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Digital Portfolios: Engaging Parents to Support Early Learning

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Abstract

Although connections between school and home have been shown to positively impact student learning, it can be challenging for parents and teachers to build relationships and engage in effective two-way communication. This study examined the potential of using digital portfolios to communicate student learning and strengthen the relationship between teachers and parents. Personalized learning goals, evidence of progress through notes, photographs and videos, along with timely access to assessment data, make digital portfolios a viable option to narrow the home-school gap. Moreover, the digital portfolio becomes a virtual space where parents, students and teachers can communicate in a timely manner focused on individual learner strengths and needs. Digital portfolios are being increasingly used by school districts throughout Canada to supplement or replace paper report cards; however, there is limited research available to inform their use.

Through a qualitative case study, this research gathered insight into how digital documentation might improve parent engagement and influence early literacy learning. Participants included six parents from a grade one/two classroom in a large school district in British Columbia where digital portfolios are used as a formal reporting tool. Drawing on an ecological theory of development and sociocultural view of learning, the researcher examined parents’ perceptions of digital portfolios as a means to support learning at home and communicate with their child’s teacher. Data were gathered through an online survey, semi-structured interviews and portfolio artifacts.

The findings suggest that parents appreciate the virtual window into the classroom offered by digital portfolios, as it allows them to feel more connected and engage in conversations about school with their child. As a platform to support learning, the findings reveal
the importance of portfolio documentation. Without personalized feedback and curriculum connections in parent-friendly language, digital portfolios can be viewed as a scrapbook and under-valued as an assessment platform. Although the results suggest digital portfolios have the potential to improve parent engagement, more research is needed to determine how they might be used effectively to address specific learning goals. This study provides initial recommendations for educators, suggestions for future research and digital portfolio samples.
Lay Summary

This is a qualitative case study that explores the relationship between digital portfolios and parent engagement in elementary school. Parent perspectives of digital portfolios as a communication tool and resource to support learning at home were gathered through an online survey, semi-structured interviews and portfolio evidence. Although research clearly supports the positive role of parent engagement in student learning, and many school districts are using digital portfolios, there are limited studies available to guide teachers as they post evidence of learning and share portfolios with parents. This study offers valuable insight into the potential for new tools such as digital portfolios to improve student learning by engaging parents and building stronger connections between schools and home.
Preface

This thesis is original, unpublished, independent work by the author, K. Fadum.
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Chapter 1: Introduction

1.1 Introduction

“The evidence is consistent, positive, and convincing: families have a major influence on their children’s achievement in school and through life” (Henderson & Mapp, 2002, p. 7). Research has shown that communication between school and home positively impacts students social, emotional and academic success (Cary, 2006; Cheung & Pomerantz, 2011; Sanders, 2008). However, effective strategies to promote and maintain purposeful communication remain a challenge in many schools (Chavkin & Williams, 1993; Dearing, Kreider, Simpkins, & Weiss, 2006; Egbert & Salsbury, 2009; Fan & Chen, 2001; Epstein, 2013; Patall, Cooper, & Robinson, 2008). Epstein et.al. (2018, p. 13), state that “just about all teachers and administrators would like to involve families, but many do not know how to go about it.” Advances in technology offer new possibilities to foster school-home relationships where reciprocity and collaboration take precedence over one-way information-giving and distinct roles that persist in many situations (Goodwin & King, 2002; Richards, Brown, & Forde, 2007). Moreover, digital tools offer an opportunity for teachers to share resources and evidence of learning in ways that support parents as they guide learning at home (Goodall, 2016; Passey, 2011) and in turn, parents have an opportunity to provide meaningful insight for teachers. Research in the area of early literacy, for example, suggests that a child’s literacy development is inextricably connected to their daily lives and family literacy practices where culture, socio-economics, values and beliefs guide an individual’s pathway to literacy (Heath, 1983; McTavish, 2007; Purcell-Gates, 1996; Street, 1993; Teale & Sulzby, 1986). Parents can have a significant impact, yet they are often unsure of their role or lack confidence to support learning at home (Harris, Goodall & Andrew-Power, 2008; Souto-Manning & Swick, 2006).
Although websites, blogs, texting, mobile apps and digital portfolios are now being widely used to connect home and school (Passey, 2011; Abrami, Venkatesh, Meyer & Wade, 2013) “this does not ensure that communication will take place or yet that this communication will be effective” (Goodall, 2016, p. 122). As educators strive to align practice with current research and involve families from diverse backgrounds as partners in a child’s learning, it is a critical time to examine the influence of new technologies in building school-home relationships. With a focus on early literacy, my thesis examines the use of digital portfolios in an elementary school setting and the potential for improved parent engagement.

1.2 Study Background

My study was carried out in a primary classroom where digital portfolios are used as a formal reporting tool and platform for fostering collaborative relationships with parents. Although the use of digital portfolios is relatively new, the impetus for their growing popularity is rooted in educational policy, findings from diverse fields of research and significant shifts in curriculum.

1.2.1. Historical & Political Context

Educational researchers began to highlight the importance of parents in the mid-20th century, sparking legislation with mandates for parent involvement in schools such as the Elementary and Secondary Education Act of 1965, where parents were “required to serve on school advisory boards and participate in classroom activities” (Hiatt, 1994, p. 255). In 2001, the No Child Left Behind Act was signed into law in the United States. This legislation recognized the central role parents play in a child’s education and required schools to ensure that parents could “make well-informed choices for their children, more effectively share responsibility with
their children’s schools and help schools develop effective and successful academic programs” (U.S. Department of Education, “Parental Involvement”, 2004, p.1).

In British Columbia (BC), current guidelines and requirements for the relationship between parents and schools is established through the School Act (School Act, RSBC 1996, c. 412) (the Act). Division 2 of the Act outlines parents’ entitlement to “be informed, in accordance with the orders of the Minister, of the student’s attendance, behaviour and progress in school” (Part 2. s.7). Further, the Act requires teachers to consult with parents, upon their request, with respect to the student’s educational program. This section of the Act serves to formalize the partnership between home and school, establishing the right for parents to be informed about their child’s progress and have a voice in educational programming. Although parents have this right by law, research suggests that many parents do not feel comfortable requesting information, having face-to-face conversations or even entering a school (Boag-Munroe, 2014; Souto-Manning & Swick, 2006). In their review of how educational policy is experienced across race, ethnicity and socioeconomics, Hill, Jeffries & Murray (2017) found educational policy often exacerbates the issue of inequality. Moreover, it is often difficult for parents to attend meetings or school events during typical school hours due to evolving changes in the family structure (Constantino, 2003; Hornby & LaFaele, 2011; Kim & Hill, 2015; Jeynes, 2010). Features such as language translation and ongoing access to information afforded by digital portfolios, offer a promising new avenue for inclusion and parent engagement.

1.2.2 Parents as Partners in 21st Century Learning

In BC, the movement for building stronger relationships between home and school is seen with the BC Education Plan, released in 2011 and revised in 2015, where partnerships with
parents are part of a significant shift towards personalized learning (BC Ministry of Education, 2015).

**Traditional Approach vs. Personalized Approach**

![Diagram comparing traditional and personalized approaches to curriculum design.](image)

*Figure 1. Traditional approach vs. personalized approach to curriculum design.*


As seen in Figure 1, teachers are encouraged to “co-plan” and work as a collaborative team with students and parents. In the recently revised BC Curriculum (BC Ministry of Education, 2016), collaboration with community is an essential component, and teachers are encouraged to incorporate “the expertise and perspective” of parents and discuss “learning
expectations and to decide which areas of the curriculum are to be addressed” (para. 18). This can be particularly challenging as the educational landscape adjusts to a rapidly changing world where competencies such as creative thinking and communication supersede content-based knowledge. According to Trilling and Fadel (2009) 21st century learning is a “monumental shift” (p. 13) where critical thinking and problem solving are “the new basics” (p. 50). As such, the way that students show their understanding and the strategies used to foster further growth may deviate from the experience that parents had during their schooling. Likewise, the perspective of parents and input from learning experiences outside of the classroom may be a new resource for teacher. Aboriginal perspectives and understandings, for example, now embedded throughout the BC curriculum, value learning as a holistic process that is deeply connected to place and one’s identity (First Nations Education Steering Committee, 2015). It is imperative, then, that teachers and parents have multiple opportunities to express their beliefs and values about learning while working towards a shared understanding of how to best support a student and engage in effective communication.

Coupled with curriculum revisions, the BC Curriculum (2016) is redefining how teachers are expected to assess and share learning. This will be formalized along with the development of a new Student Progress Reporting Order that is yet to be released. These changes highlight “strong classroom assessment practices [that] support student achievement by informing students, parents and teachers on where students are at with their learning and for establishing new learning goals” (BC Ministry of Education, 2017, p. 1). Revisions to the Student Progress Reporting Order in BC are necessary as traditional reporting practices are a static, one-way mode of communication and new curriculum requirements call for ongoing, three-way (teacher, parent, student) conversations about personalized learning experiences. Thus, school districts across the
province are replacing or supplementing traditional practices such as report cards with more collaborative options like digital portfolios. However, there is limited research on the relationship between digital portfolios and parent engagement to inform teacher practice or guide districts in their choice of platform. My research seeks to gain insight, from the perspective of parents, as to how digital portfolios may be used effectively to communicate student learning and strengthen the connection between home and school.

1.2.3 Digital Portfolio Platforms

Digital portfolios are created using various types of technology from web-based tools and mobile apps to learning platforms designed specifically for the purposes of education. Depending on the privacy requirements of their school district or institution, teachers and/or students create digital portfolios using blog platforms such as WordPress, web service tools such as Google Classroom or apps including Weebly, Evernote and Google Drive. Over the last few years - several digital-portfolio-specific platforms, both web-based and mobile have emerged. It must be noted, however, that it is not always easy to distinguish a portfolio platform from a digital grade book such as Engrade. In BC, Scholastic, Seesaw, FreshGrade and MyBlueprint are among the most popular platforms being used in K-12 classrooms.

