10.3	8.3	46.2	29.2
Speaking/Performing				
Talk on phone	40.0	17.4	47.5	52.2
Skype or video-call	32.5	21.7	27.5	34.8
Post on YouTube	8.1	16.0	21.6	20.0

Video-games are an activity that more boys than girls report enjoying (Boys 89%, Girls 60%). Boys and girls were as equally likely to report reading tips or cheats, but boys reported engaging in online gaming with players in other locations as well as communicating with other players verbally or via instant messaging during gameplay.

#### 4.1.9 Reading attitudes and habits.

Three-quarters of children reported positive attitudes to reading (75%), while only a small minority reported negative attitudes (7.4%). These positive attitudes to reading were reflected in regular reading habits. Just over two-thirds reported choosing to read most days (49.3%) or every day (19.4%) and a quarter of children (24.6%) listed reading as one of their interests.

Children in this sample most frequently reported that they would read more, if they could find an interesting book (58.2%), and would write more, if they had ideas or things to write about (63.5%). Approximately half of the children reported that they would read or write more, if they had more free time (see Table 4.8).

Table 4.8

*Percentage of Children Citing Reasons They Would Read and Write More*

Activity/Reason	%
Read	
Find an interesting book	58.2
More free time	53.7
More books/magazines	29.9
More time on device	23.9
Get books from library	16.4
Don't want to read more	7.5
Write	
Ideas or things to write about	63.5
More free time	50.8
More time on device	27.0
Share it with others	22.2
Don't want to write more	9.5

Those children who made comments mentioned having interesting and engaging reading material available as being the reason they would read more. Comments included “If I had more books that I liked”, “I could get a series I enjoy”, and “If it’s a

good book I will read it”. This indicates that children experience difficulty in finding a book that will engage them.

## **4.2 Phase 2: Interviews**

The three interviewees were all ten-years-old, of New Zealand European/Pākehā ethnicity, and attended the same school. This school had set up an ILE at the start of the school year. All students in the ILE class brought their own laptops to school to use throughout the daily learning programme and took them home at the end of each day. At home, the three children had internet connections and were able to use their school laptops for their own purposes. In addition, all three owned an electronic tablet for their personal use.

All three children demonstrated that they had understood the task of collecting photographs about their interests and favoured activities, and they readily shared their photographs with the researcher. Rapport between the researcher and participants was built up during this initial phase of the interview and provided a general background from which to explore their usual literacy practices.

### **4.2.1 Documenting children’s literacy practices.**

Children’s experiences are presented, successively, in three interview stories. This is followed by exploration of key themes related to 1) engaging literacy activities and 2) reasons for children’s activities across children. Children are referred to by pseudonyms.

#### **4.2.1.1 Rusty**

Rusty had collated a range of photographs covering numerous activities including more formal, structured interests as well as a number of informal past-times.

These included playing cricket, running, rock climbing, swimming, video-gaming, his pets, and bouncing on his trampoline. He also reported reading as one of his interests. Rusty's involvement in structured activities included playing cricket for a school team and belonging to a running club in the community. He reported that he spent most of his time engaged in informal activities such as going on his trampoline, reading or using his computer. He watched television only when he had nothing else to do and was not allowed to go on his computer after school. If he found an engaging television series, he would record all the episodes in the series, so that he could watch them at a time of his choosing and re-watch his favourite ones.

The only traditional print based literacy activity that Rusty reported engaging in was reading fiction. While he had read a variety of books in the past, he recalled only reading books from the *Warriors* series, in the last couple of months. This fantasy series is based on a number of different 'clans' of feral cats, who live by a code of principles, under the guidance of their ancestors' spirits ( <http://www.warriorcats.com/>). Rusty reported having read fourteen of these books and explained that there are lots of different sub-series as well as extra standalone books within the *Warrior's* series.

Rusty reports following his interest in the *Warriors* series online and goes to the official website to find out information about the other books in the series, learn about the characters, play the online games, and explore the *Warriors* world. He borrows the books from the public library and reports he uses the search engine at the library to locate the books he is looking for, usually finding the books without any assistance. He reports cats, in general as well as his pet cat, as being one of his interests and will often choose to watch funny cat videos on YouTube.

Apart from following his interest in cats, Rusty used his computer mainly for playing games and listening to music. He reported enjoying playing random games (for

example, *Agar.io* and games appearing on websites such as *Not Doppler*) or car racing games, while listening to electronic dance music accessed online. He also plays a lot of *Minecraft*, which he does on his tablet as his computer cannot run it. To find games, videos, and music, Rusty types key words into Google and then reads the search results before selecting one of the sites. Most of the time, he will choose to follow a YouTube link. He subscribes to various YouTube channels that have dubstep content and his favourite videogame vloggers.

Rusty's interest in gaming has led to various different literacy practices. He often rings his friends to arrange to meet them online within a videogame and play in collaboration or competition with them. During these games, he often communicates with his friends by reading and writing online messages. For example, during a game called *Tower Defense*, he states that he may write a message such as "Can you please give me some money?", so that he and his friend can work together strategically to win the game. During *Minecraft*, Rusty will often go on a variety of servers that allow him to play with others or play the game in a unique way. These servers are constructed by other players and can have instructions for players written on wooden signs within the game environment. In *Minecraft*, he can go online with other friends and speak to each other while playing. Rusty reports that he also goes to the *Minecraft Wiki* website to find out how to do specific things, such as finding a recipe in order to craft a particular item within the game or to make modifications to the game in the various different gameplay modes. While he does engage in reading and writing activities to support his gaming experiences, Rusty often finds it easier to watch a YouTube video tutorial. After quickly scanning the results from a Google search, he makes a judgment about which literacy format will be quicker and easier in giving him the information he requires – sometimes this information will be in written format but, frequently, he finds what he

needs to know in the oral/visual format combination of video. While Rusty states he does make comments on the YouTube videos he watches, these are usually limited to a word or two of acknowledgement, such as “Cool”.

With his frequent watching of online videos about video-games and dubstep, Rusty has built up familiarity with these genres and has begun to produce his own videos and recordings. He reports that he records himself playing video-games and making a verbal commentary on his gameplay experiences. He records a mixture of videos playing alone as well as videos when he is playing with his friends online. Rusty does not have his own YouTube channel because he reports he is not old enough, so he posts his videos on his friend’s channel. He states that he found a recording app on his internet browser’s webstore which was free and installed it on his computer. He believes he showed his friends how to use the app because they wanted to be able to record, too. Rusty has, also, learnt to make his own dubstep. One of his favourite websites is *Audiotool*, an online studio app that allows users to make their own songs and listen to free music by other users.

Rusty stated “I really like writing” and described winning a creative writing competition in his learning hub at school. However, the only writing he reported engaging in his own time, other than in relation to gaming, was creative writing tasks that he had started at school. While he uses his computer at school each day, Rusty primarily sees it as a tool for gaming and leisure, at home. When asked if he does homework, he stated “Oh, well, they’re not too strict about homework but they give us these learning tasks and we can go home and do them on these [referring to his laptop]. And, so, basically, that’s homework”.

#### 4.2.1.2 Gemma

Like Rusty, Gemma reported a range of interests. She had written a list of her interests and activities as well as taking photographs, prior to the interview. At various times during the interview, she listed netball, dancing, writing, drama, art, craft, personal grooming and beauty, and singing as interests, as well as the online gaming websites *Minecraft*, *Sims*, and *Animal Jam*. Gemma reported attending swimming and dance lessons, during the week, and playing netball with her school team, in the weekend. During the school holidays, she sometimes attends drama workshops for children. Gemma reported owning a set of *High School Musical* DVDs, which she used as inspiration to make up her own dances, at home. She, also, said that she enjoyed listening to music, bouncing on her trampoline, and playing board-games with her family.

Gemma states that she enjoys reading and has a regular routine of reading on weekdays. She usually chooses fiction books from the school library and is, currently reading *Dork Diaries*, a humorous book series written in a diary format with a 14-year-old female character. On holidays, she reports reading magazines such as *Totally Girls*. Occasionally, Gemma receives books as presents from family members.

While Gemma reported a neutral attitude to writing on the survey, she enthusiastically shared a recent creative writing task for school, describing the process of writing her ‘epic tale’ in detail and the feedback she received from her teacher. Apart from finishing off creative writing tasks for school, Gemma stated she sometimes wrote at home, just for fun. Gemma’s interest in drama also prompted her and a friend to write a script for an imaginary morning talk show, which they then acted out and video-recorded. Other types of writing Gemma chooses to engage in include instant messaging



her friends on *Animal Jam*, writing as part of board-games such as *5-Second Rule*, and emailing her teacher and friends.

Gemma engages in several other types of literacy related activities that combine writing, listening, and speaking. When she wants to communicate with her friend, she emails to ask her if she wants to talk with her via Facetime, a free online video-calling platform. As part of her interest in singing, Gemma learns the lyrics of favourite songs by listening to each track, pausing it after each line, and singing it herself. When she experiences difficulty with learning songs orally, Gemma writes the lyrics down line-by-line as she hears them. One of her favourite internet performers is Colleen Ballinger, who has a satirical video series on YouTube called *Miranda Sings*, where she performs as the character Miranda, an aspiring and egotistical singing YouTube star. Gemma enjoys watching these sketches, which come in a range of formats such as life or singing ‘tutorials’ as well as songs. She, often, learns the humorous song lyrics, many of which appear on the screen as they are sung.

YouTube forms a large part of Gemma’s multi-media viewing. She reports watching auditions from *X-Factor* and enjoys watching videos on O2L’s channel. O2L is a collaborative YouTube channel made up of a group of seven teenage boys. The individuals in the group recorded videos of weekly themes and challenges, gaining over three million subscribers, but have since closed the channel in early 2015. Gemma, also, watches a vlogger called LifeSimmer, who records videos about the *Sims* online game, which Gemma enjoys playing. The only television programme Gemma reported watching was *Home & Away*. Every weekday, after completing her homework, Gemma watches this programme with her mother and brother at 5.30pm. She stated that they will call out to each to let each other know that it is starting and described this in language indicating that it is an enjoyable and valued daily ritual for the family.

#### 4.2.1.3 Millie

Completing homework straight after school was a priority for Millie. She reported attending dance classes three days a week, just before dinnertime, so tries to get most of her homework done before then. In addition to dancing, Millie plays netball as part of a school team. She, also, reported singing, acting, and kapa haka as other interests and said she enjoys playing on her iPad and spending time with her pet dog and cat. Millie is close to her parents, two older sisters, and extended family and enjoys staying in close contact with them all.

Millie mentioned that her goal for the year was to read more. She reports that it is, often, difficult for her to find a book that interests her. On her survey, she had reported a neutral attitude to reading and that she chose to read only 1-2 days a week. Millie states that she has tried to read many of the popular books for girls her age, especially ones that her sisters have passed down to her. However, she struggled to recall which fiction titles she had read or what they were about. To help her recall, Millie went to her bedroom and returned with three books: a fiction book by popular author Jacqueline Wilson, the second book from the fiction series *Judy Moody*, and a non-fiction book called *The Dog Lover's Guide*. She commented that she had read the first Judy Moody book but couldn't remember the plot. Although Millie had the second book in her possession, she seemed undecided as to whether she would read it in future, stating "I did like the first one, so I'd probably want to read more of it". The only book that Millie reported enjoying reading with any enthusiasm was *The Dog Lover's Guide*. She appeared to become engrossed in the content of this book while showing it to the researcher.

Unlike the other two children, Millie did not report creative writing as an activity she was interested in. However, Millie does write as a part of other out-of-

school activities. She reported emailing her teacher to check what she was supposed to be working on for her homework. She, also, used the school email system to email her friend because “we talk about heaps of things”. When asked if she does any other kinds of writing, Millie said that she writes thank you cards to people and letters after she receives presents for her birthday. This was a family practice. Millie, also, kept in contact with extended family and friends by posting photos and comments on Instagram. She described sending a photo to her cousins, who live in other cities, and typing a message to accompany it, such as “I miss you” or “Love my cousins”. Usually, the photos are about things she has done with her family. For example, she reports when it was Mother’s Day, she posted a photo of what she had done with her mother, along with a comment that said “Happy Mother’s Day to my Mum”. She posts comments with her photos in the expectation that her relatives or friends will make comments, too. Occasionally, she will use her sisters’ Snapchat accounts to send photos.

Millie uses her iPad primarily to watch YouTube videos. She reports that her sisters got her into watching a television series called *Dance Moms*. She has watched many of these episodes on YouTube but is now spending more time watching a collaborative YouTube channel called *Seven Super Girls*. The seven girls that make up this group are average young teenagers aged between 12 and 16 years, who each post one video per week about a specific theme, acting out a skit that is usually videoed around the vicinity of their own homes. Millie enjoys acting and drama, and has made some videos of her own, at home, with her friends and cousins using the iMovie app.

Millie does not engage in video-games or multiple player websites. She stated she preferred games in the real world, such as physical games at school, party games, or board games. While the family had many board games in the cupboard, Millie reports that she did not play them that often. One online game she did frequently engage in was

*My Talking Angela*. Angela is a spin-off character from the *Talking Tom and Friends* franchise. Millie has brought the game app which allows her to ‘adopt’ Angela as her own virtual pet, whom she needs to feed and care for. This is set up as a sole player game, so she does not message other players.

#### **4.2.2 Engaging literacy activities.**

Themes were identified to answer the second research question: what types of literacy activities children found engaging. These themes included: engaging qualities of fiction; learning; exploration, choice, and novelty; gender; internetainers; and creation and production. Identifying many of these themes required the researcher to infer the meaning from children’s speech rather than the use of direct question-and-answer or identification of key words used in discussion. This section will begin with an example of the inference process, drawn from Rusty’s interview, and will then go on to discuss the themes in successive subsections.

##### **4.2.2.1 Engaging qualities of fiction.**

During the interviews, all three children found it quite difficult to identify and describe with detail the qualitative features that made their activities engaging. Responses to questions were interpreted and answered mostly with reference to factual, concrete statements and superficial descriptors such as ‘fun’, ‘cool’, or ‘funny’. With regards to reading, Rusty described what the *Warriors* book series was like:

“Um, about these cats and they’re, they’re like, live in a clan and there are other clans and there are fights, sometimes, and stuff. It’s pretty fun and cool.” (Rusty)

However, inferences could be made from how the children discussed other aspects related to their activities. For example, Rusty reported, later in the interview, that he decided to go online to visit the official *Warriors*’ website because he thought “Oh,

these would make pretty good games”, indicating that he recognised that it was a genre and narrative well-suited to the structure and format of video-games, an activity he chose to spend the majority of his free-time engaged in. The qualities of video-games that make them highly engaging have been well-documented in the research literature. The *Warriors* series, like a game-world, has many engaging features; it is goal orientated, immersive, has its own internal logic, and contains a plot that is full of action, tension, frequent challenges, suspense, and invites prediction of events and exploration of an expansive fantasy world.

Unlike Rusty, Millie struggled to find novels or video-games engaging. She reported that she did not have trouble finding novels that she thought she might like, but did have trouble staying engaged once she started.

‘Well, the book I got from the library, I didn’t want to -, because, when I get a book, I want to get into it. But, sometimes, I get a book and then it’s sort of like, “Oh, no...”. It’s like you don’t want to read more of it or you wouldn’t give it, you wouldn’t let anyone else read it...’ (Millie)

Millie stated that she liked books “that hook you in”, however this was not something that she experienced very often. She expressed some frustration about not being able to become engaged in reading the novels she chose, but found it difficult to articulate why this happens “Sometimes, books, I don’t really get them so it’s kind of, sort of hard to explain...”. Millie gets her books from the school library and, along with the rest of her class, is only allowed to borrow them for two weeks, at a time. She reports that she finds this frustrating as she takes a long time to read a book.