My study involves the use of FreshGrade, a web-based platform with mobile applications designed specifically for educators as a tool to collect, curate, assess and share student learning. Although it can be used as a digital gradebook where marks are collected in an online space, FreshGrade also offers a portfolio view (Figure 2) where students and teachers can add evidence of learning such as videos, projects made with creative apps such as Puppet Pals and reflections in written or audio form.
Figure 2. FreshGrade Digital Portfolio Sample (Student View)

The school district where my study took place has purchased a license with FreshGrade and integrated student information allowing all teachers the option to use FreshGrade for digital portfolios in lieu of traditional paper-based report cards. Assessments, evidence of learning, student reflections and teacher comments are shared continuously rather than at set times of the year. If teachers are interested in using digital portfolios, they secure permission from parents and then log in with district credentials to access their class list. Teachers provide access to individual parents and students who can then log in to the student’s portfolio through the web or mobile app.
1.3 Statement of Problem

Decades of research from various fields highlight the positive influence of parent engagement on student’s academic success and overall well-being (Epstein, 2013, Henderson & Mapp, 2002; Sanders, 2008). Although deemed important, and acknowledged by all stakeholders, a significant gap between home and school persists in many communities (Chavkin & Williams, 1993; Fan & Chen, 2001). As curriculum revisions, shifting family dynamics and an increasingly diverse student population add new layers of complexity, it is necessary to evaluate current practices intended to promote parent engagement and make informed decisions moving forward. Traditional paper-based report cards, for example, do not align with the requirements for communicating student learning as outlined by the BC MoE (2016); however, it is not yet clear what the most effective alternative may be; hence, the lack of a new Student Progress Reporting Order. Teachers are starting to utilize technology to meet requirements set out by educational policy and curriculum with limited guidance. As digital portfolios gain popularity and begin to replace traditional reporting methods, research is needed to highlight how they might be used most effectively.

1.4 Study Purpose

The purpose of my study is to gain insight into the use of digital portfolios by educators and learn more about the impact on parent engagement. Specifically, my study investigates communication between school and home as well as the ways parents support their child’s learning outside of the classroom.

1.5 Research Questions

My study is designed to better understand how educators might use digital portfolios to effectively engage parents in their child’s learning. Specifically, the research questions ask: (a)
In what ways do digital portfolios support parental engagement, (b) what do parents appreciate about digital portfolios; and, (c) what do parents perceive as limitations to digital portfolios?

1.6 Significance and Outcomes

Although digital portfolios are being widely used by school districts across Canada, there is minimal research about digital portfolios for young children, in particular the impact of digital portfolios on parent engagement. My study is significant as it is a relatively new area of research where insights and implications for practice are needed. As educators strive to build relationships with a diverse parent community within the context of curriculum change and dynamic learning environments, it is important that emerging tools such as digital portfolios are chosen and implemented in ways that align with research. My study offers insight from the lens of parents to guide teachers in the effective use of digital portfolios and highlight areas for future research.

1.7 Definition of Terms

Parent. The term parent is used throughout my thesis to represent parents, guardians, family members and any significant other involved in the upbringing or school experience of the child.

School-Home Communication. In my study, the term school-home communication refers to any type of contact between the teacher and parent including one-way where information is passed from one to the other or two-way where both parties are involved in an exchange of information.

Parent Involvement. In my study, the term parent involvement is used in accordance with the framework outlined by Epstein (2013) and refers to any and all interactions between home and school, initiated or maintained by either party.
**Parent Engagement.** For the purposes of this investigation parent engagement refers to a degree of involvement where there is a connection to student learning or well-being and involves parents working with teachers or school staff to support their child’s learning.

**Digital Portfolios.** The term digital portfolio is used in my study to describe “a purposeful aggregation of digital items - ideas, evidence, reflections, feedback, etc., which presents a selected audience with evidence of a person’s learning or ability [over time]” (JISC, 2008, p. 6). In the literature digital portfolios are represented by various titles including e-portfolios, interactive portfolios, multimedia portfolios, ePortfolios, electronic portfolios or digital learning platforms. The term ‘platform’ is also used in reference to the specific digital portfolio software.

**Artifact.** Within the context of digital portfolios, an artifact refers to a digital item or unit of documentation captured as evidence of learning including notes, pictures, audio recordings, documents and multimedia.

**Technology.** The term technology is used in my study to describe digital technology. This includes devices such as computers, tablets and smartphones and activities such as email, text, uploading digital photos to an online server and creating multimedia projects with apps.

1.8 **Summary**

This chapter introduced the context of my study, including changes in educational policy about parent-school communication and assessment practices, along with considerations for establishing relationships between home and school given the significant changes in society over the last several years. It also stated the research questions and definition of terms including details about the digital portfolio platform used in my research. My study offers much-needed insight into the use of digital portfolios by gathering feedback from parents and clarifying the
ways in which digital portfolios might support learning at home and improve school-home communication. Chapter 2 theoretically situates the study and provides a review of the literature focussed on parent engagement, school-home communication and digital portfolios.
Chapter 2: Theory & Literature

2.1 Introduction

This chapter presents a review of the literature and the theoretical perspectives underlying the study. Bronfenbrenner’s (1979) ecological theory provides a lens to view and understand communication between home and school, while Vygotsky and Cole’s (1987) sociocultural theory highlights the importance of culture and influence of parents in a child’s learning. Bronfenbrenner and Vygotsky/Cole both emphasize the role of multiple adults in a child’s life and the need to view children’s learning as part of a whole system. Parent engagement, then, must be considered as part of an intricate system where the degree of engagement depends on complex factors such as culture and family dynamics. Together these theories offer a foundation to investigate the research questions and indicate possibilities for digital portfolios to connect home and school in ways that will have a positive outcome for students academically, socially and emotionally.

This chapter also presents two other theoretical frameworks used to inform the study and guide data analysis: (a) Epstein’s (2009) theory of Overlapping Spheres of Influence and types of parent involvement; and, (b) Hoover-Dempsey and Sandler’s (1997) model of parent involvement. Finally, this chapter includes a review of the literature relevant to the research questions including parent engagement, school-home communication and the use of digital portfolios in education to capture, curate and share student learning.

2.2 Theoretical Perspectives

The shift towards a more collaborative partnership with parents described in Chapter 1 emerged, in part, from the work of theorists concerned with the connection between child development and relationships. Until this time, learning theories were mainly based on a
behaviourist perspective and focused on observable behaviours. Students were seen as a vessel to be filled with knowledge and skills; as such, classroom experiences were comprised mainly of teacher lectures and rote memorization; skill and drill type of activities were commonplace. In the 1980s, the work of researchers such as Bronfenbrenner and Vygotsky/Cole began to shed light on the importance of environment and relationships in a child’s learning and development. In my research the theories of Vygotsky/Cole and Bronfenbrenner served as a valuable lens to explore the overlapping influences of home and school environments; and the roles of parents and teachers in a child’s learning.

Bronfenbrenner (1979) theorized that a child develops within their immediate environment along with interactions in the surrounding environment. According to Bronfenbrenner’s ecological systems theory, a child’s development is influenced by four interconnected systems of human ecology: *microsystem, mesosystem, exosystem* and *macrosystem* (Bronfenbrenner, 1979). The child’s home and school are part of a microsystem; an individual’s immediate environment and all of the people with whom they contact within it. The mesosystem contains the interactions, relationships and channels of communication within the microsystem “in which the [child] becomes an active participant.” (Bronfenbrenner, 1979, p. 209). The exosystem includes interactions and relationships that in some way affect an individual without direct contact, such as a parent’s workplace. Finally, the macrosystem includes cultural contexts such as laws, values and customs (Lee, 2011). The research questions explored in my study center around the mesosystem, in particular interactions between parents and teacher.

The systems within Bronfenbrenner’s theory are not static and changes in one influence the others; in turn, the strength and diversity of connections in the mesosystem influence a child’s learning and development. In order to maximize a student’s potential for success there
should be multiple connections from different sources made between home and school (Bronfenbrenner, 1986; Epstein 1990; Galindo & Sheldon, 2012). Examples of a mesosystem include parent-teacher conferences and communication through a platform such as digital portfolios. In each case the parent and teacher have a separate relationship with the child; yet, during the conference or virtual dialogue through the portfolio, they intersect and influence the student’s learning journey. From an ecological perspective, “a child’s ability to learn to read in the primary grades may depend no less on how he is taught than on the existence and nature of ties between the school and home” (Bronfenbrenner, 1979, p.3). Studies continue to highlight the value of quality teacher-parent relationships, characterized by mutual respect, two-way communication and trust, in a child’s overall learning (Kim, Sheridan, Kwon & Koziol, 2013; Fan & Chen, 2001; Sheridan & Wheeler, 2017). While analysing various risk factors associated with parental involvement for example, Kohl, Lengua & McMahon (2000) report quality, not quantity, of parent-teacher interactions as the key predictor of student success.

According to Bronfenbrenner (1979) and others, interactions are enhanced when they are based on mutual trust, commitment to maintaining a positive relationship, shared understanding of goals and expectations, and reciprocal, such that the power dynamic is balanced (Epstein, 1995; Henderson, Mapp, Johnson & Davies, 2007; Kim et al., 2013). Communication, both direct and indirect, is foundational to this relationship structure and a child’s development across environments will “vary directly with the ease and extent of two-way communication between those settings” (Bronfenbrenner, 1979, p. 216). Therefore, when utilizing digital portfolios, it is important to consider factors that strengthen the relationship between parents and teachers and allow for two-way communication. My study investigates the potential of digital portfolios to foster meaningful communication and thus, stronger relationships between the home and school;
where ‘meaningful’ reflects the conditions suggested by Bronfenbrenner and others (Epstein, 1990; Fuller & Olsen, 1998; Goodall, 2016; Henderson & Mapp, 2002; Jeynes, 2011; Thorp, 1997) namely, processes and structures that allow for trust, reciprocity and goal consensus.

In addition to communication and parent-teacher relationships my research is interested in the consistency between learning environments, in particular how parents support their child’s learning at home. According to Vygotsky and Cole (1978), learning is always part of a social process and children build knowledge through interactions with others and their environment. As children are learning within their life context from multiple others, including teachers and parents, it is important to create conditions for communication and sharing between different environments such as home and school. Vygotsky and Cole’s theory provides a lens to consider how tools such as digital portfolios might support a child’s overall learning by bridging diverse influences and environments.