#### **4.2.2.2 Learning**

Another source of frustration Millie experiences in finding engaging material to read is trying to meet the school requirement to read chapter-books. Millie finds non-fiction more engaging than fiction but struggles to find something that is interesting and

fits what she perceives as a chapter-book format. Millie needed some prompting and discussion with her father before being able to describe a clear preference for the type of reading material that can engage her, “I like real stories. Well, not like real stories that are scary, but real stories that have actually happened. Sometimes, that hooks me in more”. She also likes books with factual information on sharks and animals. Millie described the contents of *The Dog Lover’s Guide* in great detail and with much enthusiasm. She also stated, “I think I prefer that [non-fiction] more because I like hearing about how animals struggle and try to fit into a family or, like, what to feed, or learn about them more”.

Learning about the world and others was frequently reported by Millie as enjoyable. Some of the photographs she shared were of a trip to a museum and Millie repeatedly stated how much she had learnt and how it was fun learning about new things. At the museum, she took a photo of an exhibit about the myth ‘Maui and the Sun’ and described her delighted reaction when she recognised that the display represented a story she already knew “It was explaining, I think, about the story and so, yeah, I saw that there were people pulling down the sun and I was just like “Oh, Mum, there it is!” and, yeah, it was really fun seeing that”. Her reason for joining her school kapa haka group was also motivated by the desire to learn more about the Māori culture. Overall, Millie had a strong desire to engage with the real world rather than with fictional worlds.

#### ***4.2.2.3 Exploration, choice, and novelty.***

Being able to explore at their own pace and make their own decisions about what content they consumed and what activities they engaged in was a strong feature of the children’s out-of-school literacy lives. None of the children explicitly reported rules about their online activities. Only Rusty reported a desire to go on his electronic devices

more than what he was allowed to on school days. They were all able to download free apps on their devices to use for their own purposes and all three had memberships or access to many different online game worlds. The only limit was not being allowed accounts for well-known platforms such as YouTube and Snapchat that have age restrictions. Although, Gemma did report having access to a personal Instagram account and had limited access to her sisters' accounts and Rusty posted his videos on his friend's YouTube channel.

YouTube and Google were valued tools for exploring and making choices about media consumption. Although, there were limits to how the children explored the online environment. Rusty used YouTube to follow his interest in dubstep and he had favourite dubstep artists that he subscribed to. However, he reported that he did not follow the recommendations that YouTube gave him, preferring to view only the artists he knew and already followed. Gemma and Millie, also, had the freedom to explore YouTube content, yet stayed mostly on the same few channels or following familiar characters and content. Despite showing a clear enjoyment in learning about the real world and having a strong interest in dancing and animals, Millie did not use the internet to find related online content. Instead, she chose to watch the reality television show about dancing that her sisters recommended to her, a Disney television series (that had an actor she had liked from a movie), and videos from the *Seven Super Girls* channels.

Enjoying novelty within a familiar framework was engaging for all three children and it is a standard device to develop engagement in video-games, as well as being central to why children and adults consume television and book series. Gemma described this as a common feature of the online world *Animal Jam*, with new little games or features brought to the players' attention on a regular basis. To keep up-to-date with the new features, Gemma will read the within game 'mail' from *Animal Jam*. A

powerful incentive to read the mail results from some of these mini-games and features being temporary - not knowing about the new activities may lead players to miss out on playing them. Curiosity leads her to engage in many activities in this setting. During her interview, she expressed this vividly while she demonstrated making virtual candyfloss:

“You can choose your own flavours. I might do black. I’ve never seen black candyfloss but, anyway [laughs], I don’t really care. And, then, you can choose another flavour. Yeah, maybe that one...and, then, I wonder if you can do another flavour. Oh, you can! That’s awesome.” (Gemma)

#### ***4.2.2.4 Gender and engagement.***

While their access to the internet allowed Rusty, Millie, and Gemma to explore the whole online world from the privacy of their own homes, they tended to follow traditional gender related patterns in their choice of activities. Rusty had preferences for car games, goal orientated or competitive video-games, and used communication technology in order to collaborate together with his friends toward goals within gaming environments. His favourite fiction series was set in a fantasy environment where the cats lived by a traditional warrior code of behaviour and ethics, and where tensions and physical aggression frequently erupted between individuals and groups.

Millie, apart from her interest in sharks, had a strong preference for traditionally feminine activities. The only computer game she played was *My Talking Angela*, featuring a highly feminised character interested in fashion, singing stardom, and love. Players are encouraged to dress Angela, give her presents, make her home beautiful, chat to her, and enjoy spending time with her. Millie uses social media to maintain close bonds with her extended family and friends and prefers watching *YouTube* performers of the same gender who are interested in more singing, dancing, and drama.

Gemma also prefers female *YouTube* performers and has an interest in singing, dancing, and drama. She chooses fiction and magazines that are explicitly made to



appeal to girls, however, she does show more of a mixture in her choice of games and online worlds. Gemma enjoys *Sims*, *Minecraft*, and *Animal Jam*. These are quite gender neutral online environments and gameplay is open-ended rather than strongly goal orientated. It may be that having a brother and no same sex sibling has influenced the nature of Gemma's online activities to some degree. She reports that she and her brother both play *Minecraft* and a game called *Pou*. Gemma, laughingly, described the difference between the health and habits of her online Pou compared to her brother's Pou, indicating that having a shared interest with her brother plays a role in her enjoyment of gaming.

Styles of online communication, also, reflected traditional gender patterns. While Gemma and Millie used email and online messaging to interact and make connections with others, Rusty reported using technology to communicate about shared tasks during gaming.

#### **4.2.2.5 Internetainers**

All three children reported following *YouTube* entertainers. In addition to watching the satirical *Miranda Sings* videos, Gemma follows a young woman called 'Lifesimmer', whom she describes as "really funny.....She's so hilarious. I love watching her videos". Lifesimmer's videos consist of her playing the *Sims* game and doing a running verbal commentary; a genre called 'Let's Play'. Rusty also likes the 'Let's Play' format. He follows a *YouTuber* called iBallisticSquid, whose *Minecraft* videos contain a large amount of silly humour and are watched by millions. The commentary in this genre is highly subjective and is usually entertaining and sometimes informative, providing a spontaneous critique about game elements as the gameplay progresses.

Gemma and Millie both enjoy watching collaborative groups of teenagers who make their own videos around specific themes. In this genre, there are no scriptwriters or professional support teams helping the performers; they must create all the content, themselves, within the context of their everyday lives. This gives rise to a format and performance that requires a great deal of creativity within highly constrained circumstances. The videos have a raw do-it-yourself quality and a direct style of interaction that resembles a person-to-person rather than performer-to-audience style. From the videos the children shared in their interviews, these performers seemed to present themselves as authentic everyday people rather than as professional presenters or actors, and appear to share aspects of their daily lives, reflect on their personal experiences, and form authentic opinions, in situ. The topics in the videos reflect the concerns and perspectives of the young performers and appeared to the researcher to have a much more natural quality than television series written by adult script writers.

#### ***4.2.2.6 Creation and production.***

Activities that allowed for creative self-expression were found to be engaging by all three children. Making their own videos was an enjoyable way to express themselves and be in control of the creative process. Rusty reported creating his own Let's Play type videos, stating he does this either by himself or in collaboration with a friend. He also makes and records his own dubstep tracks. Gemma and Millie prefer making videos that incorporate more traditional performance elements and genres. Millie described making a 'movie' with her cousins about a girl who's afraid of a monster as "really fun" and states she makes these sorts of movies with her friends, too. Gemma's video recording of her talk-show interview made in collaboration with her friend was something she reported as "really fun" to make. It incorporated many creative elements

including script-writing, acting, singing, selecting and adding a musical soundtrack, as well as presenting and discussing Gemma's artwork. The script Gemma and her friend wrote demonstrates familiarity with the language and structure of a talk-show format:

"Stacey says 'Good morning viewers. Welcome to the Art Show. We have a special guest today. So please put your hands together for Gemma. Woo! Yeah!' and then I say 'Woo! Yeah!' and then I say 'Yo Stacey' and 'Good morning. I'm lucky to be on the show today.' Then Stacey says 'It's an honour to have you here.' Then I say 'So, what are we looking at today?' and Stacey says 'Art' and so I say 'What kind of art?' and Stacey says 'Well, I've heard you do some fabulous art. So, why don't you show us some after the break, where Gemma will be singing' and so, in the break, I'm singing and I don't really – it's embarrassing!" (Gemma)

While Gemma enthusiastically described the process of making the talk-show and read out the script with a demonstrable pride and sense of accomplishment, she was reluctant to share the audio recording during the interview.

### **4.2.3 Reasons for children's literacy practices**

Children revealed a number of reasons why they engage in literacy activities, including the need for stimulation, family practices, functional reasons, social interaction, developing mastery and competence, and to participate and develop a positive identity.

#### **4.2.3.1 Stimulation**

The majority of children's free time outside of school is spent seeking out sources of stimulation and enjoyment. Becoming immersed in a fictional or game world meets Rusty's need for stimulation and he seems to enter a state of flow in activities such as gaming and reading. Even quite simple activities such as the online dot game *Agar.io* can absorb him in goal directed activity for long periods of time. The stimulating nature of video-games can lead to Rusty engaging in literacy related activities such as making *Let's Play* videos or searching for information from wikis and

online tutorials to support his gameplay. Maintaining an enjoyable degree of challenge and creating new goals within the game environment keeps Rusty in a state of flow.

The multi-media format of online activities are highly engaging and easily accessible, offering a vast amount of different activities. They provide a reliable source of fun and entertaining activities that can be matched to the child's mood and energy levels and do not depend on the presence or participation of someone else. Millie stated that she usually does not go to her friends' houses much during the school term because, like her, her friends have formal activities such as dancing or swimming lessons most days of the week. When she needs an activity to do, she will often choose online entertainment and activities, which can fit easily around her schedule and activities outside the home. For Gemma, the convenience and accessibility of a stimulating online world allows her to engage in her favourite multi-media activities regardless of whether she is at her father's house or her mother's house. Taking her laptop and iPad with her means she can access all her schoolwork and her favourite video-games and media content in both homes.

#### ***4.2.3.2 Family practices.***

The literacy practices of their family influenced the nature of the literacy activities the children engaged in, at home. For Rusty, regular trips to the public library with his mother provided him with the opportunities to choose engaging reading material from a wider selection than what was available from the school library. He reported using his computer to research the different books in the *Warriors* series to help him select the right ones in the particular sub-series he was reading. Because he is taken to the library regularly, Rusty expects to be able to read the rest of the series. As a result of this extended engagement, he appears to have become personally invested in

the *Warriors* world, building a detailed knowledge of the vast array of characters, their individual histories, and those of the different clans.

Regular reading routines at home create time and space for Gemma to become an engaged reader in her leisure time. Her interest in drama and performance are also encouraged, with Gemma and her brother attending drama workshops in their school holidays. She has many different types of resources available to her that support literacy activities related to her interests, including being able to earn pocket money to save up and buy her own video-games, a music collection and player, books received as gifts, and writing and art supplies.

While Millie's family own a selection of fiction books suitable for Millie's age, they do not appeal to her. Currently, she is most influenced by her family's practice of maintaining strong social ties with friends and extended family. This is often done by using social media and other forms of communication. She is also expected to participate in family practices such as writing thank you cards for gifts she has received.

#### ***4.2.3.3 Functional***

Communication was one of the most frequent reasons for writing for all three children, allowing them to socially interact, meet their needs, or follow their interests. Being able to use the school email system enabled them to get assistance with their homework and developed their understanding and skill in using the format. Millie and Gemma both reported emailing their friends using the school system, even though they knew the teacher could read their emails. Email was a mode of communication that was convenient for them as it was free and one they all had access to. Gemma used her understanding of email for an additional function, stating that she usually emailed the help and support services of apps and websites she used, whenever she needed assistance or technical help. She has learnt that many apps and games have an email or

help icon in the corner of the screen and that this is an effective way to get advice to solve her technical problems.

While the children had a preference for familiar media content for entertainment purposes, they were willing to explore the online world further when they had a particular purpose. Rusty searched the internet for information to support his interest in gaming. He reported how he had heard about a particular video-game he thought might like to buy:

“I think I might’ve, like, maybe one of my friends told me about it or I might’ve seen someone play it on *YouTube* and I thought, I might want to look into that a bit more – it looks pretty cool.” (Rusty)

Gemma searched the internet to find an app to help her make her talk-show recording. She describes this as a very straightforward process. She simply typed in the word “recordings” in a search engine and it came up with a free online audio recording app called Vocaroo. She successfully navigated using this tool and only needed help from her brother to copy the link for the recording. She also reported using the internet to search for gaming cheats or tips. She described wanting to get free diamonds in *Animal Jam*, so went in search of a *YouTube* video that showed her how to get them. She states that she mostly prefers *YouTube* because “you can actually see what they are doing to get it and for websites it’s like hard because they’re like telling you [in written text] and I don’t really understand that, so I mainly just go on *YouTube*” (Gemma).

A common theme throughout the interview data was the prevalent use of *YouTube* for a variety of purposes. The children usually reported that this was the easiest and most enjoyable format to gain information and would often choose *YouTube* links, if they came up in a search result list. With a vast and ever-growing amount of knowledge being encoded in video format, the children find using *YouTube* a very efficient way to gain the information they need. The most influential factor in their

decision making while conducting searches seemed to be their expectations based on previous successful experiences. YouTube appeared to consistently offer the information they were looking for, thereby reinforcing their preference to choose it again, in future.

However, if there was a strong motivation and a better format for the purpose, then the children were willing to use written text. Rusty found the *Minecraft* wiki very reliable and it had a format where he could easily find and use the exact information he was looking for. When not gathering information, Gemma was more willing to use written formats, especially when it was the most useful way to do a task – for example, when she encountered difficulty in learning song lyrics by watching or listening, she resorted to encoding them in written form. Additionally, there were some activities that she accepted as requiring written formats, such as learning to remember lines for dramatic performances.

#### **4.2.3.4 Social relatedness.**

Gemma and Millie showed a strong desire to connect and communicate with friends and family and engaged in a number of communicative literacy practices such as social media, email, and other forms of messaging. Millie emails her friends to share their experiences, “We talk about what’s happening and things and what you’re doing and things” (Millie). Sharing an enjoyable activity with others was another reason to use instant messaging. However, all of Rusty’s online communications with his friends centred round the activity of video-game play. The children displayed a classic gender pattern, with the girls valuing relating to others as an enjoyable activity in itself, while Rusty valued relating to others within the context of a shared enjoyable activity. While these differences were quite evident, all children were motivated to engage in social relationships.

A desire to relate to others was also demonstrated by the choice of online multi-media content. Watching other people's videos on YouTube was a popular and engaging activity. Each child followed people who shared their own zone of interest. From gaming/Let's Play type videos to channels with more skit based content, the YouTube performers shared their thoughts and emotional reactions with their audiences. All three children seemed to enjoy watching numerous videos by these very relatable performers, whose video content and online personal insights were at a level similar to the children's social development.

#### ***4.2.3.5 Mastery and competence.***

All three children demonstrated independence and confidence in their online activities and expressed a sense of competence in their ability to locate information and content, when they wanted. The children all transferred skills they had learnt at school to their home environment, where they used them for their own purposes. Gemma's use of email to solve her technical problems showed a high degree of initiative, confidence, and competence.