The concept of zone of proximal development is part of Vygotsky and Cole’s theory of child development and often used in educational contexts to guide the teaching process (Chaiklin, 2003). Scaffolding, for example is a strategy whereby teachers, parents or anyone with appropriate knowledge, recognize what a child can do, their interests or current goals and then engage in activities such as modelling to move them to a level slightly above independence, known as the zone of proximal development (Lajoie, 2005; Puntambekar & Hubscher, 2005). This is a rather simplified definition as learning is dynamic, influenced by the child and their social and cultural environments. It is relevant to my investigation, however, as it highlights the important role of both parents and teachers in a child’s learning and possibilities afforded by digital portfolios. For example, the ability to capture learning in various formats may allow teachers to assist parents in recognizing what their child can do, thereby providing a specific
starting point for school and home. From here teachers and/or parents have the opportunity to support the child in moving forward towards an established goal. The theories of Vygotsky/Cole and Bronfenbrenner served as a framework for my study guiding research questions, data analysis and discussion of the findings.

2.3 Overlapping Spheres of Influence

An elaboration of Bronfenbrenner’s (1979) ecological theory is seen in Epstein’s (1995, 2009) theory of overlapping spheres of influence where psychological, educational and sociological perspectives on social institutions provide insight into the relationships and perspectives of parents, teachers and the wider community. According to Epstein et al., (2018) there are three major contexts within which student learning emanates; family, school and local community (Figure 3).

![Figure 3. Epstein’s (2009) spheres of overlapping influence.](image)
As seen in Figure 3, the three spheres overlap within shared goals and practices; and the degree to which they do so has a significant impact on a child’s learning and growth. Thus, relationships between parents, teachers and community are emphasized over passive interactions; and, according to Epstein’s theory (1995), positively correlate to student success. As the degree of overlap within Epstein’s (1995, 2009) theory depends on the experience, beliefs and practices of parents, teachers and local community it poses that the spheres can be intentionally drawn together. From the perspective of overlapping spheres of influence teachers and schools can purposefully improve student success by fostering “family-like schools…[that] recognizes each child’s individuality … and welcomes all families not just those that are easy to reach” (Epstein, 2009, p. 11). Although Epstein’s (1995) theory has been scrutinized for being school-centric with a focus on activities led by teachers and school staff (Auerbach, 2011; Price-Mitchell, 2009; Pushor & Murphy, 2004) it is useful for my study as digital portfolios are initiated at the school level and teachers will benefit from guidance that seeks to engage families as partners rather than passive recipients of information. In essence, my study explores how educators might effectively use digital portfolios to pull the spheres of parents and teachers closer together by improving home-school communication and supporting parents in learning opportunities outside of the classroom.

2.4 Parent Involvement and Parent Engagement

The terms parent involvement and parent engagement are found throughout the literature and often used interchangeably. Parent involvement is often seen as a broad term used to include any contact between home and school, from parents driving on field trips to helping their child with homework. Epstein (1995) defines six types of parent involvement where an opportunity exists to strengthen the connection between home and school. As seen in Figure 4 the six types
include: (a) Parenting (b), communicating, (c) volunteering, (d) learning at home, (e) decision making; and (f) collaborating with community.

**Parenting**
- Help all families establish home environments to support children as students.
  - Suggestions for home conditions that support learning at each grade level.
  - Parent education and other courses or training for parents.
  - Family support programs to assist families with health, nutrition, and other services.

**Communicating**
- Effective forms of school-to-home and home-to-school communications about programs and children's progress.
  - Conferences, language translators to assist families as needed.
  - Weekly or monthly folders of student work sent home for review and comments.
  - Parent/student pickup of report card, with conferences on improving grades.
  - Regular schedule of useful notices, memos, phone calls, newsletters, and other communications.

**Volunteering**
- Recruit and organize parent help and support.
  - School and classroom volunteer program to help teachers, administrators, students, and other parents.
  - Parent room or family center for volunteer work, meetings, resources for families.

**Learning at Home**
- Provide information and ideas to families about how to help students at home with homework and other curriculum-related activities, decisions, and planning.
  - "Homework" to mean not only work done alone, but also interactive activities shared with others at home or in the community, linking schoolwork to real life.

**Decision Making**
- Include parents in school decisions, developing parent leaders and representatives.
  - School and District-level councils and committees for family and community involvement.
  - Networks to link all families with parent representatives.
  - "Decision making" to mean a process of partnership, of shared views and actions toward shared goals.

**Collaborating With Community**
- Identify and integrate resources and services from the community to strengthen school programs, family practices, and student learning and development.
  - Information for students and families on community health, cultural, recreational, social support, and other programs or services.

*Figure 4. Six Types of Parent Involvement (Epstein, 2009).*

Parent engagement, on the other hand, is more intentional and speaks to ways in which the contact has an impact on the learning or well-being of the child. Some studies differentiate the terms based on the physical space where involvement indicates school interactions and engagement refers to anything related to school, actualized in the home (Goodall, 2016). In contrast, others view the terms from the lens of their research focus and differentiate accordingly. Barton, Drake, Perez, Louis and George (2004), for instance, deems involvement as an umbrella term to include all connections between the school and home, with engagement as what parents...
do when activating their social capital. Baird (2015) also view involvement as a generality and use the term engagement to indicate specific instances of collaboration around student needs. Similarly, my study considers parent involvement as a general term to acknowledge possible entry points for deeper engagement where actions and attitudes seek to redefine how teachers and parents interact and move towards a reciprocal relationship between home and school.

For the purpose of my study, the term parent involvement is used in accordance with the framework outlined by Epstein (1990, 2013) and describes the varying opportunities parents have to interact with schools. Although the purpose of my study was to explore how digital portfolios might improve parent engagement; where a student’s academic, social or emotional learning is central, the first research question identified the various entry points using Epstein’s six types as a guide. Once the types of parent involvement were determined, namely, communication with their child’s teacher and learning from home, the second and third research questions focused on parent engagement and investigate the potential impact for student learning (Figure 5).
It is worth noting that Epstein’s current work calls for a shift away from the term “parent involvement” to “community partnerships” (Epstein, 2013). The term parent involvement and Epstein’s original framework have been critiqued for the “scripted story of school” (Pushor, 2011, p. 2) where parents are enrolled in school-initiated activities rather than partners in supporting their child’s learning and overall well-being. As defined in Chapter 1, for the purpose of my study parent engagement is viewed as a level of involvement where there is a degree of ownership and action towards the child’s overall learning; communication with their child’s teacher about specific goals, helping with homework or engaging in conversations that build connections, for example. Although parent engagement is the focus of my study, the six levels of parent involvement were used as a reference for the first research question which explores the ways in which digital portfolios might involve parents.

The important role of parents in their child’s education is well documented in the research over several decades and includes an array of topics from parent involvement in
homework (Patall, Cooper, & Robinson, 2008) and the role of parent support in school drop-out rates (Jimerson, Egeland, Sroufe & Carlson, 2000), to the implications of cultural differences (Hill, 2001; Walker, Ice & Hoover-Dempsey, 2011) and the responsibility of school leaders to engage with parents (Auerbach, 2011). In a comprehensive review of 51 studies, Henderson & Mapp (2002) link parents to student academic success, graduation rates, emotional well-being and attitudes about school. These findings are consistent with Jeynes’ (2007) meta-analysis of 52 quantitative studies investigating the role of parents in the success of secondary school students. As stated by Mapp (Children’s Institute, 2015), “we have 50 years of research showing that what families do matters. Whether it’s loving school, college access, good attendance, or academic success, family engagement has positive correlations with all sorts of indicators” (para. 14).

School boards and education ministries also acknowledge the importance of partnering with parents as a means to improve student learning. A visit to most school, district or ministry websites, reveals a vision statement or mandate, driven by government policy, calling for the involvement of parents and emphasizing the establishment of collaborative partnerships with parents. New York City, for example, has “strong family-community ties” as part of their Framework for Great Schools and one of six elements that “must improve to accomplish high student achievement” (NYC Department of Education, 2018, para. 8). The Australian Family-School Partnerships Framework established in 2008 states that “families, schools and communities actively work together as partners to support learning, development and wellbeing of children and young people”. This framework is part of several education policies and intended to support the development of partnerships with parents, recognizing the benefits to student’s academic and emotional well-being (Australia Department of Education and Training, 2008).
Although research and education mandates reflect the important role of parents in the success of students, studies continue to show that: (a) A discrepancy remains between parent and teacher expectations; (b) parents do not feel as involved as they would like to be; (c) it is not clear to parents how to best support their child’s learning or become involved in their schooling; and, (d) teachers are frustrated with the level of parent support or uncomfortable communicating with parents (Goodall, 2016; Harris, Goodall & Andrew-Power, 2008; Mapp & Hong, 2010; Newman, 2005; Olmstead, 2013; Watkins, 2013). Furthermore, there is a significant research to confirm that parent involvement slowly decreases as students make their way through grade levels (Epstein, 1990; Epstein & Sanders, 2006; Wang & Sheikh-Khalil, 2014; Spera, 2005). Such a discrepancy between research findings and practice is not uncommon in education (Biesta, 2007), therefore, it is important to continue building on existing research as new practices and tools emerge. Finally, as it is well established that parents as partners is an effective way to support students, there is value in exploring why parents become involved and how involvement might shift to sustained engagement.

2.5 Hoover-Dempsey and Sandler Model of Parent Involvement

The model of parental involvement developed by Hoover-Dempsey and Sandler (1995, 1997) moved beyond identifying ways in which parents may be involved in their child’s learning towards and understanding of the process; why do parents become involved, stay involved and how might involvement in school-based activities shift to engagement in their child’s overall learning (Hoover-Dempsey & Sandler 1997; Hoover-Dempsey et al., 2005). As seen in Figure 6, this model consists of five levels to describe motivations and forms of parent involvement that ultimately influence student achievement.
Figure 6. Hoover-Dempsey and Sandler's model of the parent engagement process. Adapted from Hoover-Dempsey et al. (2005).