Developing skill and a sense of competency underpinned many of the reasons the children chose to engage in literacy activities. All the children showed a disposition and openness to experiment and learn independently, searching for, downloading, and using new apps, games, and tools. Millie had, also, learnt to manage her own Instagram account and social media postings largely independently, while Gemma and Rusty reported downloading online tools for their own creating and recording purposes. Rusty's focus has been on playing goal orientated video-games and he has spent many hours engaged in game play, building a sense of mastery in the tasks. To learn new skills, he often chose to read game wikis and watch video tutorials.



#### ***4.2.3.6 Participation and identity.***

The drive to become active participants in the wider world had encouraged Rusty, Gemma, and Millie to explore a range of activities and interests, which contributed to how they saw themselves. All three actively explored their online worlds, seeking out content that engaged them. They have, also, produced their own media content and engaged in creation and performance within their areas of interest. Rusty had moved from just watching other people's Let's Play videos to making his own, moving from a consumer role to an active producer through the use of an informal process of modelling. He, often, posted his videos online, believing that they were of sufficient quality to share in the public arena, showing his self-confidence and sense of efficacy within this area.

Millie had learnt how to engage with social media in a supportive and scaffolded environment, with her two older sisters serving as models. She is able to create and maintain a positive online sense of identity within a close social circle consisting of family, friends, and her sisters' friends. Gemma's participation in school productions and out-of-school drama workshops had given her many opportunities to develop performance skills and self-confidence in front of a real audience. She is able to express herself creatively through crafting her own scripts and performing them, at home.

However, neither Millie nor Gemma posted recordings of their own performances online for a public audience. This may be due to a variety of different reasons, from not having access to a suitable forum to share these, to the possibility that they have had explicit or implicit messages from adults that it is not appropriate to post them. Alternatively, it may be that they are either not quite at that stage of consciously or intentionally modelling off other YouTubers or they are too self-conscious to

publicly share what they see as play products (rather than good enough approximations of socially valued products – which is how Rusty seems to view his gaming videos).

### **4.3 Summary of results**

Most participants from both phases of the research reported positive attitudes to literacy related activities despite a variety in practices. Data from the survey administered in Phase 1 revealed patterns in the frequency and format of the children's everyday literacy practices. The majority of children in the survey sample had access to computers or electronic tablets, but there was a wide variety in the reported time spent using multimedia. Children in the survey sample reported using a variety of different media formats, with the most frequent activities reported as reading print books and watching YouTube videos. Most children reported following their interests across different media, particularly through the viewing of related YouTube videos. While some gender patterns were identified in different genres, boys and girls both reported positive attitudes to reading.

The case studies in Phase 2 enabled the everyday literacy practices of three children to be explored in greater detail. Each child had access to a laptop computer and an electronic tablet, as well as print items such as books and stationery materials, and engaged in a variety of literacy related activities. All three children reported the frequent consumption of online videos but varied in their reading and writing activities across print and electronic media. Qualitative features of engaging activities were identified such as novelty, exploration, choice, gendered activities, creation, and production. The children revealed a number of reasons why they engaged in literacy activities, including the need for stimulation, social interaction, family practices, functional reasons, developing mastery and competence, and participation.

## Chapter Five

### Discussion

#### 5.1 Introduction

New technologies are shaping children's lives, multi-media consumption is increasing, and there is evidence that their everyday literacy practices have evolved in small but significant ways. While some children show an advanced proclivity for technology and its potential applications, most children are engaging with technology as a new normal in their daily lives. Given the new normal of daily technology use, it is important to understand these new practices and the implications they have for literacy development. These changes create opportunities for families, educators, and other social organisations to reconsider what their role in supporting children's literacy development may be and whether there are important issues of social equity that need to be addressed.

This research project sought to develop a more in-depth understanding of children's literacy activities in the context of their everyday lives. Data gained across both phases of this study support the idea that children are choosing to engage in a range of literacy related activities in their own free time and do so for a variety of reasons. These reasons range from the functional to the social and from entertainment to self-expression, and reveal insights into the psychological and sociocultural factors that influence children's everyday literacy as a situated, social practice.

In the first section of this chapter, data from both the survey and case studies will be used to describe the variety of literacy related activities children engage in and discuss how these results compare to the most recent large-scale media and literacy surveys in New Zealand and overseas. Subsequent sections will discuss the qualitative

features of engaging literacy practices and how these relate to individual interests, preferences, and developmental stage. Finally, the discussion will conclude with a positioning of children's everyday literacies in a sociocultural framework and the presentation of a hypothesis that children are changing their literacy practices and are learning new ways to participate in the global cultural world that the internet has brought into their homes. Social and educational implications of these changes will be discussed.

## **5.2 The everyday practices of children**

### **5.2.1 The challenge of defining and capturing everyday literacy.**

Several issues in collecting and analysing the data were identified during the course of this research project. Capturing an accurate picture of the range of children's everyday literacy practices can be made difficult by their ideas on what constitutes reading and writing. Usually, reading and writing are terms children associate with practices that resemble school literacies. Having to rethink a diverse range of everyday leisure activities and perceive what could be counted as literacy activities was somewhat challenging within the limited 15-20 minute timeframe for the survey. No children nominated playing board games as an additional reading, writing, or talking activity despite being given the opportunity to add in any such activities in a free text box. Even Gemma did not nominate board-games in the survey despite having identified the reading and writing components in her favourite board-game *5-Second Rule*, prior to the start of the interview. As mentioned in the results section, the case study participants had some limitations in their ability to reflect on their literacy experiences in detail. These types of higher and abstract cognitive skills do not typically develop until adolescence (Taylor, Barker, Heavey & McHale, 2013).

Defining what constituted literacy practices was another challenge to the accuracy of survey data. With widespread and constant changes to digital formats and content, there seems to be an increasingly blurry continuum along which multi-media activities could be said to contribute toward literacy development. Activities such as online gaming and watching YouTube videos do have the potential to incorporate elements of literacy but it is difficult to determine the extent of these from survey data. YouTube videos come in a vast array of genres, as demonstrated by the three case study participants. They can be light entertainment videos such as the funny cat videos that Rusty watched or the Disney television series that Millie preferred, or, they can incorporate more obvious elements of embedded literacy, such as the Let's Play *Minecraft* videos that Rusty watched, which can incorporate varying amounts of written text such as rules or other information to enhance gameplay. These videos can, also, have extensive verbal commentary with features such as narrative, explanatory, or procedural discourses.

On its own, survey data can only provide a superficial description of children's everyday literacy practices. In her interview, Millie revealed how easy it is for children to assign different meanings to categories and labels on a survey. On the questions relating to how often children choose to do certain activities, Millie reported that she sometimes does the activities "Instant message online" and "Write comments on websites". For both categories, she was actually referring to the same practice of writing captions for photos she posts on the app, Instagram. She stated "I thought Instagram were websites as well". Features of children's writing could not be captured by survey data either. In the case studies, children were able to elaborate on the types of comments they made online. Rusty described that his comments on websites usually consisted of single words on YouTube such as "Cool". His example of the types of messages he

wrote to friends while gaming also indicated simple language use (e.g. “Can you please give me some money”). Because research methods such as making extensive observations were outside the timescale and scope of this project, it is not possible to conclude how representative this was of the types of messages he wrote or if his ability to recall examples only extended to more simple concrete ones. While the use of surveys and interviews had some limitations in collecting examples of children’s actual literacy products, the mixed methods design did provide enough quantitative and qualitative data to answer the three research questions.

### **5.2.2 Variety and video.**

Although a wide variety of literacy related practices were reported in the survey, there was a clear preference toward multi-media activities. Time spent using electronic devices and watching television or movies dominated the daily lives of the majority of children. The proportion of children and amount of time using multi-media was similar to large scale surveys on children’s media use completed in New Zealand (Broadcasting Standards Authority, 2015) and U.S. (Common Sense Media, 2015). Both surveys found YouTube and traditional television media to be the most popular formats, although individual children varied in their usage patterns and content preferences depending upon factors such as age, gender, ethnicity, and family income.

The large sample in the U.S. study allowed the identification of distinct patterns of media use (Common Sense Media, 2015). Children aged 8-12 years old could be classified into six media profiles: light users (27%), video gamers (23%), social networkers (15%), mobile gamers (14%), readers (11%), and heavy viewers (10%). These categories appear useful in that they highlight broad but distinct patterns of practices and engagement with print and digital media. For example, it shows that all gamers should not be treated as one homogenous group; that survey revealed that video

gamers tend to be mostly boys who spend less time reading than other media users, while mobile gamers are more likely to be girls who read for a significant amount of time. However, it is not always useful to lump all children into discrete exclusive categories. While Millie showed a clear pattern of light media use in the case studies, Rusty showed strong characteristics of both the video gamer and reader categories, appearing to respond to similar qualitative features found across the activities.

As newer electronic devices have become ever more versatile and multifunctional, the ability to classify the nature of children's multi-media activities has become increasingly challenging. Survey developers have had to make choices about what aspects to cover as the construction of survey questions has had to become more precise and provide longer, more detailed lists of answer options. The 2015 survey by Common Sense Media, described above, aims to offer the most comprehensive picture of media use in the U.S. across print and digital formats, however, due to the need to limit length and complexity, the report states it could not cover information such as what genres of media were used (e.g., sitcoms vs. documentaries or *The Sims* vs. *Grand Theft Auto*), what time of day media are used, or whether it is used alone. These factors were, also, outside the scope of the survey used in the current research project for the same reasons.

Despite the limitations inherent in surveys, both the U.S. and the current research project found that most children this age show media and literacy practices across many formats. While results showed the predominance of online video and television, reading was still a popular activity. Both surveys found the large majority of children read print books rather than electronic books. Even though reading can be seen as in competition with multi-media formats for children in terms of time use, children still seem to value reading as an activity and most report enjoying it. Very few seemed

to actively dislike it or report that they did not want to read more. Instead, it seems finding engaging books and having enough free time were perceived as barriers to reading more. In her survey, Millie reported that she did not really enjoy reading and chose to read only 1-2 days a week. However, in her interview, she stated she continues to hold the goal of reading more despite finding it difficult to achieve as she struggled to find interesting books. Being able to access interesting reading material has long been identified as one of the key factors in increasing leisure reading (Krashen & McQuillan, 2007) and this still appears to be a problem for quite a number of children.

Both survey and case study data showed that children are using a mixture of digital and print formats for a range of purposes. Watching and talking activities were generally more popular than most reading and writing activities, except for reading books. Nearly a third of the survey participants talked to others on the phone or on video calls often, whereas most writing practices were done occasionally rather than frequently. Email seemed the most frequent writing activity, which is probably representative of this age group's greater access to computers rather than mobile phones.

Overall, across survey and case study data, children's lives are characterised by variety – a variety of formal and informal activities and a variety of media. While multi-media activities were a significant use of time, it was balanced by a range of non-media interests and pastimes and physical activities, from sport and dance lessons to climbing trees and playing with Lego. Even without parental rules limiting screen-time, children usually alternate the nature of their activities. As Gemma stated in her interview, “I like getting active. I don't feel fresh when I'm playing on my iPad” (Gemma). As much as children get absorbed by multi-media activities, there are also people and pets in their lives to be talked to and skills to be practised. As will be discussed in the following



sections, these parts of children's lives cannot be ignored when attempting to answer the why of everyday literacy practice.

### **5.3 What drives children to engage in everyday literacy activities?**

#### **5.3.1 The experience of flow.**

Despite a desire to engage in a variety of activities, some children can still spend hours happily engaged in specific activities such as reading or gaming. It was evident that Rusty's online activities were his passion and this was how he displayed himself during his interview. Out of the three case study participants, he showed the most engagement with his digital devices as he demonstrated activities, and the interview was eventually terminated when he became more engrossed with playing the computer game he was demonstrating than continuing the discussion. He was, also, the only interviewee who reported the need to try and distract himself with other activities when he was not allowed to go online.

Researchers have examined the subjective qualities of passion-ed past-times across a range of activities (e.g., dancing, art, sport, mountain climbing, chess) to understand what supports individual sustained engagement. People who devote extensive amounts of time and energy to activities with no material rewards frequently reported a number of subjective qualities that seem to define their experience (Csikszentmihalyi, 2014). These included: being focused and concentrated on what they were doing; a sense of ecstasy or being outside everyday reality; inner clarity about what needs to be done; knowing they have the skills to do the task; a sense of serenity or going beyond normal worries or concerns; and a sense of timelessness.

Individuals will pursue those activities that give them these positive emotional states, however, research shows that the experience of 'flow' is specific to the

individual rather than something that resides within the activity itself (Schmidt, Shernoff & Csikszentmihalyi, 2014). While the present study did not measure the construct or ask children to report on flow-like qualities, they were inferred in different ways – for example, reporting high levels of enjoyment of reading in the survey or observation of overt behaviours during the interview, such as level of enthusiasm and detail of descriptions and behaviours such as prolonged, focused attention when demonstrating specific activities. While it can't be assumed that all survey respondents who reported choosing to read regularly experience a state of flow, it is reasonable to assume that reports of enjoying reading are indicative. Reading is one of the most commonly reported activities that create a sense of flow (Csikszentmihalyi, 2014). Reading a story involves visualising the characters, events, and setting, and making predictions about what will happen next. Csikszentmihalyi (2014) argues that flow occurs when the book has characters with motivations the reader can understand and empathise with, a complexity of plot that stimulates without overloads, and interesting challenges that the characters must overcome; it is the reaction that these elements provoke in the reader that is key – are they at a compatible level with the imaginative, interpreting, and empathising skills of the reader? Too complex and the reader will not understand and too superficial or shallow and it will bore.

In Rusty's case, he had found a book series that was at the perfect level of plot complexity and pacing to stimulate his interest, and his general love of cats and personal experience in having a pet cat helped him in empathising with and understanding the many characters. The sense of flow he experienced sustained his motivation to keep reading the series through fourteen books. Millie, on the other hand, struggled to connect with the content of novels that appealed to her female peers and sisters, when they were her age. She reported far more positive experiences in reading about real

animals and people, and demonstrated high levels of empathy and understanding of content when reading out loud passages from her book about dogs, during the interview. Millie's experience shows that all children, even children who don't identify with or usually experience reading as an enjoyable, can have flow states when the content is highly personally relatable and relevant to their personal goals. Her pet dog was an important and valued member of the family and Millie enjoyed caring for her. Millie found reading about the experiences of dogs from the dogs' perspective highly absorbing and it enabled her to expand on and refine her understanding of what her role was in caring for her pet.

### **5.3.2 Social interaction and development.**

Motivation to engage in reading varies and there can be multiple reasons children have for reading any particular text. The reasons Rusty and Millie had for particular types of reading material indicates quite different foreground motivations for choosing those particular texts. Rusty intrinsically enjoyed reading for the experience of pleasure that it brings him. The books in the Warrior series were an optimal match for his understanding and skills, and created an enjoyable state of flow. However, a by-product of his extensive reading of this series and its complex narrative and array of characters is likely to be deeper understandings about theory of mind. Theory of mind (ToM) is the awareness of and ability to interpret the mental states and emotions of others, and there is a body of research that shows reading fiction can increase individuals' abilities in social cognition and social competence (Black & Barnes, 2015; Mar, Oatley, Hirsh, dela Paz, & Peterson, 2006). Black and Barnes' (2015) research has extended this to include on-screen fiction, although not all fictional viewing. They state that an increase in ToM is specific to certain qualities within narrative, whether it be on-screen or in print. These qualities include narrative complexity, complexity of

characters and their relationships with each other, and providing frequent opportunities where viewers or readers have to make inferences about what characters think and feel.