As seen in Figure 6, the first tier is the most general and outlines the reasons parents may choose to become involved, at any level, in their child’s schooling and learning overall. According to Hoover-Dempsey & Sandler (1997) parents’ decision making with regards to their child’s education depends on three factors: (a) Parental role construction, (b) parental efficacy; and, (c) specific invitations. Essentially, parents are motivated to be part of their child’s education when they value the focus of learning, believe they can make a difference, feel welcomed to contribute and do not feel constrained by the time or energy. My study seeks to gain an understanding of digital portfolios from the perspective of parents and provide insight for
teachers, therefore, this model provides an important lens for research question 2 (what do parents appreciate about digital portfolios), and question 3 (what do parents perceive as limitations to digital portfolios)?

2.6 School-Home Communication

While communication is a key aspect of parent involvement, research suggests that ‘effective communication’ is complex and often a barrier to strong home-school relationships (Eberly & Konzal, 2007; Jeynes, 2007). Communication as defined by Goodall (2016) calls for reciprocity: “a signal passed from one person to another; a signal which the second person is capable of understanding to which they could, potentially, respond” (p. 19). Advances in technology have expanded the ways in which teachers and parents communicate and when used effectively can allow for timely, informed and two-way conversations, (Goodall, 2016; Olmstead, 2013). As Goodall (2016) points out, technology has the potential to break down some barriers such as access to information when it is convenient or needed, however, it will not establish relationships and is best seen as a supplement to other modes of communication or existing practices that promote parent participation. In a study investigating how to support parents with children in Head Start, for example, Hurwitz, Lauricella, Hanson, Raden & Wartella (2015), found text messaging to be a useful addition to the programs communication plan. The results of their study suggest that mobile technology “may be an effective way to complement existing efforts to engage parents in a fashion that is enjoyable, helpful, and flexible” (p. 1386)

Historically, the most significant mode of communication about student learning has been report cards. In recent years the use of report cards as a primary mode of communication have come under scrutiny as they do not position parents as partners or correspond with current trends
in learning design. In BC, and in many other parts of the world, traditional assessment practices such as standardized tests and letter grades are being phased out as they do not align with 21st century learning which emphasizes “what students can do with knowledge, rather than what units of knowledge they have” (Silva, 2009, p. 630). Skills such as creative thinking, critical thinking, self-assessment and communication are at the core of learning in today. As Silva (2009) points out, these skills are not new per se, just newly important as the workforce adjusts to a technology-driven and globalized world. This is further emphasized by Fox (as cited by Seitz & Bartholomew, 2008): “we cannot know for sure what knowledge our students will need to best prepare them for the future. What we do know however is that they will need to become lifelong learners, able to adapt to the future changes which will inevitably have an impact on their lives.’’

The majority of reporting practices represent a static, one-way mode of communication whereas new curriculum requirements call for ongoing, three-way (teacher, parent, student) conversations about personalized learning experiences. This is a critical time, then, to investigate the potential for new tools such as digital portfolios to shift school-home communication practices. The effectiveness of report cards has been questioned for decades and there is a substantial research base highlighting the negative impact of report cards, including student stress and promoting extrinsic motivation rather than a desire to learn (Brookhart, 1997; Guskey, 2002; Kohn, 1999; Marlyn, 2012; Wentzel & Brophy, 2014). Furthermore, report cards are often confusing for parents or fail to communicate their child’s learning progress and goals effectively. Seagreaves’ (2009) review of the literature suggests this holds true across various formats and whether they include letter grades, percentages, standards-based grading, or performance level descriptors, it seems the true meaning of the information provided on report cards is
not always detailed enough to give parents a thorough understanding of what the child has actually learned or achieved. (p.35)

As stated by Cooper (The Learning Exchange, 2016) “a report card … is a crude summary of the rich experience that’s gone on in a classroom” (part 4. para. 8). Report cards do not reflect personalized learning or value competencies such as creative thinking and “we have the technology at our disposal … to basically render report cards obsolete” (The Learning Exchange, 2016. part 4. para 8). Many school districts, for example, are exploring alternatives to traditional paper-based report cards, such as digital portfolios, where learning is captured through notes, videos or pictures and shared in an online space, giving parents constant access to their child’s progress at school. How are parents responding to this new way of reporting? What features of digital portfolios set them apart from traditional reporting methods and assessment tools? How might educators use digital tools to support personalized student learning? My study seeks to gain insight into these questions, provide examples for educators using digital portfolios and offer possibilities for next steps in the research.

2.7 Digital Portfolios

The majority of research to date on digital portfolios is found in post-secondary education, in particular teacher training programs, (Abrami & Barrett, 2005; Kecik et al., 2012; Rhodes, 2010; Welsh, 2012; Yancey, 2009; Zubizarreta, 2009). Digital portfolios are used in varying formats in higher education around the world and seen as a “very powerful tool that makes explicit the lifelong learning path and professional career trajectory of each individual” (Sánchez, 2009). In this context digital portfolios are usually created and maintained by students as a means to showcase their learning, demonstrate skills or share self-assessments with faculty. The popularity of portfolios in higher education is due, in part, to the desire of students and
future employees to have a more robust example of a particular person’s skills, knowledge and competencies as they enter the workforce. Digital portfolios are also seen as a valuable tool for student reflection and a way for faculty to access evidence of learning from multiple sources (Abrami & Barrett, 2005; Rhodes, 2010). Digital portfolios “provide multi-dimensional evidence [and allow] students to integrate their lives with their academic experiences converging to transform how we measure and conceive of student success” (Rhodes, 2010, p. 12).

In contrast to higher education, there is limited research available on the use of digital portfolios in K-12 education, despite their widespread uptake in the last several years. However, there is a growing body of literature focused on the use of digital portfolios in early childhood education (Beaumont-Bates, 2017; Chang, Chen & Hsu, 2011; Higgins & Cherrington, 2017; Stockall, Dennis & Rueter 2014). Digital portfolios for young learners are intended to capture the spirit of early learning characterized by inquiry, play and exploration; learning that is difficult to share with paper-based assessments. The portfolio is “a collection of items that celebrate the child [and] includes a variety of artifacts, documentation, and reflections that are developmentally appropriate for young children and includes evidence of understanding and ability” (Seitz & Bartholomew, 2008, p. 63). The possibilities afforded by digital portfolios to help bridge the home-school gap in K-12 education are encouraging based on studies with preschool children. A study conducted at a preschool where digital portfolios were being used to improve parent-teacher communication found that ”parents felt better informed about their child’s learning, and this led to increased confidence in approaching teachers… parents [also] reported that having information about their child’s activities at the centre also led to more meaningful conversations with their child” (Higgins & Cherrington, 2017).
It is interesting that digital portfolio research is building from opposite ends of the education spectrum. Moreover, both fields of research call for a better understanding of how teachers might effectively use digital portfolios because their popularity seems to be increasing without a solid foundation in research specific to portfolios created and accessed with technology (Jones & Shelton, 2011; Kabilan & Khan, 2012). Paper-based portfolios have been used in diverse educational settings for decades (Lockledge & Hayn, 2000; Yancey & Weiser, 1997) and much of the impetus for digital applications stems from research suggesting portfolios are much more effective at capturing a student’s learning than traditional assessments (Barrett, 2007; Yancey, 1992). The concept of portfolio pedagogy (Yancey, 1992) characterized by reflection, inquiry and a purposeful learner-centered approach (Tierney et al., 1998) also holds value within a digital platform, with technology opening the door for new ways to collect and share learning. As stated by Barrett (2007), with regards to the use of digital portfolios in teacher education, the original pedagogical intention for using portfolios needs to remain at the forefront without letting the ease of accumulating data afforded by technology take over. Likewise, in early childhood studies, researchers caution against the use of digital portfolios without a purposeful focus on learning as they can easily become a collection of pictures and fail to capitalize on the potential for reflection and rich conversation as “it is reflection that distinguishes portfolios from scrapbooks or other kinds of collections” (Jones & Shelton, 2011, p. 80).

2.8 Summary

Parents and teachers are both significant influences in a child’s growth and development student and every effort made to engage parents as collaborative partners in their child’s education will ultimately benefit student learning. According to Vanderlinde and van Braak (2010), “by building bridges between researcher and practitioners, new incentives for school
improvement can be established” (p. 312). In order to accomplish this, they recommend research that provides “evidence on ‘what works’ in practice” (p. 312). As such, my study moves beyond acknowledging the role of parents and provides practical examples of digital portfolio practices that engage parents in their child’s learning. As stated by Hoover-Dempsey et al., (2005) parents are most likely become involved when they believe that their involvement will make a difference for their children. It is important then, that educators and schools continue to explore new options to involve parents in meaningful ways and help parents understand the benefit of their engagement.

This chapter introduced the four theoretical perspectives underlying my study: Bronfenbrenner’s (1977) ecological theory, Vygotsky and Cole’s (1978) sociocultural theory, Epstein’s (2009) overlapping spheres of influence and Hoover-Dempsey & Sandler’s (1997) model of parent involvement. From here, I reviewed the research literature relevant to parent involvement and parent engagement, home-school connections, and digital portfolios. The next chapter describes the research design and methodology of my study.
Chapter 3: Research Design and Methodology

3.1. Introduction

A qualitative case study was designed to explore three research questions: (a) In what ways do digital portfolios support parent engagement; (b) what do parents appreciate about digital portfolios; and, (c) what do parents perceive as limitations to the effective use of digital portfolios? This chapter presents the design and methodology used to construct and carry out my research. I begin with a discussion of the rationale for the research design followed by a description of the research methods. Next, I describe the research site and relevant details about the digital portfolio platform being used at this site. Finally, I provide information about recruitment, participants, data collection and data analysis. I conclude with the limitations of my study.

3.2. Research Methods

Digital portfolios are gaining popularity as a way to document and communicate student learning and are replacing paper report cards in some school districts (Renwick, 2017). However, research exploring the potential benefits and implications for this shift towards digital learning platforms is scarce, particularly for younger students (Abrami & Barrett, 2005). The primary goals of my study were to (a) examine the impact of digital portfolios as a home-school communication tool, (b) gather feedback from parents on how digital documentation might influence the ways they support their child’s learning; and, (c) identify strategies, practices and resources for educators to consider when using digital portfolios. The research questions and study purpose are best suited to a qualitative approach. Qualitative research is appropriate when the focus is on the experiences and interpretations of individuals as it seeks to describe a phenomenon from the perspective of participants, thus allowing for a process of discovery.
Quantitative research, however, focuses on verification and seeks to measure facts by analyzing variables (Yin, 2009). My research explores how parents conceptualize their roles with portfolios, what informs how and when they interact with the portfolio and their perceptions of digital portfolios and therefore, best suited to a qualitative approach. Qualitative methods involve a process of understanding from an inquiry lens where the “researcher builds a complex, holistic picture, analyzes words [and] reports detailed views of informants” (Creswell, 1998, p. 15). Yin (2009) emphasizes the affordance of qualitative research designed to collect data on participant perceptions about a particular phenomenon. A qualitative approach allowed for an in-depth view of the phenomenon being studied by inviting parent perspectives, experiences and opinions into the research.