Social cognition, which is important for both educational success and developing friendships, increases throughout childhood and adolescence in a developmental process caused by interactions between physical maturational processes and social experiences (Taylor, Barker, Heavey, & McHale, 2013). Literacy related activities, whether on or off-screen, provide opportunities to develop important skills such as perspective taking and empathy; even drama lessons have been shown to improve children's social skills and increase prosocial behaviour (Schellenberg, 2004).

Millie's choice in reading material showed a clear motivation to understand the experiences of others – in her case it was dogs. It can be inferred that Rusty, also, is motivated to engage in reading that extends his understanding of others. The *Warriors* series is very character centred with frequent references to the differing and often clashing thoughts and feelings of the numerous characters.

Social development was found by Moje et al. (2008) to be a common reason for literacy in adolescents with some literacy activities practised more as a social activity and some, such as reading inspirational biographies or self-help books, as a means to increase knowledge about the self and social world. Adolescents' intense use of social media reflects the increased preoccupation with the social world that is typical for their developmental stage. Only a small minority of 10-year-olds in this study used social media and this reflects the developmental stage of the children. It is likely that this figure would rise significantly, if the sample were surveyed again, in another year or two. After the age of eleven, children's use of social media increases, with over half of New Zealand 12-14 year olds reporting using Facebook daily (BSA, 2015).

Millie was the only one out of the three case study participants who used social media and this was partly influenced by having two teenaged sisters. It seems, also, likely that it was motivated by Millie's strong need to relate to and interact with others. She enjoys having close relationships with her family and friends and her literacy practices allowed her to maintain these connections. The other two children also used the affordances of technologies they had access to and often emailed (Gemma) or talked online (Rusty) with their friends. Although it appears in a more subtle form than during adolescence, the social world is intricately tied up with children's motivation to engage in literacy activities and influences the nature of their practice.

### **5.3.3 Autonomy, competence, and relatedness.**

Ryan and Deci's (2000) self-determination theory views the need for autonomy, competence, and relatedness as core motivating factors in people's goal-directed behaviour and activity choices. They state that these three factors are basic psychological needs that, when satisfied, result in active engagement, positive emotionality, and psychological growth. Erikson (1998) believed that school aged children, prior to adolescence, must resolve a developmental stage that is based on the building of skill and competence. In this stage, children must become skilful users of tools, learn to apply themselves to tasks with industry, and become a producer of things. If all goes well, they will then make the transition to adolescence with feelings of competency and a solid foundation for a positive identity to develop (Erikson, 1998).

In late childhood, most children have developed basic literacy and technological skills, which allow them a greater ability to engage in productive, self- and goal-directed behaviour. The findings from the current study support the view that the motivational force to develop feelings of competence in children this age, influences the nature of their activities more toward production rather than process. The three children

displayed feelings of satisfaction and competence when they finished a completed ‘product’. Conversely, when discussing the iMovie she made with her cousins, Millie expressed disappointment that she wasn’t able to be finish it.

Rusty’s engagement with video-games provided him the opportunity to feel a sense of competence and mastery in his gaming skills. The online environment allowed him to navigate easily around gaming websites so that he could choose and play a wide range of video-games. This level of autonomy means that he explored at his own pace and chose games that were personally engaging and at a level just right to challenge his skills, yet, allow success. The satisfaction he felt in playing video-games led him to do other literacy related activities that supported his proficiency and engagement in gaming, such as reading gaming wikis and watching how-to videos, to improve his skills.

Gaming is a popular way to experience a sense of flow and it is an activity that Rusty shared with his friends and brother. Not only are video-games designed specifically to induce these flow states in individual players, when gamers play with others, they feel the psychological satisfaction that comes from relatedness. This makes gaming a highly engaging activity. Rusty extended his interest in gaming even further and watched other people’s gameplay videos on YouTube, as well as produced and publicly shared videos of his own gameplay.

The need for relatedness may, also, play a part in the gendered pattern of activities found in this study and much of the research literature. Time spent with same-sex siblings and peers is believed to reinforce gendered interest preferences, especially in middle childhood, when gender segregation is at its peak (McHale, Dotterer, Kim, Crouter, & Booth, 2009). This may help explain why Millie’s interests were very

feminine (she has two sisters) and Rusty had traditionally masculine interests (his only sibling is a brother), while Gemma had a mostly gender neutral preference in video-games (her older brother shared her interest in these games). Gendered styles of play and communication emerge out of same-sex interactions. When Gemma felt a need to interact with her friends, despite being physically apart, she used email to talk and the conversation was about anything, as the purpose was on feeling connected to each other. Rusty used communication technology to share his favourite activity, gaming. Gaming is not experienced as a solitary activity by the majority of children. Nearly two-thirds of the children who played video-games in the survey, reported playing with others in the room and 58% played with friends online. Rusty communicated online with his friends only when it related to gaming. Video-games offer boys like Rusty a reason to socialise. Open-ended games, such as *Minecraft*, have been described as being the digital equivalent of people meeting together to play soccer (Goldberg & Larsson, 2014).

Children learn to internalise the value of activities through a process of socialisation (Deci & Ryan, 2000). Important figures for socialisation, such as parents and educators, can support children's motivation for literacy activities by recognising their needs for autonomy and developing competency (Reeve, Deci, & Ryan, 2004). This support covers providing both recognition of their literacy activities and products as socially valued (thereby meeting the need for relatedness), as well as providing the necessary material resources to enable exploration, performance, and production.

## **5.4 Sociocultural factors and everyday literacy practices**

### **5.4.1 Symbiotic relationship between school and out-of-school activities**

While the survey data did not allow inferences about the relationship between school and out-of-school literacy practices to be made, the relationship was discernible

from interview data. The affordances that the innovative learning environment (ILE) enabled the case study participants to explore the online world with ease, in their own time. Rusty, Gemma, and Millie all had a laptop which travelled with them to and from school each day and, because they all had internet connections at home, they could use their laptops for their own purposes, in addition to homework. All three used the school email as a way to communicate easily with friends from their class for leisure purposes and this appeared to be an accepted use by the children and the school.

They, also, referred to using practices and the technological skills they had learnt, at school, for their own purposes, at home. In her interview, Gemma described how her classroom environment was set up so that students, who needed help from the teacher, sent an email explaining what they needed help with and how urgent it was. This practice spilled over into Gemma's out-of-school practices and she reported emailing the IT help services of websites and apps she used. The extensive use of multi-media literacy activities in their school programme, also, made its way into Gemma's home literacy practices, with her recorded talk-show interview modelled from similar tasks at school. During the year, Rusty has developed a strong sense of competence and confidence with using ICT in his daily life; so much so that he stated on his survey that he could use an audio call app even though he hadn't used it. He stated

“Um, I can do that but I don't think I've done it, yet. I think I know how to do it. I think I randomly, one day, I don't know how, I think it came up [on his computer screen] and I saw it and thought – I can do that.”  
(Rusty)

This illustrates the potential of digital classrooms to create the kind of competent, confident digital citizens that the government is hoping to produce (New Zealand Government, 2013) and extends on McDowall's (2010) findings that academic type literacy activities can spill-over from classroom to home. With wide-ranging ICT



use across both settings, Rusty's confidence in his own ICT skills, honed through extensive practice at home, is likely to empower him and support his literacy practices in the classroom, as well.

#### **5.4.2 Modern cultural apprentices and the new literacies.**

Throughout the developed world, the proliferation of new technology has blurred the distinct boundaries between the public and private spheres which characterised the 20<sup>th</sup> century. For Millie, Rusty, and Gemma, the boundaries have become very porous and their personal laptops and iPads allow them access to the vast contents and range of activities of the internet. This lets them follow their interests across digital platforms and communicate and collaborate with friends and strangers.

But, as Gemma's case demonstrated, just because they can do these things doesn't mean they will. While Gemma was capable of creating a carefully scripted talk-show interview and using an online tool to record it, she did not share this in a public online forum like Rusty did, with his Let's Play video. She chose only to share this privately with her mother and friend's mother. Vygotsky believed that children come to incorporate what they see and do into their own thinking and behaviour (Corno & Mandinach, 2004). Gemma may not have people in her social circle of family and friends that upload videos to public forums, whereas Rusty does. The social network within which Rusty enjoyed gaming had practices and resources that supported his participation to play, to produce, and to share his own creative products online. Rusty had a friend with his own YouTube channel and this friend allowed Rusty to upload his videos on his channel.

Online practices are changing with each new wave of technology. In a 2006 research article, 32% of 8- to 18-year-olds reported creating a personal homepage and it

appeared to be a growing trend (Schmitt, Dayanim, & Matthias, 2008). Even as the research was conducted, the growing popularity of social networking sites with personalised profiles was taking place, and it is no longer as common to have a personalised webpage; no child in the current study reported creating one. Although the popularity of the personalised webpage has declined, the motivations for creating one haven't. The researchers stated that identity formation and expression were key reasons, whilst children who created a webpage had strong feelings of mastery (Schmitt et al., 2008). These psychological motivations are now finding other formats.

The popularity of YouTube makes video a dominant social practice in the everyday lives of children. This has brought new kinds of communicative practices and anyone with a computer, tablet, or smartphone capable of recording video can create and upload their own content. Many of the videos that become popular for children and youth are simply produced and have the feel of a combination between everyday informal registrars of speech and the speech of traditional television programmes. As evidenced in the survey and interviews, this is the most frequently used model of literacy children are consuming.

Sociocultural theories of learning posit that children learn to value the practices they experience and participate in (Corno & Mandinach, 2004). This means that it is likely that children who frequently choose to watch YouTube performers will start to internalise the value of these oral competencies. YouTube is a format that has a special power to shape what children value. Each video's viewing and subscription statistics are public and highly visible as they select the clip. The number of views per video is a key part of online discourse and a quick indicator for how engaging a video is. It also provides a sense of what is culturally valued and can possibly be seen by children as a source of model for children's own interpretations and performances.

It is evident by Rusty's keen participation in making Let's Play *Minecraft* and other gaming videos, that he had already internalised the value of the genre. Rogoff (1990) argued that children have the innate drive to acquire the skills necessary to participate in their community and will learn these by keen observation and practice. Rusty seemed to have modelled his videos and discourse from the ones he watched and the format, also, allowed him to watch the videos he makes to see if they were good enough products to share publicly, before he decided to upload them. This process of observing, modelling, approximation, and video feedback seemed to be an empowering informal learning method for him.

Posting such videos is a form of social performance delivered within a gameplay narrative and video-game platforms that give autonomy and control to the player provide a kind of theatre within which improvisation and drama can occur. For Rusty, the format allowed him to make choices about whether he videos alone or in collaboration with a friend. To collaborate, Rusty and his friend must have a shared understanding of the format, genre, and objective in making that particular video. By the way that Rusty described the videos, he clearly valued them. However, he did not want to share them as part of the research; it is likely that Rusty views them as having value and interest to a specific audience of gamers who share his interest, rather than a general audience.

Even though only a small proportion of children in the current research sample reported making and posting videos online, the practice may continue to grow as these formats become more prevalent in classrooms and everyday social contexts.

### 5.4.3 Funds of knowledge

Access to online content as well as traditional print and television media offers children a range of literacy experiences. Children are able to follow their interests across multiple formats, building bodies of specific content knowledge as well as a sense of competency in navigating across these mediums. Both Gemma and Rusty reported searching online to find information in text and video formats to assist them in their gameplay, and they seemed to have developed an understanding of what types of information are available on the internet and how they can search for it. They, also, demonstrated that children this age are, independently, searching and finding software tools that help them to perform specific tasks, as part of their interests.

Most children, who go online, consume a large amount of global popular culture content and those with YouTube accounts are learning skills such as how to manage content subscriptions. Through watching YouTube videos, the three children in the case study became familiar with certain creative genres of performance, such as skit performance that is theme based (Millie) and character based (Gemma), as well as Let's Play gaming genres (Rusty and Gemma). It is possible that children who choose to watch numerous videos that incorporate a lot of self-reflective narration may be building up more sophisticated theories of mind, which could contribute to social interactions and literacy development. More sophisticated understanding of humour can, also, be developed. The *Miranda Sings* videos that Gemma watched invite the viewer to take a critical stance on popular culture practices such as cyberbullying and the pursuit of fame, but it was unclear from the interview whether Gemma perceived these as satire or took them at face value.

Children who use social networking apps or websites are learning important lessons in managing online identities and social media etiquette (Marsh, 2011). These skills are likely to become increasingly important to them in their personal lives as they adopt the more social literacy activities and concerns of adolescence. Building social capital is an important developmental goal going into adolescence, with youth culture being characterised by extensive references to popular culture and the acquisition and use of these references being used to show an individual's belonging to their peer group (Moje et al., 2008). Popular culture is, also, becoming more recognised as a fund of knowledge to be drawn from as a way to link adolescents everyday understandings to more formal topics in the academic curriculum, especially when students are new to the discourse used in a discipline (Hall, 2011).

Gaming is such an engaging activity for many children this age and they can spend large amounts of time building detailed understandings of game-world narrative structures and within world logic. However, because of such a diversity of content, it can't be assumed that children are extending their skills and knowledge in ways significant to the school curriculum. There are many games and online activities that do not engage children on anything but a superficial level – for example, the dot game that Rusty played or the funny cat videos he watched. While, there is potential for significant funds of knowledge to be acquired by children watching YouTube content and pursuing other online activities, only detailed understandings of individual children's practices can reliably reveal what may contribute toward literacy development.

## **5.5 Implications**

Due to the changes in digital technologies and associated social practices, children's everyday literacy practices exist within a complex, ever-evolving social environment requiring a reconsideration of the role families and educators play in supporting literacy development. General strategies that have traditionally been used, such as the promotion of book reading and letter writing, still have their place. However, the multi-media environment now requires children to develop proficiencies in multi-literacies. Additionally, new multi-media technologies have allowed children to carve out their own particular set of niches in the digital world and their literacy practices can differ significantly from that of their peers. This means that more complex and personalised understandings of children's literacy activities are needed, in order to provide effective supports.

The differences found between Rusty and Millie's literacy practices highlight the influence that psychological and social factors can have. Rusty frequently engaged in many activities that supported his literacy, including novel reading, using a range of ICT apps and platforms to communicate with his friends and record his creative products, and pursuing his interests across formats (i.e., reading *Warriors* books then visiting the *Warriors* website, watching YouTube tutorials and reading wikis to support his *Minecraft* game-play). Rusty's strong interests in gaming and reading were well supported by his family and he had the resources and opportunities that enabled him to maintain his high levels of engagement and motivation in these activities. Millie, on the other hand, did not seem to experience similar levels of engagement. On the survey, she reported that she never engaged in any literacy practices, often. Despite a supportive family environment, Millie experienced leisure reading as frustrating and unengaging and rarely followed her interests across formats. She engaged in writing activities when she received high levels of support from family (e.g., homework, letter writing, and

social media). While holding positive attitudes to school and informal learning, school book lending practices and requirements for chapter books negatively impacted on Millie's leisure reading.

McTavish (2014) argues that children need time outside the boundaries of school to solidify conceptions of literacy. Equally, this would apply to online literacies, meaning that for children to fully appreciate the affordances of the internet and its contents, older children need extensive periods of free time for exploration. Free time and access, however, may not be the only thing that children this age need. Despite experiencing supportive family literacy practices and an innovative learning environment at school (as evidenced by the types of e-learning activities displayed on their individual school blog pages), the case study children did not explore the contents of the internet as widely as expected and showed a preference for a selected few YouTube channels and websites. It may be that the children need a scaffolding format to allow them to explore outside their trusted sources. When asked how the internet could be made better for children his age, Rusty said, "I guess they could put a thing like, um, recommendations maybe for five to seven, seven to nine, nine to eleven. They could do that. Like, make a bit of a list."