Exploratory case studies are often used when there is a gap in the literature and “to identify the research questions or procedures to be used in a subsequent research study” (Yin, 2014, p. 238). As indicated by the literature review there is a gap in the research regarding the use of digital portfolios in K-12 education, particularly in regard to parent engagement. Hence, an exploratory case study was deemed appropriate to explore the research questions from the view of parents and guide future research. A case study was appropriate for my research because case studies focus on a specific instance of a phenomenon that the researcher is interested in (Merriam & Tisdell, 2015), in this case the phenomenon of interest is the use of digital portfolios as a home-school communication tool and avenue for parental involvement. Data was collected through surveys and semi-structured interviews with parents receiving school communication through their child’s digital portfolio, along with digital document observation and analysis.
3.3  Research Context

3.3.1  School Context

My research took place in a grade one/two classroom in a large school district in western Canada. The student population is socially, economically, and culturally diverse, with more than 50% speaking a language other than English at home. A recently revised student reporting policy in the province allows flexibility in the form of communication used by classroom teachers. As a result, the use of digital portfolios is now part of the school district’s formal communication with parents and involves a significant shift away from paper-based report cards.

In 2013, the school district initiated a 2-year pilot project where teachers from 35 elementary schools used the platform FreshGrade as an assessment and reporting tool. Rather than replace report cards with a new assessment tool, the pilot sought to transform teaching through assessment by make learning visible for students and parents. This was a collaborative inquiry process where teachers, with parent consent, used iPads, iPod touches and laptops to document and share student learning. Artifacts can be added to digital portfolios in the form of written comments, documents, video, picture or audio by the student and all teachers working with a particular student (such as music and art specialists). Parents have access to their child’s portfolio through an app or the web and can add comments or ask questions to portfolio artifacts.

Today (2018-2019 school year), the school district offers all elementary school teachers the option to use FreshGrade instead of traditional paper-based report cards and as part of a more holistic approach to communicating student learning. In this case parents have access to ongoing documentation of their child’s learning through the FreshGrade website or parent mobile app. Evidence of learning, teacher assessments and student comments are uploaded to the portfolios on a regular basis and parents receive one paper summative report at the end of the year instead
of each term. For the 2017/18 school year, more than 2,500 teachers in the district choose to use
digital portfolios as their primary means of reporting and as part of their communicating student
learning plan. Teachers at the school chosen for my study have been using digital portfolios since
2014. As a former classroom teacher using portfolios and then taking on a district position to
provide leadership within the scope of communicating student learning, I have experience and
background knowledge about this initiative in the school district and the FreshGrade platform.

3.3.2 FreshGrade

FreshGrade is an assessment and portfolio platform based out of Kelowna, BC. It is
FOIPPA-compliant with all data stored in Canada and accessible for teachers to use for free or as
part of a paid, district-managed, account. It is a web-based platform and also has applications for
access with mobile devices: teacher, parent and student apps. Teachers and students can upload
notes (including speech-to-text and audio notes), documents, pictures and video to the portfolio.
Parents have access to the portfolio once teachers send an email invitation and from this point
they can add comments to artifacts. FreshGrade digital portfolios are only accessible to students,
teachers and parents and intended to be a secure platform for collaboration and communication.
Figure 7 and Figure 8 show examples of FreshGrade digital portfolios from the parent view.
Figure 7. FreshGrade digital portfolio sample grade 4 parent view.
Figure 8. FreshGrade digital portfolio sample grade 1 parent view.

3.3.3 Researcher Background

As a classroom teacher I used blogs, websites and eventually digital portfolios to share student learning with parents and the community. In 2012, I was invited to pilot the FreshGrade platform along with seven other teachers in my school district. Through this I had the opportunity to provide feedback to the company and work closely with senior team members in my district. In 2014, I left my classroom to accept a new district-level position as the Communicating Student Learning Helping Teacher. In this role, I facilitated workshops and worked with teachers to help them communicate learning in new ways including the implementation of digital portfolios.

3.3.4 Recruitment
The nature of my work for the school district gave me direct access to all of the classrooms in which teachers used digital portfolios. The classroom chosen to recruit participants met the following criteria: (a) A primary grade classroom, to accommodate early literacy focus in data collection; (b) classroom teacher using digital portfolios in lieu of paper report cards; (c) classroom teacher comfortable with all aspects of the proposed research including access to student portfolios (with parental permission) and interviewing parents of his/her students; and (d) school administration comfortable with all aspects of the proposed research. Criteria three and four listed above were determined by several conversations with both the classroom teacher and school administrator prior to application for approval to the university ethical review board. I considered the school selected for my study after both the principal and classroom teacher inquired about being part of any district initiatives seeking to collect feedback on the use of digital portfolios. An overview of my study was sent via email to the classroom teacher and school principal, who were then invited to contact me if they were interested in learning more about the proposed study. I was clear that my study is outside of regular school district initiatives and completely voluntary. After meeting with both the classroom teacher and school principal in person to thoroughly review the proposed study, the classroom selection was finalized.

3.3.5 Classroom Teacher

Although the classroom teacher was not a direct participant in my study, teacher-parent and teacher-student relationships play a significant role in the way digital portfolios are accepted and utilized by parents. Positive teacher relationships are characterized by trust, reciprocal support, shared values and expectations and a balance of power (Henderson & Mapp, 2002; Vickers & Minke, 1995). Moreover, research-based frameworks for parent involvement such as Epstein’s (1990) highlight relationships as central to the success of initiatives and practices.
seeking to involve parents in meaningful ways. Likewise, students are “always the main actors in their education, development, and success in school” (Epstein, 2009, p. 10). When students feel supported, appreciated and cared for they are more likely to have a positive approach to learning. From an ecological perspective, these relationships are central to the home-school connection (Bronfenbrenner, 1986; Rouse & O’Brien, 2017).

Through classroom visits, conversations and previous experience working with the classroom teacher, it was clear that a great deal of time was spent on building a safe and respectful classroom environment. Student and parent relationships were important to the classroom teacher and fostered through purposeful activities and invitations. Before receiving digital portfolio consent forms, for example, parents were invited to attend a short presentation in the classroom where the purpose for portfolios is shared, demonstrations offered to help parents navigate the platform and questions welcomed. In this way parents had the opportunity to be part of a conversation about how digital portfolios will be used rather than receiving a notice requesting their permission to use it.

3.4. Participants

My study involved six participants recruited from the classroom described above. The sampling procedure used in my study was purposeful sampling in order to ensure specificity aligned with the research question (Patton, 2002). The inclusion criteria for participants required a parent with a child in the selected classroom and consent previously given to the classroom teacher to use FreshGrade. This included all parents from the selected classroom and therefore all were invited to participate. I had discussed family dynamics with the classroom teacher during the initial planning stages and knew that all 24 students lived in at home with both parents.
As all parents of children within the classroom selected for the study met the criteria, a recruitment letter was sent home with each student after receiving ethical approval from both the university and the school district (see Appendix 1 and 2). The letter stated the research question along with a brief description of the study and my background as a graduate student and teacher in the school district. Interested parents were asked to request a consent form be sent home or left at the office for pick up, attend an information session being held at the school on two separate occasions or contact me for more details (see Appendix 3). The letter clearly stated that participation was voluntary and completely separate from regular classroom proceedings.

Consent forms were either collected in person at the information sessions or left at the office in a sealed envelope for me to pick up. The classroom teacher was not involved in the research and did not know who chose to participate. Along with informed consent, participants were asked to indicate their preferred method of contact and provide permission for me to access their child’s FreshGrade account. Although students were not formal participants, I suggested parents talk with their child and ensure their child was comfortable with a researcher looking at their portfolios and having their parents discuss their learning with me.

A total of six parents decided to participate in the study. Participants were all mothers living in a two-parent home. Five of the six participants spoke English as their first language and three participants held full-time employment. The student portfolios accessed for my study belonged to three girls and three boys with four students in grade one and two in grade two.

3.5 Data Collection

My study was carried out using a qualitative case study method and took place between March and June of 2017. Data were collected through one online survey created with FluidSurveys, two semi-structured interviews and collection of artifacts from digital portfolios.
including pictures, videos and comments made by the classroom teacher and parents. Gathering information from multiple sources over several months allowed triangulation of the data and validation of findings (Patton, 2002). Although my study aimed to identify overall uses of digital portfolios as a communication tool, the curricular focus was literacy and parent engagement with their child’s literacy learning. Questions were designed to provide insight to participants’ beliefs about literacy, explore how digital documentation and communication through portfolios might influence their view, and how they support their child’s literacy learning. While viewing student portfolios I also focused on literacy-related events and collected artifacts relevant to the research question. As discussed in Chapter 1, there are many entry points and levels of support for a child’s learning; a literacy event describes a discrete instance of literacy and does not necessarily equate to a school-based task such as spelling or a writing assignment. The term is often used as a unit of analysis in literacy education, particularly in qualitative studies (Heath, 1983).