This gap in the range of content that many children actually search for and consume and the range of content that is available for this age group could potentially be bridged by existing information services such as public libraries. Preadolescent children still feel most comfortable with the familiar and value the security that their family and local community provide (Eccles, 1999). From the case study data, this appeared to be the case for online environments, as well. There seems to be evidence to support the need for an online platform that can offer children highly engaging content at their developmental level and can encourage children to follow their interests across

digital and print formats, create and safely share literacy and multi-media products, and links them to relevant activities in their local community.

This study raises issues for formal educational settings, as well. The popularity of video as a format for learning and creating raises questions about the value schools place on oral competencies. At the moment, the use of literacy benchmarks in primary schools have given primacy to reading, writing, and numeracy. It may be appropriate to adopt oral competencies as a core skill with the same value as reading and writing, as it is in Māori medium education.

The role of the teacher to children's everyday literacy practices may, also, need re-conceptualising. Traditionally, there has been a one-way flow of literacy activities and products. Teachers encourage families to support school literacy practices and content areas in the home but literacies and funds of knowledge particular to everyday settings rarely have been welcomed into the classroom. Recommendations from researchers have sought to redress this balance, with some cautions. While it can be beneficial for teachers to understand and value children's references to popular culture and use it to help children make connections between their personal funds of knowledge (Benson & Chik, 2014; Dyson, 2003; Hall, 2011), there are caveats to how this should best be done. McTavish (2014) argues against dragging in children's leisure activities and pedagogising them. Insights from this and other research investigating children's motivation and informal learning suggest that a more valuable role for teachers may be in the recognising and valuing the competencies that children gain from their informal literacy related activities, rather than knowledge of particular popular culture texts. When teachers take the time to learn about children's activities in terms of their developing skills and competencies, a powerful message is given about the value of the activities and the identity of the child as a competent, literate person.



## **5.6 Limitations and recommendations for future research**

There were several limitations in this research project. A major limitation was the homogeneity of the three children who participated in the case study compared to those who engaged in the survey. The three children were from families of Pākehā ethnicity, who were considered affluent and were able to provide their children with a range of resources and informal learning opportunities. All three children were from the same ILE multi-level learning hub, which was a new type of classroom environment for the school and required each student to own a digital device to be used across home and school settings. The case study children expressed a positive attitude toward technology and the ease that they could cross boundaries between home and school with online access. Thus, the survey gives insights into the reported experiences of children from a range of backgrounds while the case studies illuminate the experiences of a narrower groups of children and are not reflective of the wider surveyed group of children.

Moreover, survey participants were drawn from schools identified as mid-decile. Differences in income are associated with access to digital technology (i.e., rates of electronic ownership and internet connection). The extent to which children from higher income homes and lower income homes are included in the sample is not known. It is recommended that further research on children's everyday literacy practices be conducted with children from a more representative range of ethnicities and family backgrounds. Literacy is a social practice affected by a wide array of social and cultural factors, thus the results for this study are descriptive and illustrative of the characteristics of the participating sample.

## 5.7 Conclusion

This research project found that literacy is a cultural tool that children are using to enrich their own lives and develop competencies and skills relevant to their personal interests. Many children in the sample chose to engage in a range of literacy related activities across multiple formats. However, there appears to be a widespread preference for video formats such as YouTube. While book reading is still enjoyed by many, watching and talking activities were more popular than writing or reading in all formats except print books.

While technological changes have influenced the types of literacy related activities children find engaging and changed many of their literacy practices, they still have the same developmental needs and motivations. Children appear to value new content but familiar environments, the opportunity to participate in the wider world but from the safety of home and local community, and create products but only for a select audience. These contradictions suggest that children this age may need a supportive scaffold to help them incorporate a wider range of texts, formats, and practices into their everyday lives.

Research into the nature of children's everyday literacy practices allows the opportunity to review how we conceptualise literacy and the place they have, not only in children's lives outside of school, but within education, as well. By learning about, recognising and valuing everyday practices, there is potential for teachers and parents to support both children's literacy development and their identity as competent, literate people.

Understanding everyday literacies is an important field of study as new technologies continue to influence social practices. This is especially important in relation to children's literacy development. Public discourse on the literacies and competencies that children need to acquire in the 21<sup>st</sup> century continue to shape educational policy and practice. It is vital to understand children's everyday literacies in the contexts of wider social issues and how they enrich their lives and shape their educational opportunities. It is recommended that future research examine the level of access and range of literacy activities that children from a wide range of social and cultural backgrounds can and do engage in. All children should have access to the resources and support necessary to become fully literate.

## References

- Abuhamdeh, S., & Csikszentmihalyi, M. (2012). The importance of challenge for the enjoyment of intrinsically motivated, goal-directed activities. *Personality & Social Psychology Bulletin*, 38(3), 317-330. doi: 10.1177/0146167211427147
- Agee, J., Altarriba, J., Arnold, P., Meany, K., & Morton, S. (2009). Changing conceptions and uses of computer technologies in the everyday literacy practices of sixth and seventh graders. *Research in the Teaching of English*, 43(4), 363-396. doi: 10.2307/27784340
- Alvermann, D. E., Hagood, M. C., Heron-Hruby, A., Hughes, P., Williams, K. B., & Yoon, J. C. (2007). Telling themselves who they are: What one out-of-school time study revealed about underachieving readers. *Reading Psychology*, 28(1), 31-50.
- Antin, J., & Itō, M. (2010). *Hanging out, messing around, and geeking out : Kids living and learning with new media*. Cambridge, Mass: MIT Press.
- Apperley, T. (2014). Understanding digital games as educational technologies: Capitalizing on popular culture. In P. Benson & A. Chik (Eds.), *Popular culture, pedagogy and teacher education* (pp. 40-52). Abingdon, UK: Routledge.
- Apperley, T., & Walsh, C. (2012). What digital games and literacy have in common: A heuristic for understanding pupils' gaming literacy. *Literacy*, 46(3), 115-122. doi: 10.1111/j.1741-4369.2012.00668.x
- Arrow, A., & Finch, B. (2013). Multi-media literacy practices in beginning classrooms and at home: The differences in practices and beliefs. *Literacy*, 47(3), 131-141. doi: 10.1111/lit.12006
- Baiocco, R., D'Alessio, M., & Laghi, F. (2009). Discrepancies between parents' and children's attitudes toward TV advertising. *Journal of Genetic Psychology*, 170(2), 176-192. doi:10.3200/gntp.170.2.176-192
- Baker, L. (2003). The role of parents in motivating struggling readers. *Reading & Writing Quarterly: Overcoming Learning Difficulties*, 19(1), 87-106. doi: 10.1080/10573560308207
- Barton, D., & Hamilton, M. (1998). *Local literacies: Reading and writing in one community*. London, England: Routledge.
- Benson, P. (2014). Popular culture as education: how it teaches and how we learn. In P. Benson & A. Chik (Eds.), *Popular culture, pedagogy and teacher education* (pp. 11-25). Abingdon, England: Routledge.
- Benson, P., & Chik, A. (2014). *Popular culture, pedagogy and teacher education*. Abingdon, England: Routledge.

- Biddulph, F., Biddulph, J., & Biddulph, C. (2003). *The complexity of community and family influences on children's achievement in New Zealand: Best evidence synthesis*. Wellington, New Zealand: Ministry of Education.
- Bitar, A., Vernet, J., Coudert, J., & Vermorel, M. (2000). Longitudinal changes in body composition, physical capacities and energy expenditure in boys and girls during the onset of puberty. *European Journal of Nutrition*, 39(4), 157-163. doi: 10.1007/s003940070019
- Black, J., & Barnes, J. L. (2015). Fiction and social cognition: The effect of viewing award-winning television dramas on theory of mind. *Psychology of Aesthetics, Creativity, and the Arts*, 9(4), 423-429. doi: 10.1037/aca0000031
- Black, R. W. (2008). Just don't call them cartoons: The new literacy spaces of anime, manga, and fanfiction. In J. Coiro, M. Knobel, C. Lankshear & D. J. Leu (Eds.), *Handbook of research on new literacies* (pp. 583-610). New York, NY: Lawrence Erlbaum.
- Blackwell, C. K., Lauricella, A. R., Conway, A., & Wartella, E. (2014). Children and the internet: Developmental implications of web site preferences among 8-12 year old children. *Journal of Broadcasting & Electronic Media*, 58(1), 1-20.
- Blair, H. A., & Sanford, K. (2004). Morphing literacy: Boys reshaping their school-based literacy practices. *Language Arts* 81(6), 452-460. doi: 10.2307/41483434
- Bolstad, R., Gilbert, J., McDowall, S., Bull, A., Boyd, S., & Hipkins, R. (2012). *Supporting future-oriented learning & teaching: A New Zealand perspective*. Wellington, New Zealand: Ministry of Education.
- Braithwaite, I., Stewart, A. W., Hancox, R. J., Beasley, R., Murphy, R., & Mitchell, E. A. (2013). The worldwide association between television viewing and obesity in children and adolescents: Cross sectional study. *PLoS ONE*, 8(9), 1-8. doi: 10.1371/journal.pone.0074263
- Braun, L. W. (2007). *Teens, technology, and literacy; or, why bad grammar isn't always bad*. Westport, CT: Libraries Unlimited.
- Broadcasting Standards Authority. (2015). *Children's media use study*. Wellington, New Zealand: Author.
- Brooks, K. (2008). An impossible passion: young people, contemporary popular culture and reading. *Access*, 22(3), 19-28.
- Bulfin, S., & Koutsogiannis, D. (2012). New literacies as multiply placed practices: expanding perspectives on young people's literacies across home and school. *Language and Education*, 26(4), 331-346. doi: 10.1080/09500782.2012.691515
- Bus, A. G., & Neuman, S. B. (Eds.). (2009). *Multi-media and literacy development: improving achievement for young learners*. New York, NY: Routledge.

- Bus, A. G., van Ijzendoorn, M. H., & Pellegrini, A. D. (1995). Joint book reading makes for success in learning to read: A meta-analysis on intergenerational transmission of literacy. *Review of Educational Research*, 65, 1-21. doi: 10.3102/00346543065001001
- Byrnes, J. P., & Wasik, B. A. (2009). *Language and literacy development: What educators need to know*. New York, NY: Guilford Press.
- Cairney, T. H. (2005). Literacy diversity: Understanding and responding to the textual tapestries of home, school, and community. In J. Anderson, M. Kendrick, T. Rogers & S. Smythe (Eds.), *Portraits of literacy across families, communities, and schools: Intersections and tensions*. (pp. 41-61). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Carrington, V., & Dowdall, C. (2013). 'This is a job for Hazmat Guy!': Global media cultures and children's everyday lives. In K. Hall, T. Cremin, B. Comber & L. C. Moll (Eds.), *International handbook of research on children's literacy, learning, and culture* (pp. 96-107). Chichester, England: John Wiley & Sons.
- Catts, H. W., & Kamhi, A. G. (2005). *Language and reading disabilities* (2nd ed.). Boston, MA: Pearson.
- CensusAtSchool NZ. (2015). *CensusAtSchool NZ Questionnaire 2015*. Retrieved from <http://new.censusatschool.org.nz/wp-content/uploads/2013/01/CensusAtSchool-New-Zealand-2015.pdf>
- Chamberlain, M. (2013). *PIRLS 2010/11 in New Zealand: An overview of findings from the third cycle of the Progress in International Reading Literacy Study (PIRLS)*. Wellington, NZ: Ministry of Education. Retrieved from <http://www.educationcounts.govt.nz/publications/series/2539/114981/125051>
- Chapman, J. W., & Tunmer, W. E. (1995). Development of young children's reading self-concepts: An examination of emerging subcomponents and their relationship with reading achievement. *Journal of Educational Psychology*, 87(1), 154-167. doi: 10.1037/0022-0663.87.1.154
- Clark, C. (2014). *Children's and young people's reading in 2013*. National Literacy Trust. Retrieved from [http://www.literacytrust.org.uk/research/nlt\\_research/6078\\_childrens\\_and\\_young\\_peoples\\_reading\\_in\\_2013](http://www.literacytrust.org.uk/research/nlt_research/6078_childrens_and_young_peoples_reading_in_2013)
- Clark, J. (2014). Does New Zealand have a long tail of school underachievement? *New Zealand Principals' Federation Magazine*, 29(1), 17-22.
- Coiro, J., Knobel, M., Lankshear, C., & Leu, D. J. (Eds.). (2008). *Handbook of research on new literacies*. New York, NY: Lawrence Erlbaum Associates.
- Colmar Brunton Research & New Zealand Broadcasting Standards Authority. (2008). *Seen and heard: Children's media use, exposure, and response*. Retrieved from <http://bsa.govt.nz/images/assets/Research/Seen-and-Heard-Full-BSA2008.pdf>

- Conradi, K., Jang, B. G., & McKenna, M. C. (2014). Motivation terminology in reading research: A conceptual review. *Educational Psychology Review* 26(1), 127-164. doi: 10.1007/s10648-013-9245-z
- Corno, L., & Mandinach, E. B. (2004). What we have learned about student engagement in the past twenty years. In D. M. McInerney & S. Van Etten (Eds.), *Big theories revisited* (Vol. 4, pp. 299-328). Greenwich, CT: Information Age Publishing.
- Cresswell, J.W. (2015). *A concise introduction to mixed methods research*. London, England: Sage.
- Csikszentmihalyi, M. (2014). *Applications of flow in human development and education: The collected works of Mihaly Csikszentmihalyi*. Netherlands: Springer. doi: 10.1007/978-94-017-9094-9\_11
- Cushman, E., & Emmons, C. (2002). Contact zones made real. In G. A. Hull & K. Schultz (Eds.), *School's out!: Bridging out-of-school literacies with classroom practice* (pp. 203-232). New York, NY: Teachers College Press.
- Davies, J., & Merchant, G. (2014). Digital literacy and teacher education. In P. Benson & A. Chik (Eds.), *Popular culture, pedagogy and teacher education* (pp. 180-193). Abingdon, England: Routledge.
- De Naeghel, J., Van Keer, H., Vansteenkiste, M., & Rosseel, Y. (2012). The relation between elementary students' recreational and academic reading motivation, reading frequency, engagement, and comprehension: A self-determination theory perspective. *Journal of Educational Psychology*, 104(4), 1006-1021. doi: 10.1037/a0027800
- Deci, E. L., & Ryan, R. M. (2000). The 'What' and 'Why' of Goal Pursuits: Human Needs and the Self-Determination of Behavior. *Psychological Inquiry*, 11(4), 227-268. doi: 10.1207/s15327965pli1104\_01
- Denzin, N. K., & Lincoln, Y. S. (2008). *Collecting and interpreting qualitative materials* (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage Publications.
- Dyson, A. H. (1997). *Writing superheroes: Contemporary childhood, popular culture, and classroom literacy*. New York, NY: Teachers College Press.
- Dyson, A. H. (2003). *The brothers and sisters learn to write : popular literacies in childhood and school cultures*. New York, NY: Teachers College Press.
- Dyson, A. H. (2006). Foreword: Why popular literacies matter. In J. Marsh & E. Millard (Eds.), *Popular literacies, childhood and schooling*. London, England: Routledge.
- Eccles, J. S. (1999). The development of children ages 6 to 14. *Future of Children*, 9(2), 30-44.



- Ellis, S., & Coddington, C. S. (2013). Reading engagement research. In K. Hall, T. Cremin, B. Comber & L. C. Moll (Eds.) *International handbook of research in children's literacy, learning, and culture*. Chichester, England: John Wiley & Sons.
- Endestad, T., Heim, J., Kaare, B., Torgersen, L., & Brandtzæg, P. B. (2011). Media user types among young children and social displacement. *Nordicom Review*, 32(1), 17-30.
- Engeser, S. (2012). Comments on Schiefele and Raabe (2011): Flow is a multifaceted experience defined by several components. *Psychological Reports: Mental & Physical Health*, 111(1), 24-26. doi: 10.2466/04.22.pr0.111.4.24-26
- Epstein, I., Stevens, B., McKeever, P., & Baruchel, S. (2006). Photo elicitation interview (PEI): Using photos to elicit children's perspectives. *International Journal of Qualitative Methods*, 5(3), 1-9.
- Erikson, E. (1998). Eight stages of man. In C. L. Cooper & L. A. Pervin (Eds.), *Personality: Critical concepts in psychology* (pp. 67-77). London, England: Routledge.
- Fali, H., & Myoung-Jae, L. E. E. (2009). Does television viewing affect children's behaviour? *Pacific Economic Review*, 14(4), 474-501.
- Fontana, A., & Frey, J. H. (2008). The interview: From neutral stance to political involvement. In N. K. Denzin & Y. S. Lincoln (Eds.), *Collecting and interpreting qualitative materials* (3rd ed., pp. 115-160). Thousand Oaks, CA: Sage.
- Fox, K. R. (2013). Exploring literacy in our own backyard: Increasing teachers' understanding of literacy access through community mapping. *Journal of Praxis in Multicultural Education*, 8(2), 1-33. doi: 10.9741/2161-2978.1071
- Gee, J. P. (2003). *What videogames have to teach us about learning and literacy*. Houndmills, England: Palgrave Macmillan.
- Gee, J. P. (2008a). Being a lion and being a soldier: Learning and games. In J. Coiro, M. Knobel, C. Lankshear & D. J. Leu (Eds.), *Handbook of research on new literacies*. New York, NY: Lawrence Erlbaum.
- Gee, J. P. (2008b). Learning theory, video games, and popular culture. In K. Drotner & S. M. Livingstone (Eds.), *The international handbook of children, media and culture* (pp. 196-211). London, England: Sage Publications.
- Gilmore, A., & Smith, J. K. (2010). *NEMP Writing, Reading and Mathematics Report 2010*. Dunedin, New Zealand: Educational Assessment Research Unit, University of Otago. Retrieved from <http://nemp.otago.ac.nz/report/2010/NEMP%20Report%202010.pdf>



- Goldberg, D., & Larsson, L. (2014). *Minecraft: The real inside story of Markus 'Notch' Persson and the gaming phenomenon of the century*. London, England: Penguin Random House.
- González, N., Moll, L. C., & Amanti, C. (Eds.). (2005). *Funds of knowledge: Theorizing practices in households, communities, and classrooms*. Mahwah, NJ: L. Erlbaum Associates.
- Guthrie, J. T., Coddington, C. S., & Wigfield, A. (2009). Profiles of reading motivation among African-American and Caucasian students. *Journal of Literacy Research*, 41(3), 317-353. doi:10.1080/10862960903129196
- Guthrie, J. T., & Davis, M. H. (2003). Motivating struggling readers in middle school through an engagement model of classroom practice. *Reading & Writing Quarterly: Overcoming Learning Difficulties*, 19(1), 59-85. doi: 10.1080/10573560308203
- Guthrie, J. T., Hoa, L. W., Wigfield, A., Tonks, S. M., & Perencevich, K. C. (2006). From spark to fire: Can situational reading interest lead to long-term reading motivation? *Reading Research & Instruction*, 45(2), 91.
- Guthrie, J. T., & Knowles, K. T. (2001). Promoting Reading Motivation. In C. E. Snow & L. T. Verhoeven (Eds.), *Literacy and motivation: Reading engagement in individuals and groups*. Mahwah, NJ: L. Erlbaum Associates.
- Hall, K., Cremin, T., Comber, B., & Moll, L. C. (Eds.). (2013). *International handbook of research on children's literacy, learning and culture*. Chichester, England: Wiley-Blackwell.
- Hall, L. A. (2006). Anything but lazy: New understandings about struggling readers, teaching, and text. *Reading Research Quarterly*, 41(4), 424-426. doi: 10.1598/RRQ.41.4.1
- Hall, L. A. (2011). How popular culture texts inform and shape students' discussions of social studies texts: Adolescents draw on pop culture texts to inform their understandings of academic texts in ways that support and limit them. *Journal of Adolescent & Adult Literacy* 55(4), 296. doi: 10.1002/JAAL.00036
- Hamilton, M. (2006). Understanding the everyday: Adult lives, literacies, and informal learning. In A. McKeough, L. M. Phillips, V. Timmons & J. L. Lupart (Eds.), *Understanding literacy development: A global view*. Mahwah, NJ: L. Erlbaum Associates.
- Harper, D. (2002). Talking about pictures: A case for photo elicitation. *Visual Studies*, 17(1), 13-26. doi: 10.1080/14725860220137345
- Harris, S. (2011). *Too much internet use 'can damage teenagers' brains'*. Retrieved, 2014, from <http://www.dailymail.co.uk/sciencetech/article-2015196/Too-internet-use-damage-teenagers-brains.html>

- Henderson, R. (2011). Classroom pedagogies, digital literacies and the home-school digital divide. *International Journal of Pedagogies and Learning*, 6(2), 152-161. doi: 10.5172/ijpl.2011.6.2.152
- Honan, E. (2006). Deficit discourses within the digital divide. *English in Australia*, 41(3), 36-43.
- Hughes-Hassell, S., & Rodge, P. (2007). The leisure reading habits of urban adolescents. *Journal of Adolescent & Adult Literacy*, 51(1), 22-33. doi: 10.1598/jaal.51.1.3
- Hull, G. A., & Schultz, K. (Eds.). (2002). *School's out: Bridging out-of-school literacies with classroom practice*. New York, NY: Teachers College Press.
- Ito, M., Baumer, S., Bittanti, M., boyd, d., Cody, R., Herr-Stephenson, B., . . . Tripp, L. (2010). *Hanging out, messing around, and geeking out: Kids living and learning with new media*. Cambridge, MA: MIT Press.
- Ito, M., & Martin, C. (2013). Connected learning and the future of libraries. *Young Adult Library Services*, 12(1), 29-32.
- Jacobs, G. E. (2012). Rethinking common assumptions about adolescents' motivation to use technology in and out of school. *Journal of Adolescent & Adult Literacy*, 56(4), 271-274. doi: 10.1002/jaal.00139
- Jones, N. (2013). Schools cross the digital divide. *The New Zealand Herald*. Retrieved from <http://ezproxy.massey.ac.nz/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=anh&AN=HOBZNZHNZC-28Oct13-digital26&site=eds-live&scope=site>
- Juel, C. (1988). Learning to read and write: A longitudinal study of 54 children from first through fourth grades. *Journal of Educational Psychology*, 80(4), 437-447.
- Klauda, S. L. (2009). The role of parents in adolescents' reading motivation and activity. *Educational Psychology Review*, 21(4), 325-363. doi: 10.1007/s10648-009-9112-0
- Klingner, J. K., & Boardman, A. G. (2011). Addressing the "research gap" in special education through mixed methods. *Learning Disability Quarterly*, 34(3), 208-218.
- Knobel, M. (2006). Technokids, koala trouble and pokemon: Literacy, new technologies and popular culture in children's everyday lives. In J. Marsh & E. Millard (Eds.), *Popular literacies, childhood and schooling*. New York, NY: Routledge.
- Knobel, M., & Lankshear, C. (2008). Remix: The art and craft of endless hybridization. *Journal of Adolescent & Adult Literacy* 52(1), 22-33. doi: 10.1598/jaal.52.1.3

- Krashen, S., & McQuillan, J. (2007). The case for late intervention. *Educational Leadership*, 65(2), 68-73.
- Koolstra, C. M., van der Voort, T. H. A., & van der Kamp, L. J. T. (1997). Television's impact on children's reading comprehension and decoding skills: A 3-year panel study. *International Reading Association*, 32(2), 128-152.
- Lankshear, C. (2006). No single divide: literacies, new technologies and school-defined versus self-selected purposes in curriculum and pedagogy. In J. Marsh & E. Millard (Eds.), *Popular literacies, childhood and schooling* (pp. 111-127). London, England: Routledge.
- Lankshear, C. (2011). *New literacies* (3rd ed.). Berkshire, England: Open University Press.
- Lankshear, C., & Knobel, M. (2007). Researching new literacies: Web 2.0 practices and insider perspectives. *E-Learning*, 4(3), 224-240. doi: 10.2304/elea.2007.4.3.224
- Leander, K. M., & McKim, K. K. (2003). Tracing the everyday 'sittings' of adolescents on the internet: A strategic adaptation of ethnography across online and offline spaces. *Education, Communication & Information*, 3(2), 211-240. doi: 10.1080/1463631032000092037
- Lenters, K. (2007). From storybooks to games, comics, bands, and chapter books: A young boy's appropriation of literacy practices. *Canadian Journal of Education*, 30(1), 113-136. doi: 10.2307/20466628
- Leu, D. J., & Forzani, E. (2012). New literacies in a web 2.0, 3.0, 4.0, ...∞ world. *Research in the Schools*, 19(1), 75-81.
- Lewis, C., & Fabos, B. (2008). Instant messaging, literacies, and social identities. In J. Coiro, M. Knobel, C. Lankshear & D. J. Leu (Eds.), *Handbook of research on new literacies*. New York, NY: Lawrence Erlbaum Associates.
- Linebarger, D. L., Moses, A., Garrity Liebeskind, K., & McMenamin, K. (2013). Learning vocabulary from television: Does onscreen print have a role? *Journal of Educational Psychology*, 105(3), 609-621.
- Mackey, M., & Shane, M. (2013). Critical multimodal literacies. In K. Hall, T. Cremin, B. Comber & L. C. Moll (Eds.), *International handbook of research on children's literacy, learning, and culture* (pp. 15-27). Chichester, England: John Wiley & Sons.
- Mar, R. A., Oatley, K., Hirsh, J., dela Paz, J., & Peterson, J. B. (2006). Bookworms versus nerds: Exposure to fiction versus non-fiction, divergent associations with social ability, and the simulation of fictional social worlds. *Journal of Research in Personality*, 40(5), 694-712. doi: 10.1016/j.jrp.2005.08.002

- Marsh, J. (2003). One-way traffic? Connections between literacy practices at home and in the nursery. *British Educational Research Journal*, 29(3), 369. doi: 10.1080/01411920301857
- Marsh, J. (2006). Popular culture in the literacy curriculum: A Bourdieuan analysis. *Reading Research Quarterly*, 41(2), 160-174. doi: 10.1598/RRQ.41.2.1
- Marsh, J. (2009). New literacies, old identities: young girls' experiences of digital literacy at home and school. In C. Jackson, C. F. Paechter & E. Renold (Eds.), *Girls and education 3-16: Continuing concerns, new agendas*. Buckingham, England: Open University Press.
- Marsh, J. (2011). Young children's literacy practices in a virtual world: Establishing an online interaction order. *Reading Research Quarterly*, 46(2), 101-118. doi: 10.1598/rrq.46.2.1
- Marsh, J., & Millard, E. (Eds.). (2006). *Popular literacies, childhood and schooling*. London, England: Routledge.
- Martinez, R. S., Tolga Arricak, O., & Jewell, J. (2008). Influence of reading attitude on reading achievement: A test of the temporal-interaction model. *Psychology in the Schools*, 45(10), 1010-1022. doi: 10.1002/pits.20348
- McDowall, S. (2010). *Literacy teaching and learning in e-learning contexts: Report to the Ministry of Education*. Wellington, New Zealand: Ministry of Education.
- McHale, S. M., Dotterer, A. M., Kim, J.-Y., Crouter, A. C., & Booth, A. (2009). The development of gendered interests and personality qualities from middle childhood through adolescence: A biosocial analysis. *Child Development*, 80(2), 482. doi: 10.1111/j.1467-8624.2009.01273.x
- McKenna, M. C. (2001). Development of reading attitudes. In L. Verhoeven & C. E. Snow (Eds.), *Literacy and motivation: Reading engagement in individuals and groups*. Mahwah, NJ: Lawrence Erlbaum Associates.
- McKenna, M. C., Conradi, K., Lawrence, C., Jang, B. G., & Meyer, J. P. (2012). Reading attitudes of middle school students: Results of a U.S. survey. *Reading Research Quarterly*, 47(3), 283-306. doi: 10.1002/rrq.021
- McKenna, M. C., & Kear, D. J. (1990). Measuring attitude toward reading: A new tool for teachers. *Reading Teacher*, 43, 626-639. doi: 10.1598/rt.43.8.3
- McTavish, M. (2009). 'I get my facts from the internet': A case study of the teaching and learning of information literacy in in-school and out-of-school contexts. *Journal of Early Childhood Literacy*, 9, 3-28. doi: 10.1177/1468798408101104
- McTavish, M. (2014). "I'll do it my own way!": A young child's appropriation and recontextualization of school literacy practices in out-of-school spaces. *Journal of Early Childhood Literacy*, 14(3), 319-344. doi: 10.1177/1468798413494919

- Mellon, R. C., & Moutavelis, A. G. (2009). Parental educational involvement conceived as the arrangement of contingency operations. *Educational Psychology*, 29(6), 621-642. doi: 10.1080/01443410903165649
- Ministry of Education. (2007). *The New Zealand curriculum for English-medium teaching and learning in years 1–13*. Wellington, New Zealand: Learning Media.
- Ministry of Education. (2010). *The literacy learning progressions: Meeting the reading and writing demands of the curriculum*. Retrieved from <http://www.literacyprogressions.tki.org.nz/content/download/143/701/version/1/file/The%20Literacy%20Learning%20Progressions.pdf>
- Ministry of Education. (2012). *The definition of literacy*. Retrieved from <http://literacyonline.tki.org.nz/Literacy-Online/Secondary-Literacy/Teacher-needs/Pedagogy/Literacy-in-Secondary-School-Contexts/Introduction/The-definition-of-literacy>
- Moje, E. B. (2013). Hybrid literacies in a post-hybrid world: Making a case for navigating. In K. Hall, T. Cremin, B. Comber & L. C. Moll (Eds.), *International handbook of research on children's literacy, learning, and culture* (pp. 359-372). Chichester, England: John Wiley & Sons.
- Moje, E. B., Ciechanowski, K. M., Kramer, K., Ellis, L., Carrillo, R., & Collazo, T. (2004). Working toward third space in content area literacy: an examination of everyday funds of knowledge and discourse. *Reading Research Quarterly* 39(1), 38-70. doi: 10.1598/RRQ.39.1.4
- Moje, E. B., Overby, M., Tysvaer, N., & Morris, K. (2008). The complex world of adolescent literacy: Myths, motivations, and mysteries. *Harvard Educational Review*, 78(1), 107-154. doi: 10.17763/haer.78.1.54468j6204x24157
- Mol, S. E., & Bus, A. G. (2011). To read or not to read: A meta-analysis of print exposure from infancy to early adulthood. *Psychological Bulletin*, 137(2), 267-296. doi: 10.1037/a0021890
- Moll, L. C., Soto-Santiago, S. L., & Schwartz, L. (2013). Funds of knowledge in changing communities. In K. Hall, T. Cremin, B. Comber & L. C. Moll (Eds.), *International handbook of research on children's literacy, learning, and culture*. Chichester, England: John Wiley & Sons.
- Netsafe. (2014). *About Netsafe*. Retrieved 20/07/2014 from <http://www.netsafe.org.nz/>
- Newman, S. (2010). *Teens and the internet: How much is too much?* Retrieved from <http://www.psychologytoday.com/blog/stepmonster/201004/teens-and-the-internet-how-much-is-too-much>
- New Zealand Government. (2013). *Government responds on digital literacy*. Retrieved from <http://www.beehive.govt.nz/release/government-responds-digital-literacy>