After signing the consent form, participants were provided a link via email to complete an online survey (Appendix 4). Before giving participants access, I conducted a pilot survey with a group of parents not involved in my study and minor adjustments were made based on their responses. This included a few spacing errors that made it hard to read and the addition of a space to provide additional information. All participant surveys were completed within the first two weeks of the study. As discussed in previous chapters, my study draws on research in the fields of family literacy and parental involvement, which document the benefits of a reciprocal relationship between home and school (Epstein, 2009; Henderson & Mapp, 2002; Moll & Gonzalez, 2004 and Purcell-Gates, 1996). Part of the process in data collection, therefore, was to learn as much as I could about the views and opinions of the participants in relation to the research question. The intention of the online survey was to gather information about the
participants’ home literacy practices, family background, involvement with their child’s learning at school and their general beliefs about literacy learning. The questions in the survey were designed from research in the field of early literacy, home literacy (Curry, 2012; Martini & Senechal, 2012) and parent involvement as outlined by Epstein (1990). The data collected through the survey also provided a reference for interview questions and portfolio observations. Developing rapport and trust is an important part of the interview process (Gall, Gall & Borg, 2015). The background information gathered from the survey gave me the opportunity to ask open ended questions that participants were already familiar with from the survey. For example, “You indicated in the survey that you and [your child] like to play singing games, could you tell me more about that.”

The main source of data collection came from two interviews with each participant, conducted near the beginning and end of the study. Interviews were semi-structured with open-ended questions and sought to explore participants’ beliefs, expectations, challenges and attitudes about digital portfolios and their child’s literacy learning. This was an appropriate method because semi-structured interviews with open-ended questions are an effective way to gather an authentic understanding of participants’ experiences and “gain an in-depth understanding of how key-stakeholders perceive and understand an issue” (Silverman, 2006, p. 61). The intention of the first interview was to provide a lens when viewing portfolios (literacy goals, student interests, etc.), get a sense of what parents valued in terms of school communication and any concerns they may have specific to their child’s learning. The second interview focused more specifically on portfolio documentation and gathered feedback from their experience with the platform. Appendix 5 includes a list of sample interview questions.
A key objective of my research was to obtain feedback from participants. As such, I wanted to establish a relaxed atmosphere and encourage more of a conversation than a back and forth, question and answer type interview. Although I created a list of questions guided by the purpose of the study, and informed by the online survey responses, I kept the conversation flexible and invited questions from participants in order to produce a more holistic picture of their experiences and opinions (Gall, Gall & Borg, 2015). As a teacher, I am comfortable working with and talking to parents and in my experience, they appreciate knowing you have something in common and can relate to their circumstances. For example, when appropriate I would acknowledge my own children, why I chose to work with their child's classroom and my experience as a classroom teacher.

Five of the participants chose to conduct the interviews by phone while one participant came to the school on two separate occasions. The face-to-face interviews were conducted in an empty office after school was finished for the day. All interviews were recorded using Camtasia recording software and saved to a secure file on a personal computer. Interview times ranged from 8-26 minutes with an average time of 20 minutes. Participants were provided with a verbatim transcript of their interviews and invited to review the documents in case they wanted to clarify, remove or add anything to their comments. None of the participants chose to alter the original interviews in any way. One participant requested the use of their real first name; pseudonyms were assigned to the others. All student names mentioned in the course of interviews were changed to a pseudonym or replaced with a pronoun.

Access to student digital portfolios provided additional data such as notes, videos and pictures. I was able to view student portfolios and collect documentation deemed relevant to the study. I looked at student portfolios after the first interview and continued to observe the
portfolios during the course of the study. During the second interview, I opened student digital portfolios on an iPad while interviewing participants. This provided a reference point for asking questions and helped to guide the conversation. After the second interview, I reviewed student portfolios again and downloaded all parts related to literacy events on to a secure file on my computer. Figure 9 shows an example of the type of documentation collected from digital portfolios from the view of a classroom teacher and student.

![Figure 9. FreshGrade portfolio and documentation type.](image)

### 3.6 Data Analysis

Data analysis followed the approach suggested by Braun & Clarke (2006). They recommend qualitative researchers: (a) become familiar with the data; (b) generate initial codes; (c) search for themes using codes; (d) review themes, in relation to original coding scheme;
(e) develop a thematic map of the analysis; (f) define and name themes; and (g) produce the final report, showing a final analysis of sample data extracts relating back to the research question. The process for coding was further informed by Auerbach & Silverstein’s method (2003) whereby “constructs” emerge after text-based codes are grouped into themes and interpreted from the theoretical perspective of the research.

To prepare for data analysis I transcribed all audio recordings of interviews word for word. Survey responses were collated using tools within the software (Appendix 6) and portfolios were downloaded. During the initial phase of analysis, I took time to immerse myself in the data by reading transcripts, reviewing survey responses and browsing through portfolios. As suggested by Agar (1996) I found reading through transcripts several times helped me get an overall picture of the participants. Likewise, I wanted to learn as much as I could about their child. Although students were not directly involved in the study, they were central to conversations during interviews with parents, and their literacy learning, as evidenced in their digital portfolios, a focal point for my investigation. In order to gain a more holistic view of the student as I perused their portfolio, I used the information from the survey and first interview with parents to create a word web for each student including their interests and specific details about their strengths or goals in relation to literacy. A sample of this can be seen in Figure 10. I found this to be a useful reference when viewing their portfolios.
Figure 10. Sample student word web.

Interview transcripts were read line by line, and words, phrases or ideas were written in the margins as part of an open coding process (Silverman, 2006). These codes were either direct quotes from interviews or a brief summary of my observations. Notes taken from portfolio observations were analyzed in a similar fashion. I transferred the initial codes to a digital platform (Padlet), as seen in Figure 11, where I could easily move them around to look for salient themes across the data and create a thematic map as suggested by Braun & Clarke (2006). Data analysis resulted in ten themes and each theme was associated with a specific research question. An example of how themes were determined from the data and related to a research question is seen in Figure 11 and a copy of all themes is included in Appendix 7.
Figure 11. Thematic map from initial codes using Padlet.

The process shown in Figure 11 allowed me to engage in more focused coding and create themes based on the research questions and the conceptual frameworks detailed in Chapter 2 (Epstein, 1990; Hoover-Dempsey & Sandler, 1997). For example, the initial codes from transcripts and portfolio comments labelled conversation starter, virtual window, shared learning with extended family and parent to child school connection, were grouped under the theme “Connection to School” and related to the second research question. This theme is used to guide the findings in Chapter 4.3.2. and is discussed in Chapter 5. Once themes were established, I
returned to my original notes and transcripts and looked for new data that emerged based on
themes. Thematic analysis allows for the identification and analysis of patterns within data in
order to interpret various aspects of the research topic (Boyatzis, 1998). In generating themes, I
looked for patterns that cut across all participants. In the following chapter I present the findings
based on emergent themes and the associated theoretical constructs.

3.7 Limitations

My research is not intended to be exhaustive. Rather, it is an exploratory study to
investigate the relationship between digital portfolios and parent engagement. I have a
background in early learning and using the platform FreshGrade to document and communicate
student learning. Although this helped me prepare for interviews and navigate portfolios it also
presents a bias. With several years invested in learning how to use FreshGrade as a classroom
teacher myself, acting in a leadership role to support district-wide implementation, and receiving
communication via digital portfolios for my own children, my lens when viewing portfolios and
interviewing participants is inextricably linked to this experience.

My study is limited by the inclusion criteria and small sample size as it may not provide
an accurate reflection of a typical primary classroom. The parent experience in a classroom
without technology support available or where the teacher has not established a comfortable
relationship with parents may be very different than those described in my study. Moreover,
digital portfolios are not a new phenomenon at the school site used in this study and parents
participating in my study were all familiar with the concept and therefore may have been more
receptive. Although I was cautious to avoid influencing how parents engage with portfolios, they
may have viewed it more often or added comments because they knew it was part of a study.
Likewise, I cannot determine if the study influenced how the classroom teacher communicated with parents or added documentation to student portfolios.

3.8 Summary

This chapter introduced the research design and methodology used to collect and analyze the data. A qualitative case study was employed to gather insight from parents during semi-structured interviews. This chapter also presents details relevant context to the study including researcher background, the digital portfolio platform FreshGrade, and the classroom site. The following chapter presents the findings from themes that emerged during data analysis.
Chapter 4: Findings

4.1 Introduction

The purpose of my study was to gain a better understanding of how parents with children in elementary school perceive digital portfolios, and the potential for improved parent engagement. My research is primarily concerned with how educators might use digital portfolios to effectively engage parents in their child’s learning. The findings in this chapter are organized by three research questions designed to unpack the overall inquiry: (a) In what ways might digital portfolios support parental engagement; (b) what do parents appreciate about digital portfolios; and, (c) what do parents perceive as limitations to digital portfolios? Emerging themes were gleaned from the data analyses and aligned with the corresponding research question.

4.2 In What Ways Might Digital Portfolios Support Parental Involvement?

Epstein’s (2013) framework described in Chapter 2 served as a guide to determine the ways parents might be engaged by the use of digital portfolios. Although her framework includes six types of parent involvement, including decision-making and volunteering, my research is primarily concerned with parent engagement as defined in chapter one. However, to understand a phenomenon, in this case connections between home and school influenced by digital portfolios, it must first be shown that there is indeed an association. As such, the first question explored the types of involvement as defined by Epstein (2013) and provided a starting place to explore the depth of these connections. Two types of parent involvement were evident in my study: Learning at Home and Communication.

4.2.1 Learning at Home

Although Epstein’s (1990) original framework describes learning at home as “homework and other curriculum-related activities, decisions, and planning” and encourages teachers to help
families understand such activities, my study considers learning at home in line with her “redefinitions” where homework includes “interactive activities shared with others at home or in the community, linking schoolwork to real life “ and “help at home to mean encouraging, listening, reacting, praising, guiding, monitoring, and discussing” (Epstein, 2009, p. 15). These redefinitions are more aligned with parent engagement as defined in Chapter 1 and speaks to the various ways a child’s learning may be fostered outside of the classroom. In my study, support for learning at home, initiated by the digital portfolio in some way, was evident in direct teaching by the parent, continuing conversations and asking questions to promote metacognition. The digital platform used in my study, FreshGrade, allows for background information and resources to be shared by the teacher along with evidence of learning. Parents commonly mentioned their appreciation for this extra information, such as learning intentions, and student expectations alongside a sample of their child’s work. The classroom teacher often posted details about activities, thus providing a reference for parents when they wanted to continue the conversation outside of school or support the learning at home. In addition, specific suggestions were often included on how a particular learning goal might be facilitated at home. Although all parents had access to this information, it was not clear how often it was accessed or how it was used. There were, however, several parent comments on the portfolio indicating that the information posted by teachers to explain what was being shared was helpful. Four of the six parents in my study participated directly with the portfolio by adding written comments to the teacher’s feedback or content added to the portfolios. Parent comments often acknowledged the suggestions for further learning made by the teacher and offered their appreciation for the “very useful information”.