- Olson, C. K. (2010). Children's motivations for video game play in the context of normal development. *Review of General Psychology*, 14(2), 180-187. doi: 10.1037/a0018984
- Pahl, K., & Burnett, C. (2013). Literacies in homes and communities. In K. Hall, T. Cremin, B. Comber & L. C. Moll (Eds.), *International handbook of research on children's literacy, learning, and culture* (pp. 3-14). Chichester, England: John Wiley & Sons.
- Pearson, C. (2010). Acting up or acting out? Unlocking children's talk in literature circles. *Literacy*, 44(1), 3-11. doi: 10.1111/j.1741-4369.2010.00543.x
- Powell, M. (2014). Media concepts and cultures: Progressing learning from and for everyday life. In P. Benson & A. Chik (Eds.), *Popular culture, pedagogy and teacher education* (pp. 55-68). Abingdon, England: Routledge.
- Reeve, J., Deci, E. L., & Ryan, R. M. (2004). Self-determination theory: A dialectical framework for understanding sociocultural influences on student motivation. In D. M. McInerney & S. Van Etten (Eds.), *Big theories revisited* (Vol. 4, pp. 31-60). Greenwich, CT: Information Age Publishing.
- Research New Zealand. (2014). *A report on a survey of New Zealanders' use of mobile electronic devices 2014*. Retrieved from [http://www.researchnz.com/pdf/Special%20Reports/ResearchNZ%20Special%20Report%20-%20NZrs\\_Device\\_Use\\_09-04-14.pdf](http://www.researchnz.com/pdf/Special%20Reports/ResearchNZ%20Special%20Report%20-%20NZrs_Device_Use_09-04-14.pdf)
- Rideout, V. J., Foehr, U. G., & Roberts, D. F. (2010). *Generation M2: Media in the lives of 8- to 18-year-olds*. Menlo Park, CA: Henry J. Kaiser Family Foundation. Retrieved from <http://files.eric.ed.gov/fulltext/ED527859.pdf>
- Robertson, L. A., McAnally, H. M., & Hancox, R. J. (2013). Childhood and adolescent television viewing and antisocial behavior in early adulthood. *Pediatrics*, 131(3), 439-446.
- Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in social context*. New York, NY: Oxford University Press.
- Rutar, T. (2013). Dystopian future of education in the knowledge society. *Journal of Contemporary Educational Studies / Sodobna Pedagogika*, 64(3), 10-22.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78. doi: 10.1037/0003-066X.55.1.68
- Sainsbury, M., & Clarkson, R. (2008). *Attitudes to reading at ages nine and eleven: Full report*. Slough, England: National Foundation for Educational Research. Retrieved from <http://www.nfer.org.uk/nfer/publications/RAQ01/RAQ01.pdf>
- Sanacore, J. (2013). "Slow down, you move too fast": Literature circles as reflective practice. *Clearing House*, 86(3), 116-120. doi: 10.1080/00098655.2013.773270

- Schellenberg, E. G. (2004). Music lessons enhance IQ. *Psychological Science*, 15(8), 511-514. doi: 10.1111/j.0956-7976.2004.00711.x
- Schmidt, J. A., Shernoff, D. J., & Csikszentmihalyi, M. (2014). Individual and situational factors related to the experience of flow in adolescence. In M. Csikszentmihalyi (Ed.), *Applications of flow in human development and education* (pp. 379-405). Springer Netherlands. doi: 10.1007/978-94-017-9094-9\_20
- Schmitt, K. L., Dayanim, S., & Matthias, S. (2008). Personal homepage construction as an expression of social development. *Developmental Psychology*, 44(2), 496-506. doi: 10.1037/0012-1649.44.2.496
- Sefton-Green, J. (2003). Informal learning: substance or style? *Teaching Education*, 14(1), 37-51. doi: 10.1080/10476210309391
- Serpell, R., Sonnenschein, S., Baker, L., & Ganapathy, H. (2002). Intimate culture of families in the early socialization of literacy. *Journal of Family Psychology*, 16(4), 391-405.
- Shapiro, J., & Whitney, P. (1997). Factors involved in the leisure reading of upper elementary school students. *Reading Psychology*, 18(4), 343-370. doi: 10.1080/0270271970180402
- Smith, J. A., Larkin, M. H., & Flowers, P. (2009). *Interpretative phenomenological analysis: Theory, method and research*. London, England: SAGE.
- Statistics New Zealand. (2013). 2013 *Census QuickStats about national highlights: Phone and internet access*. Retrieved from <http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-national-highlights/phones-internet-access.aspx>
- Strommen, L. T., & Mates, B. F. (2004). Learning to love reading: Interviews with older children and teens. *Journal of Adolescent & Adult Literacy* 48(3), 188-200. doi:10.1598/jaal.48.3.1
- Takeuchi, L. (2011). Kids closer up: Playing, learning, and growing with digital media. *International Journal of Learning & Media*, 3(2), 37-59. doi: 10.1162/ijlm\_a\_00068
- Taylor, S. J., Barker, L. A., Heavey, L., & McHale, S. (2013). The typical developmental trajectory of social and executive functions in late adolescence and early adulthood. *Developmental Psychology* 49(7), 1253-62. doi: 10.1037/a0029871
- Te Kete Ipurangi. (2014). *Instructional series*. Retrieved from <http://literacyonline.tki.org.nz/Literacy-Online/Teacher-needs/Instructional-Series>

- Te Riele, K., & Crump, S. (2003). Ongoing inequality in a 'Knowledge Economy': perceptions and actions. *International Studies in Sociology of Education*, 13(1), 55-75. doi: 10.1080/09620210300200103
- Tunmer, W. E., Chapman, J. W., Greaney, K. T., Prochnow, J. E., & Arrow, A. W. (2013). Why the New Zealand National Literacy Strategy has failed and what can be done about it: Evidence from the Progress in International Reading Literacy Study (PIRLS) 2011 and Reading Recovery monitoring reports. *Australian Journal of Learning Difficulties*, 18(2), 139-180.
- Vasudevan, L., Schultz, K., & Bateman, J. (2010). Rethinking composing in a digital age: Authoring literate identities through multimodal storytelling. *Written Communication*, 27(4), 442-468. doi: 10.1177/0741088310378217
- Villiger, C., Niggli, A., Wandeler, C., & Kutzelnmann, S. (2012). Does family make a difference? Mid-term effects of a school/home-based intervention program to enhance reading motivation. *Learning and Instruction*, 22(2), 79-91. doi: 10.1016/j.learninstruc.2011.07.001



## Appendix A: Survey Questions

1. Are you a boy or girl?

☐ Girl

☐ Boy

2. How old are you?

☐ 8 years old

☐ 9 years old

☐ 10 years old

☐ 11 years old

☐ 12 years old

3. What is your ethnicity? You can tick more than one.

☐ New Zealand European / Pakeha

☐ Maori

☐ Samoan

☐ Cook Island Maori

☐ Tongan

☐ Niuean

☐ Tokelauan

☐ Fijian

☐ Asian

☐ Chinese

☐ Indian

☐ Don't know

☐ Other (please write)

4. When you are not at school, what do you spend a lot of time doing? (Choose up to 5)

- |  |   |
|--|---|
| <input type="checkbox"/> TV / movies   | <input type="checkbox"/> Reading  |
| <input type="checkbox"/> Video games   | <input type="checkbox"/> Being with friends                               |
| <input type="checkbox"/> Computer or other device                                  | <input type="checkbox"/> Being with family                                |
| <input type="checkbox"/> Team sport  | <input type="checkbox"/> Homework / extra lessons                         |
| <input type="checkbox"/> Sport with friends / family                               | <input type="checkbox"/> Listening to music                               |
| <input type="checkbox"/> Watching sport  | <input type="checkbox"/> Lessons - dance / art / swimming / music         |
| <input type="checkbox"/> Doing jobs / work   | <input type="checkbox"/> Groups - kapa haka / cubs / guides / youth group |
| <input type="checkbox"/> Looking after others                                      | <input type="checkbox"/> Waiting  |
| <input type="checkbox"/> Religious activities e.g prayer, church, temple or mosque | <input type="checkbox"/> Do not want to answer                            |
| <input type="checkbox"/> Other (please write)                                      |   |

5. Do you enjoy reading?

<i>Hate reading</i>				<i>Love reading</i>
1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. How often do you **choose** to read in your own time?

<i>Never</i>	<i>Hardly ever</i>	<i>1-2 days a week</i>	<i>Most days</i>	<i>Every day</i>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. Do you enjoy writing?

<i>Hate writing</i>				<i>Love writing</i>
1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. Which items can you use every week in your own time?

- ☐ Computer
- ☐ I-Pad or tablet
- ☐ Gaming consoles (e.g. X-Box, Wii, Playstation)
- ☐ Pens, pencils and paper
- ☐ I-Pod or MP3 player
- ☐ Mobile phone
- ☐ Smartphone with internet
- ☐ TV
- ☐ CD or music player
- ☐ Books
- ☐ Magazines
- ☐ Internet

9. Please tick how often you choose to do these things in your own time:

	Never	Sometimes	Often
Read books	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Read e-books	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Read comics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Read manga / graphic novels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Watch videos on YouTube	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Watch the same DVD more than once	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Watch the 'making of the movie' part at the end of a DVD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. How much time do you spend watching TV or movies?

	None	Less than 1 hour	1 hour	2-3 hours	More than 3 hours
On school days	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
On weekend days	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. How much time do you spend using devices? (computers, Xbox, Playstation, iPod, mobile phones,iPad, tablets)

	None	Less than 1 hour	1 hour	2-3 hours	More than 3 hours
On school days	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
On weekend days	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. Please tick how often you choose to do these things in your own time:

	Never	Sometimes	Often
Text message on phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instant message online	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Read on Facebook	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Write on Facebook	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Download music	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use Twitter	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Read blogs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Write blogs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13. How about these things?

Tick how often you choose to do these things in your own time:

	Never	Sometimes	Often
Email	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Talk on phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Skype or video call	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Post videos on YouTube	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Read the comments on websites	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Write comments on websites	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Write a diary or journal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Write letters	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please list any other reading, writing or talking activities you do:

14. What interests do you have? They can be anything (but not devices e.g. iPad or computer). You can add up to six. Here are some examples: *Playing rugby, a type of dancing, kapa haka, drawing, Warriors fan, gaming, X-Factor, hot rods, hunting, music, writing stories, Minecraft, Lego, horses, skateboarding, collecting something, singing....*

**Interest 1:**

**Interest 2:**

**Interest 3:**

**Interest 4:**

**Interest 5:**

**Interest 6:**

15. You said you liked these interests. Do other people you know have the same interests?

	Friend	Mum or Dad	Brother/Sister Cousin	Aunt/Uncle Grandparent	Club or Team	Someone else I know
[Q14]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[Q15]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[Q16]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[Q17]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[Q18]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[Q19]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16. You said you liked these interests. Tick if you do these things about your interests:

	Read book, magazine/newsletter	Read on device	Write something	Watch video, YouTube	Make video, YouTube
[Q14]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[Q15]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[Q16]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[Q17]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[Q18]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[Q19]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

17. If you want to find out more about something you are interested in, what do you do?

- ☐ Ask another kid
- ☐ Ask an adult or coach
- ☐ Find a book or magazine
- ☐ Look on the internet
- ☐ Nothing
- ☐ Something else - please write what you do

18. Do you enjoy video games?

- ☐ Yes
- ☐ No

19. What are your favourite video games? (list up to 5)

1

2

3

4

5

20. Do you do these things while you play video games?

- ☐ Mostly play by yourself
- ☐ Play with friends or family in the same room
- ☐ Play online with friends
- ☐ Play online with others you know
- ☐ Play online with people you have not met
- ☐ Talk to other players online
- ☐ Read tips or cheats
- ☐ Read / write messages to other players

21. What are your favourite websites? (list up to 5)

1	
2	
3	
4	
5	

22. I would read more if:

- ☐ I had more books or magazines
- ☐ I had more free time
- ☐ I could find an interesting book
- ☐ I could get books from the library
- ☐ I had more time on a device, e.g. computer, iPad.....
- ☐ None of these - I don't want to read more

Other (please write)

--

23. I would write more if:

- ☐ I had more free time
- ☐ I had more time on a device e.g. computer, iPad.....
- ☐ I could share it with others
- ☐ I had ideas or things to write about
- ☐ None of these - I don't want to write more

Other (please write)

24. Would you like to talk to me about what you enjoy doing when you are not at school? I will need to visit you at home or afterschool care, and your parent or caregiver will need to fill in a form.

- ☐ Yes
- ☐ No

25. What is your name?



## Appendix B: Case Study Photography Guidelines

# ***Literacy Practices of Children at Home***

## **Taking Photos for the Discussion**

I would like you to take photos of the things you enjoy doing in your own time, when you are not at school.

These photos will help us to talk about the things you like doing. We will look at them together and talk about what is happening in the photos.

Research photos are different from the photos you take for your own use. You will need to respect other people's privacy – they may not want to have you share their picture and be talked about by a stranger.

### **Here are some guidelines for taking photos for our talk:**

- Before you take photos of other people, ask their permission.
- If other people are in the photos, check with them if it is okay for you to share them as part of our talk.
- Try to get photos of other people facing away from the camera or not including head shots.
- Make sure any people in your photos are fully dressed – that includes yourself.

I will show you how to delete any photos that you do not want to share. You may want to practice taking some photos and deleting them before you begin.

Is there anything else you would like to know about taking the photos?

## Appendix C: Case Study Interview Schedule

### Interview Schedule

Last week, you took some photos of the things you enjoy doing in your own time. Let's take a look at those now.

**Question 1:** Tell me about this photo. Why did you take this picture?

**Question 2:** Do you share your interest in (*insert interest*) with someone else, like your friends or family? Tell me more.

**Question 3:** When you want to learn more about (*insert interest*), what do you do?  
Who helps you?

**Question 4:** You said you enjoy (*e.g. video games*). What is it about them that you enjoy?  
Is reading and writing a part of this activity? How?

**Question 5:** Do you have any favourite TV shows or characters from TV, books or movies?  
Do you ever search for more information, books or videos about them? Tell me some more about that.

**Question 6:** You said you enjoy visiting (*insert website*). How did you find out about this website? What kinds of things make a good website?

**Finish interview with a review of survey responses and clarify any points not already discussed.**

## ***Children's Home Literacy Practices Survey***

### **INFORMATION SHEET FOR CHILDREN & PARENTS/GUARDIANS**

You are invited to be part of a research project by Susan Cummings, a student of the Institute of Education at Massey University.

The purpose of this project is to find out what activities children like to do when they are not at school and whether reading or writing are a part of these activities.

Technology such as computers, video-games, and other digital devices have changed children's daily lives. This project involves completing a short survey about the things you enjoy doing in your own time.