Parents commented on the value of portfolio posts to their own learning and confidence to support their child. One parent remarked that:
sometimes teachers use buzz-words that are confusing, yet when you see an example on
the portfolio it helps, and I am like, okay, so there’s the example, and it helps me to
understand it a bit more ... I was like decoding, what is decoding and then I saw the
example and it made sense.

Recorded conversations between the teacher and student in an interview style was
commonly mentioned as a valuable resource. Parents found that actually hearing how the teacher
converses with their child in comments such as, “I like the way you read with confidence,” very
useful in their own conversations. One parent shared that she “was trying to approach [her
child’s] learning using the same terminology and questioning strategies because “I really did not
know” while another remarked on how it is “very helpful to hear how [the teacher] would
challenge her but also check for understanding”.

Another example of how portfolio documentation can serve as a reference for learning at
home can be seen in the activity shown in Figure 12.
Figure 12. Student FreshGrade portfolio sample: bucket filling

As seen in Figure 12, for this activity, the classroom teacher created a post on the student portfolios titled Bucket Filling. From the teacher’s description on the portfolio it appears to be an ongoing activity, as part of the Physical and Health curriculum, intended to help students explore respectful relationships, kindness and empathy. The student reflection on their learning is posted under the activity description, as a writing sample, along with an anchor chart where key ideas and sentence starters were created by the class and displayed in the classroom as a reminder for students. Sharing details of the activity along with classroom resources and a student sample creates an authentic reference, thus providing parents a resource to both support learning at home using common language and build their own understanding of their child’s school experience.
This is seen in parent comments such as “she uses the language at home and even her three-year-old sister is” and “I knew they had done something like that because I saw it on the portfolio, so I looked back to find it.” Another parent shared an example where she noticed something on the portfolios that “was similar to something we were doing at home so I asked more questions because she can link back to what she had learned in the classroom.”

There are several instances on student portfolios where the connection to learning at home is specific and personalized. Parents often shared their appreciation for anything that was specifically relevant to their child and not just a “generic statement about what was done.” An activity post titled Just Right Reading, for example, includes detailed information for all parents about what typical expectations are for oral reading at this grade level along with learning intentions such as students will “begin to recognize basic structures and organization of text.” This was followed with personalized feedback for each student, three times over the course of the school year, outlining learning goals and suggestions, such as “to support her self-correcting strategy, encourage her [to] slow down and to re-read sentences when it does not make sense” and “please continue to read with him and ask questions about what happened in the story to support comprehension.” Feedback was often given in a way that models for parents how the teacher supports learning, for example:

The next strategy [she] is working on is ‘chunking it out.’ If she doesn’t recognize the word then she can look for parts she does recognize and cover up the rest (for example with the word important she could cover up everything but the ‘im’ and say that sound, next reveal ‘port’ and then ‘ant’ and when she says them all together it reads ‘important’). Through photos of student work, videos showing activities such as oral reading and written details of how learning goals may be supported, the portfolio provided a useful reference
for parents to continue the learning at home. There are numerous comments throughout most of the portfolios to indicate that parents used information on the digital portfolio to inform activities and conversations at home. This is confirmed by comments during interviews such as “[the teacher] put a suggestion [on the portfolio] about expression so we have been working on that at home” and “it prompted me to work on something that I was noticing but did not have the skills to assist her.” The latter quote refers to a post seen in Figure 13 where the teacher posted a picture of how spelling is approached through work with sounds rather than memorizing whole words.

![Spelling]

At the beginning of the year we focus on practising our letter sounds and where we hear them within a word. So, in this activity, children are listening for the sound and identifying if they hear it at the beginning or end of the word. If a student would like to challenge themselves, they can listen and write the beginning and ending sounds and write both. Some students are capable of listening for all the sounds, including the middle vowel sounds as well. In this activity, students can challenge themselves with doing as much as they are capable of at this time. It is okay for students to be using their phonics skills to sound out new words, as we really want students to be able to get their ideas down in grade1/2, without a focus on perfect spelling.

**Learning Intentions:**
- I can listen to and recognize sounds.
- I can write letters that make their sounds at the beginning or end of a word.

*Figure 13. FreshGrade portfolio sample: spelling.*

Parents often mentioned how interesting it is to see “how kids are learning today... it is not how we were taught with worksheets and memorization.”
4.2.2 Communication

FreshGrade includes several features that align with Epstein’s (2013) suggestions for effective school-to-home and home-to-school communication such as specific invitations and opportunity for parent contributions. These include a translation option, announcements feature, ongoing access to information and ability for parents to comment on their child’s portfolio. As with the findings detailed in the previous section, it is not clear how often parents utilize these features. The purpose here, however, is to explore the potential afforded by digital portfolios to support parental engagement and share instances where it was evident in my study. All participants reported logging in to the portfolio several times over the school year with three of the six participants gaining access “all the time.” Survey results show that all participants consider FreshGrade a significant mode of communication with their child’s teacher. Four of the six participants added comments directly to their child’s portfolio and this often resulted in a conversation thread with the classroom teacher as seen in Figure 14.
All participants recognized the value of ongoing communication about their child’s learning through digital portfolios. One participant shared that although she does not have any concerns about her child’s learning, she likes getting “the FreshGrade updates and little videos as well as where they are at with certain aspects of their learning.” Another participant stated that “it is good as a full-time working parent as it is a lot easier.” During the 16 weeks of data collection, 24 posts were added to student portfolios by the teacher. These posts span all curricular areas and include a range of evidence including pictures, videos and anecdotal notes (Figure 15).
Figure 15. FreshGrade portfolio (parent view) showing four posts.

Parents have immediate access to new portfolio posts with an option to get push notifications to a mobile device. Participants expressed their appreciation for the FreshGrade updates and ongoing communication from their child’s teacher via digital portfolios.

4.3 What do Parents Appreciate About Digital Portfolios?

Analyses of participant interviews and portfolio documentation revealed four themes with regards to parents’ perceptions of digital portfolios as a means to support learning at home and communicate with their child’s teacher: (a) Timely communication, (b) feeling more
connected, (c) variety of learning evidence; and, (d) student voice. The following sections describe the findings within each of these emergent themes.

4.3.1 Timely Communication

Parents described how convenient it was to have ongoing access to their child’s digital portfolio and know what is going on as it happens. In particular parents recognized the value of “staying in the loop,” even when they have busy schedules and limited opportunities to be at their child’s school. As one parent shared, “I like FreshGrade in the sense that it is right there, I can comment whenever I want if I have any questions. It is the way our lives are right now, it is real time, not saying okay in two weeks you can have the parent-teacher interview.” Another parent went on to compare communication with digital portfolios to more traditional types, stating that, “you get way more information as it is in real time versus getting the paper one or three months down the road.”

One parent shared an example of how valuable timely communication can be when trying to help their child at home. The classroom teacher provided some background information about various reading strategies along with a student specific assessment and “all sorts of tips.” Although she found this information helpful, it “prompted her to ask for more support,” so she went to see her child’s teacher where “she gave me a helpful handout, but I would not have asked for it if I did not see her reading assessment so immediately on FreshGrade”. Other parents echoed an appreciation for frequent and detailed posts, giving them the confidence to ask more questions during the learning rather than after the fact.

4.3.2 Connection to School

In addition to feeling more informed to ask questions, parents often referred to a stronger connection to their child’s experiences at school. Coupled with the information they had access
to on the portfolio, this connection allowed for more meaningful conversations and interactions. As described by one parent, “you just engage with your child way more on what they are doing in class … I was able to have a conversation with them, you know about her writing, and you become a bit more involved in that school aspect.” Another parent shared a similar response and how she would sit down with her daughter to go through the portfolio together “and I will ask her about certain things, you know, to explain what it is going on”. Parents appreciated the dialogue prompted by portfolio posts and not “just the assessment piece.”

You can actually have those dialogues with your kids when you get home and also, your teacher posted this so I know you are learning about how plants grow and then ya know we can have this full-on conversation whereas if I was to say what did you do or did you do science today she would be like, no.

Digital portfolios as a “conversation starter” was frequently mentioned along with the difficulty parents often face in getting a response to the question, “what did you do at school today?” One parent in particular remarked how she was often confused by the fragmented information she received from her son and that the portfolio allowed for a more complete picture because “you get to see what they are doing and actually know what the kids are doing because sometimes when they talk about it you only understand half of it.” Another parent shared an example of viewing her daughter’s portfolio at work and later asking her daughter about what she did at school that day only to receive the common answer of “nothing.” She was able to prompt her daughter because:

I had seen on FreshGrade about a potato party so was able to ask specifically so there is that accountability... and you can ask more questions instead of what did you do today, I think it is good because it gives a starting point for parents to talk to their kids.
Busy schedules and dual-income families were often mentioned as a barrier to parents’ connection with their child’s school. Several parents shared how digital portfolios allowed them to feel informed about what was going on in their child’s classroom. Although face to face was considered the ideal form of connection for most parents, they felt schedules made this difficult or impossible, and with digital portfolios there was, “at least some opportunity to be involved.” Another full-time working parent commented, “I am still involved because I can see what is going on and I can ask about things, I can add on to things talked about.” Two parents in particular, remarked on the mobile notifications feature of FreshGrade which allowed them to, “stay connected even when at work.” One added that she always tries to look as soon as something is posted because “it was wonderful to have a window into her [daughter’s] learning.”

Learning artifacts posted on a student’s portfolios were often shared beyond the child’s parent(s). Several parents mentioned that pictures and videos were saved and shared with other family members such as siblings, aunts and grandparents. One parent stated that digital portfolios are “just a lot more family-centered and I would often share it with others, my husband, her brothers.” This parent enjoyed saving pictures and editing them to make them easier for her own parents to view when she sent it to them via email. Parents appreciated the opportunity to share writing samples, art projects and videos from school with their extended family living in various geographical locations.