All children in your class have been invited to do the survey. You can choose whether you want to take part. Read all the information on this sheet with your parent or guardian.

#### **About the survey:**

The survey will be done on computers during class time.

It will take about 15-20 minutes to finish.

There are no right or wrong answers to the questions – this is **not** a test.

You can stop doing the survey at any time.

If you do not want to answer a question, you can skip to the next question.

Your answers will only be seen by me.

You do not have to give your name.

If you do not want to do the survey, tell your teacher. Your teacher will have another activity for you to do on the computer.

You may wish to talk with your parents or guardian before you decide you want to do the survey.

#### **Further information for Parents/Guardians:**

The information from the survey is confidential and will be kept by Massey University in a safe and secure place for about 3 years, before being destroyed.

After the survey, a short report about the results for the whole class will be given to the school. Individual children will not be named or identified, in any way, in this report. If you would like a copy of this report, please remove the form at the bottom of this page and return it to the class teacher.

Information from this study will be used to complete an academic research project. You and your child are free to choose not to participate in this survey, at any stage. Please let the classroom teacher or researcher know, if you do not want your child to be involved.

If you have any questions that you want to ask me, at any stage, please email me at \_\_\_\_\_ or telephone \_\_\_\_\_.

You can also contact the research supervisors:

Brian Finch  
Telephone: (06) 356 9099 ext. 84459  
Email: [B.T.Finch@massey.ac.nz](mailto:B.T.Finch@massey.ac.nz)

Tara McLaughlin  
Telephone: +64 (06) 356 9099 ext. 84312  
Email: [T.W.McLaughlin@massey.ac.nz](mailto:T.W.McLaughlin@massey.ac.nz)

*This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 14/53. If you have any concerns about the conduct of the research, please contact Prof John O'Neill, Acting Chair, Massey University Human Ethics Committee: Southern B, telephone 06 350 5799 x 81090, email [humanethicsouthb@massey.ac.nz](mailto:humanethicsouthb@massey.ac.nz).*



If you would like a copy of the whole class report, please tick the box and return this to the classroom teacher.

☐

Yes, I would like a copy

Child's Name: \_\_\_\_\_

## ***Children's Home Literacy Practices Survey***

### **INFORMATION SHEET**

You are invited to be part of a research project by Susan Cummings, a student of the Institute of Education at Massey University.

The purpose of this project is to find out what activities children like to do when they are not at school and whether reading or writing are a part of these activities.

Technology such as computers, video-games, and other digital devices have changed children's daily lives. This project involves completing a short survey about the things you enjoy doing in your own time.

All children in your class have been invited to do the survey. You can choose whether you want to take part. If you would like to do the survey, show your parent or guardian this information sheet and the consent form. They will need to sign the consent form before you return it to your teacher.

### **About the Survey**

The survey will be done on computers during class time.

It will take about 15-20 minutes to finish.

There are no right or wrong answers to the questions – this is **not** a test.

You can stop doing the survey at any time.

If you do not want to answer a question, you can skip to the next question.

You do not have to give your name.

Your answers will only be seen by me.

If you do not want to do the survey, your teacher will have another activity for you to do on the computer.

You may wish to talk with your parents or caregivers before you decide you want to do the survey.

### **Further information for Parents/Guardians**

The information from the survey is confidential and will be kept by Massey University in a safe and secure place for about 3 years, before being destroyed.

After the survey, a short report about the results for the whole class will be given to the school. Individual children will not be named or identified, in any way, in this report. If you or your parent/guardian would like a copy of this report, please tick the box on the attached consent form.

Information from this study will be used to complete an academic research project. If you have any questions that you want to ask me, at any stage, please email me at \_\_\_\_\_ or telephone \_\_\_\_\_.

You can also contact the research supervisors:

Brian Finch  
Telephone: (06) 356 9099 ext. 84459  
Email: [B.T.Finch@massey.ac.nz](mailto:B.T.Finch@massey.ac.nz)

Tara McLaughlin  
Telephone: +64 (06) 356 9099 ext. 84312  
Email: [T.W.McLaughlin@massey.ac.nz](mailto:T.W.McLaughlin@massey.ac.nz)

*This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 14/53. If you have any concerns about the conduct of the research, please contact Prof John O'Neill, Acting Chair, Massey University Human Ethics Committee: Southern B, telephone 06 350 5799 x 81090, email [humanethicsouthb@massey.ac.nz](mailto:humanethicsouthb@massey.ac.nz).*

## Appendix F: Survey Consent Form – Active Consent

***Literacy Practices of Children at Home*****PARENT/GUARDIAN SURVEY CONSENT FORM**

I have read the Information Sheet that was given to my child and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions, at any time.

I agree that my child is able to participate in this study under the conditions set out in the Information Sheet.

☐

Yes, I would like a copy of the one-page report that will be given to the school. *(Please tick box)*

**Signature:**

**Date:**

**Full Name - printed**

**Child's Name:**

**Relationship to Child:**

## Appendix G: Board of Trustees Information Sheet

***Literacy Practices of Children at Home*****BOARD OF TRUSTEES INFORMATION SHEET**

My name is Susan Cummings and I am a postgraduate student completing a Master of Educational Psychology degree at Massey University. I would like to invite two of your senior classes to participate in a research project that explores children's everyday literacy practices.

**The Study**

The purpose of this project is to find out what activities children like to do when they are not at school and whether reading, writing or other literacy activities are involved. A child's literacy development is significantly affected by factors that exist outside school. Technology such as computers, video-games, and other digital devices have changed children's daily lives. This project aims to develop a deeper understanding of how children who attend low to mid-decile schools follow their interests across different media in the contemporary environment.

I am looking for two schools with two Year 6 or composite Year 5/6 classrooms to participate by completing a short online questionnaire about the types of literacy activities they choose to do during their everyday life. The survey should take only 15-20 minutes to finish and provides children with an opportunity to reflect on their out-of-school literacy practices in a positive way.

**Research Procedure and Consent Process**

The research procedure involves completing a questionnaire on computers or tablets during class time. This is to encourage as many students as possible to participate and ensure that there is a broad cross-section of children in the sample. Children's participation in the study is voluntary and they will only take part once parental consent is gained. For children not participating in the study, it is hoped that the classroom teacher will be able to provide another suitable computer activity for them to complete at the time the survey is administered.

In the week before the survey is due to be administered, I will visit the classroom when the teacher introduces the research project so that I can explain it in more detail and answer any questions that the children may have. I will provide the teacher with Information Sheets and Consent Forms to be given to children to take home and read with their parents or caregivers. These will have my contact details included so that parents/caregivers can ask for more information, if desired. *It is the school's decision whether active or passive consent is needed for students to participate in this survey.*



It is anticipated that no harm will occur to children during this study. The school and individual children will be free to withdraw from the study, at any time, and children will be told that they can choose not to answer any of the questions by skipping to the next one, if they wish to do so. They will be advised that there are no right or wrong answers to the survey questions.

It will be made clear to children that they do not have to give their name during the survey, unless they choose to opt into the next phase of the study, which is a case study. The case study involves an informal discussion in their home or other out-of-school setting and will be conducted independently of the school. I will provide Information Sheets and Consent Forms for the case study for children to take home only for those who have opted in on the survey.

After the study is completed, a short report of the whole class results will be provided to the school. Individual children will not be able to be identified in this report. Parents/whanau can request a copy of the report by ticking a box on the parental consent form.

Research data for participants from different ethnicities or the two participating schools will not be used to compare groups and analysis of data will be descriptive. All precautions will be taken to ensure individual responses remain confidential and children's individual answers will only be seen by the researcher. Documents relating to the research process will be kept for three years within secure storage, before being shredded.

A small koha to your school/classroom library would be offered as recognition of your participation in this project, if you choose to be involved.

### **Further Information**

If you would like more information before making a decision to participate or have any questions, at any stage, please contact me by email \_\_\_\_\_ or telephone \_\_\_\_\_.

You can also contact the research supervisors:

Brian Finch  
Telephone: (06) 356 9099 ext. 84459  
Email: [B.T.Finch@massey.ac.nz](mailto:B.T.Finch@massey.ac.nz)

Tara McLaughlin  
Telephone: +64 (06) 356 9099 ext. 84312  
Email: [T.W.McLaughlin@massey.ac.nz](mailto:T.W.McLaughlin@massey.ac.nz)

*This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 14/53. If you have any concerns about the conduct of the research, please contact Prof John O'Neill, Acting Chair, Massey*

*University Human Ethics Committee: Southern B, telephone 06 350 5799 x 81090, email [humanethicsouthb@massey.ac.nz](mailto:humanethicsouthb@massey.ac.nz).*

## Appendix H: Teacher Information Sheet

***Literacy Practices of Children at Home*****TEACHER INFORMATION SHEET**

My name is Susan Cummings and I am a postgraduate student completing a Master of Educational Psychology degree at Massey University. I would like to invite your class to participate in a research project that explores children's everyday literacy practices.

**The Study**

The purpose of this project is to find out what activities children like to do when they are not at school and whether reading, writing or other literacy activities are involved. A child's literacy development is significantly affected by factors that exist outside of school. Technology such as computers, video-games, and other digital devices have changed children's daily lives. This project aims to develop a deeper understanding of how children follow their interests across different media in the contemporary environment.

Participating Year 6 classrooms will complete a short online questionnaire about the types of literacy activities they choose to do during their everyday life. The survey should take only 15-20 minutes to finish and provides children with an opportunity to reflect on their out-of-school literacy practices in a positive way.

**Research Procedure and Consent Process**

The research procedure involves completing a questionnaire on computers or tablets during class time. This is to encourage as many students as possible to participate and ensure that there is a broad cross-section of children in the sample. Children's participation in the study is voluntary and they will only take part once parental consent is gained. For children not participating in the study, it is hoped that you will be able to provide another suitable computer activity for them to complete at the time the survey is administered.

In the week before the survey is due to be administered, I will visit the classroom when you introduce the research project so that I can explain it to the children in more detail and answer any questions that they may have. I will provide Information Sheets and Consent Forms to be given to children to take home and read with their parents or caregivers. These will be written in child friendly language and will have my contact details included so that parents/caregivers can ask for more information, if desired. The decision whether to gain active or passive consent will be made by your school's Principal/Board of Trustees.

It is anticipated that no harm will occur to children during this study. The school and individual children will be free to withdraw from the study, at any time, and children will be told that they can choose not to answer any of the questions by skipping to the

next one, if they wish to do so. They will be advised that there are no right or wrong answers to the survey questions.

It will be made clear to children that they do not have to give their name during the survey, unless they choose to opt into the next phase of the study, which is a case study. The case study involves an informal discussion in their home or other out-of-school setting and will be conducted independently of the school. I will provide Information Sheets and Consent Forms for the case study for children to take home, only for those who have opted in on the last question of the survey.

After the study is completed, a short report of the whole class results will be provided to you. Individual children will not be able to be identified in this report. Parents/whanau can request a copy of the report by ticking a box on the parental consent form.

Research data for participants from different ethnicities or the different participating schools will not be used to compare groups. Analysis of data will be descriptive only. All precautions will be taken to ensure individual responses remain confidential. Children's individual answers will only be seen by the researcher. Documents relating to the research process will be kept for three years within secure storage, before being shredded.

### **Further Information**

If you would like more information or have any questions, at any stage, please contact me by email \_\_\_\_\_ or by telephone \_\_\_\_\_ .

You can also contact the research supervisors:

Brian Finch  
Telephone: (06) 356 9099 ext. 84459  
Email: [B.T.Finch@massey.ac.nz](mailto:B.T.Finch@massey.ac.nz)

Tara McLaughlin  
Telephone: +64 (06) 356 9099 ext. 84312  
Email: [T.W.McLaughlin@massey.ac.nz](mailto:T.W.McLaughlin@massey.ac.nz)

*This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 14/53. If you have any concerns about the conduct of the research, please contact Prof John O'Neill, Acting Chair, Massey University Human Ethics Committee: Southern B, telephone 06 350 5799 x 81090, email [humanethicsouthb@massey.ac.nz](mailto:humanethicsouthb@massey.ac.nz).*

## Appendix I: Case Study Parent Information Sheet

## ***Literacy Practices of Children at Home*** ***Discussion***

### **INFORMATION SHEET**

You are invited to be part of a case study research project by Susan Cummings, a student of the Institute of Education at Massey University.

The purpose of this project is to find out what activities children like to do when they are not at school, and whether reading or writing are a part of these activities.

#### **What does the case study involve?**

The case study involves two parts:

Part 1: You get to take photos of the things you enjoy doing in your own time.

Part 2: I will visit you at your home or out-of-school setting to talk about the photos you have taken and the activities you enjoy doing. This is a very relaxed talk and there are no right or wrong answers to the questions asked.

#### **Part 1 – Taking the Photos**

In the week before the discussion, you will be asked to take photos of the activities you usually enjoy doing in your spare time. These photos are only going to be used by you to help you show me what you enjoy doing. You will keep the photos.

If you do not have a camera to use, you can borrow one from me for the week. It will be a camera made for children, so it will be easy to use and will have a protective case to keep it safe.

#### **Part 2 – Discussion**

- The discussion will take between 45 – 60 minutes (no longer than 90 minutes).
- You are free to stop the discussion, at any time.
- You can choose not to answer any question.
- You can have any people you want at the discussion with you, including your parent, other whanau/family, or your friend.
- I will bring a snack you can have during the discussion.

- To help me remember what we talked about, a sound recording will be made. After the discussion, the researcher will type it into a written record before deleting the recording. You can ask that the recording be stopped or have parts deleted, at any time.
- You will be asked to choose a pretend name for the project (for example, this could be a favourite TV or book character). To protect your privacy, everything written about the project will use this pretend name instead of your real name.
- The information you share as part of this project will be confidential.
- All written information will be kept by Massey University in a safe and secure place for 3 years, before it is destroyed.
- You may wish to talk with your parents or caregivers about this project before you decide to take part. Read through the information on this sheet together, so that you both understand what will be involved.

If you or your whanau/family would like a short written summary of the discussion, please let me know by ticking the box on the consent form. I will send you a copy.

### Further Information

If you have any questions or would like any more information, at any stage, please contact the researcher:

Susan Cummings  
Telephone: \_\_\_\_\_  
Email: \_\_\_\_\_

Or, the research supervisors:

Brian Finch  
Telephone: (06) 356 9099 ext. 84459  
Email: [B.T.Finch@massey.ac.nz](mailto:B.T.Finch@massey.ac.nz)

Tara McLaughlin  
Telephone: +64 (06) 356 9099 ext. 84312  
Email: [T.W.McLaughlin@massey.ac.nz](mailto:T.W.McLaughlin@massey.ac.nz)

*This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 14/53. If you have any concerns about the conduct of the research, please contact Prof John O'Neill, Acting Chair, Massey University Human Ethics Committee: Southern B, telephone 06 350 5799 x 81090, email [humanethicsouthb@massey.ac.nz](mailto:humanethicsouthb@massey.ac.nz).*

## Appendix J: Case Study Parent Consent Form

***Literacy Practices of Children at Home*****PARENT/GUARDIAN CASE STUDY CONSENT FORM**

I have read the Information Sheet that was given to my child and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree that my child can participate in this study under the conditions set out in the Information Sheet.

I agree to my child taking photographs of their leisure activities for the purposes described in the Information Sheet and for the discussion between my child and the researcher to be sound recorded.

☐ I would like a written summary of the discussion. (Please tick box)

**Signature:**

**Date:**

**Full Name - printed**

**Child's Name:**

**Relationship to Child:**