4.3.3 Variety of Learning Evidence

Digital portfolios showed a variety of artifacts including pictures, videos, teacher anecdotal feedback and student quotes. Pictures were often taken for an assessment reference, such as a page from a journal or they showed students doing something like completing a word study activity on a whiteboard. Videos included students reading out loud to the class using a
document camera (this allows pictures to be shown on a larger screen), and interviews where students are engaged in a reflective conversation with their teacher. Written notes often took the form of extensive feedback personalized for each student or supportive comments such as “I like the way you used pictures to support your words, you are a writer!” Although parents expressed their appreciation for different types of learning evidence, personalization emerged as a common theme. In addition, parents often commented on the need for specific feedback or suggestions to accompany pictures and videos. One parent, for example, shared that videos are only helpful when they are part of an overall assessment because she “reads with him all the time, it is the comments with the video.”

One parent spoke to the nature of the post, opposed to the type of artifact and found that:
what was being posted was very helpful to help us guide her reading ... what I found helpful was the feedback on where she was reading but also examples of what we could do at home … with writing she would actually take a picture of it then make a comment on it then again something she could work on. It was very helpful especially when it was supported with documentation like that picture or video.

This concept is reflected in other parent comments such as “I am happy videos are limited or quick as they take more time to watch … I really liked the balance of photos and videos, conversations with my daughter and specific feedback” and “clips of my son reading does not tell me anything, however, the detailed descriptions [with reading clips] are very helpful and elevate the portfolios from a scrapbook to quality information.”

4.3.4 Student Voice

Another aspect of digital portfolios commonly mentioned by parents was student engagement in their own learning. Parents shared how their child likes to watch the videos, scroll
through their portfolio and talk about what has been posted on their portfolio. As mentioned by one parent, “She loves it and is constantly looking at her FreshGrade … sometimes she will just sit on her own and look at the pictures and videos for something to do, like at her brother’s baseball game.” Another parent recognized the opportunity for authentic learning as “we talk a lot about teaching children to write for an audience but if no one is going to see it except for your teacher you know you don’t have that built-in audience.” Parents acknowledged that since technology is a regular part of their child’s life, videos and pictures are “a nice way for them to share what they are doing” and “the kids are so digital now they get really excited about it.”

4.4 What do Parents Perceive as Limitations to the Effective Use of Digital Portfolios?

Although parents appreciated the ongoing communication, variety of learning evidence, student ownership and connection to school facilitated by digital portfolios, several concerns and suggestions were revealed during interviews. Parents described some challenges with technology and worries about consistency over the years with the quality of information posted on portfolios. In addition, parents requested that teachers share the purpose of digital portfolios and their expectations for parent participation. Finally, parents remarked on the importance of other modes of communication, such as face-to-face meetings, in addition to digital portfolios.

4.4.1 Technology as a Barrier

Although parents shared their appreciation for the “virtual window into the classroom” and felt that it helped them relate to their child’s daily experiences at school, one parent noted that the technology could be “daunting” and that “it is just not what we are used to.” Overall parents found the digital portfolio platform, FreshGrade “pretty easy to figure out and use”. There were, however, a few instances where parents described their challenges with FreshGrade and raised some concerns for new users. This often resulted from being unaware of particular
features or access capabilities. For example, one parent commented that she had not looked at her daughter’s portfolio over several weeks because her phone was stolen. She was surprised to learn that, in fact, the portfolio is also accessible through a web browser and she could log in from her computer. She wondered if all parents were aware of this and would be able to access the portfolio on various devices because she had “been using FreshGrade for three years and had no idea.” Moreover, “some people are more comfortable with technology than others.” Another parent offered a similar concern when she realized that the activity details posted by the teacher are hidden from view until the ‘more’ tab is clicked, she was “just not sure other parents are clicking that button to get all the information.”

Parents were often frustrated by the way information is organized on the portfolio and how posts are displayed. One parent in particular explained, “at times I would lose things that were posted, even though I would get an alert, I would scroll and scroll and scroll to finally find it,” she went on to suggest that:

- it might be nice to have it filed in some way like science, math, reading, writing ... if I want to find her reading I don’t want to scroll through all the documentation, I want to know where to go and be like, there it is, all her documentation on reading, we have seen improvement and there is something she could work on, also three months down the road, how is she now.

Other parents offered similar suggestions as it “can be hard to find specific subject areas so it would be nice to have a tab or something.” Another concern for parents was the size of pictures and limited editing capabilities. For example, one parent shared that she “really liked seeing writing samples because [her daughter] does not write a lot at home so it is nice to see the progress right there on FreshGrade but sometimes pictures [are] hard to see.” She went on to
explain that although she feels comfortable enough with technology to download and edit pictures, it is an extra step that others may be unwilling or unable to take.

4.4.2 Quality of Portfolio Posts

Although most parents were satisfied with the amount of information posted to their child’s digital portfolio, there was a concern about subsequent years as, “depending on the teacher it could be a very different experience with FreshGrade.” One parent in particular commented that “teachers might only [add to the portfolio] every two months or so, then I might have some anxiety about it.” Later she added “maybe there should be a minimum standard” because some teachers may not post enough, while others, too much. Balance emerged as a common theme in conversations about what is posted to the portfolios and when. Parents often spoke of quality over quantity and portfolio updates that are frequent yet not overwhelming. As mentioned by one parent, “the portfolio is quite limited compared to others I have seen, which personally I like ... I would always love more but also understand it is not sustainable, so I would rather have the quality over the quantity.”

Parents’ descriptions of a quality post included specific and concise feedback with attention given to individual learning goals, artifacts that highlight progress or growth and suggestions for improvement. Portfolio updates are most helpful when they are streamlined to help parents understand “this is where he is at, this is what he needs to do to get to the next level sort of thing, to progress or to fix … and these are exercises you can do with him at home that would help him.” Parents were clear in wanting feedback “specific to my child” and “comments where they can improve,” otherwise the portfolio might just become a digital “scrapbook.” One parent added, “it has the potential to be a bit fluffy so I liked that [his teacher] put what he can work on sort of thing and useful information as to where he stood.” Although parents appreciated
various learning artifacts, such as pictures and video, the type of documentation was not as important as the clarity it provided in terms of their child’s current learning goals. A picture or video posted on its own for example, without something to “substantiate it, really does not mean anything.”

4.4.3 Digital Portfolio Purpose and Parent Participation

FreshGrade allows parents to add comments to any portfolio post created by the classroom teacher or student. Parents shared that although they appreciate the opportunity to add comments and questions, they are not certain what might align with the teacher’s expectations. It was often mentioned that parents want to acknowledge what has been posted without writing an extensive comment. Sometimes parents had viewed the portfolio, discussed it with their child, and wondered, “do I need to add a comment as well, I mean does [the teacher] really want to read 23 responses, I am just not sure if I should be commenting more.” As one parent in particular mentioned, “I mean I always show [my daughter] when her FreshGrade posts come up, but I will have verbal communication with her, I don’t then post a comment.” She went on to share that in a conversation with other parents they discussed “wanting the teacher to know it had been seen but not sure how to acknowledge that because they did not want to just write good job.” Parents often struggled with knowing what to add as a comment and wondered if there could be a way to acknowledge the information posted, “similar to the Like feature on Facebook.” Parents were often concerned that the teacher was “doing so much work without knowing if it was even being viewed” and wanted clarity on what the expectations were for them.

The purpose of digital portfolios was vague for many parents. They all viewed it as a way to access information about what their child is doing at school, yet it was not clear if portfolios
also serve as an official assessment record like a report card. Although there were no specific
questions about report cards in the interviews, it often came up as a point of comparison, with
mixed reviews. Several parents shared that they preferred digital portfolios because “it is just a
lot more detail than I could possibly imagined on a report card, it is not just every few months, or
a generic matter of fact … but an ongoing window into their learning.” One parent commented
that she prefers digital portfolios because “the feedback is more specific … and report cards are
pretty lame, they are plain, generic and a checklist that does not really give me information about
specifics of my child.” In contrast, two parents, found that if the portfolio is intended to replace
report cards it would not be enough information in their opinion. “It is great for a glimpse into
the classroom, but I don’t prefer it for assessment purposes.” One parent shared that a traditional
report card “gave more snapshots and ability to address more learning outcomes.”

One parent in particular shared her struggle in reconciling the traditional forms of
communication with digital portfolios. She found that “a report card is laid out in black and
white on paper and that is nice sometimes.” This parent continued to add:

but when [the teacher] does give feedback on the portfolio there is a ton of detail, more
than you would get on a report card and I do appreciate that aspect, but you cannot do
that for 6 things per term because that would be very onerous for the teacher. I think also
I am a person who does not like change so much.

Finally, she remarked that “this is a fun tool and gives a glimpse into the classroom but I
don’t prefer it for assessment purposes as it does not cover as much as a traditional report card,
[the digital portfolio] is more in depth but I just don’t know which is more valuable. In general,
parents agreed that the detail of digital portfolios along with a summary at key points in time
would help them feel informed about their child’s learning in relation to the curriculum.
4.4.4 **Other Modes of Communication**

Parents often addressed the need for other modes of communication such as sending things home, chatting with the teacher during pick-up or drop-off, notes in planners, and parent-teacher conferences in order for digital portfolios to be effective. One parent in particular noted that “I really like that [the teacher] still sends things home like sight words because if everything was on the portfolio you might get bogged down.” Parents felt that the teacher used digital portfolios with intention and not to showcase everything their child is doing. They also shared that it was an addition to other means of support, not a replacement. For example, one parent commented that she knew how her son was progressing from feedback on the portfolio and the classroom teacher also “gave me little things to do with him at home to practice letters and words, I really like that.” Another parent spoke of “little booklets sent home to support [her daughter’s] writing goals that were posted on the portfolio.”

Commonly mentioned by parents was an appreciation for the efforts of the classroom teacher in establishing a relationship where they “could go and talk to her anytime” or reach out if they had specific questions or concerns. As one parent stated, “the portfolio is only as good as the teacher using them.” One parent shared that there was a tendency to “feel a bit detached from [the digital portfolio] because it is electronic … I am not a big social media person and prefer face to face to ask questions and read body language,” therefore, she was happy that there were also opportunities to connect with the teacher in person. Several parents agreed with comments such as, “at the one-on-one parent-teacher interview I get more satisfaction out of it because I can ask questions” and “I find the parent-teacher conversations super valuable.” One parent shared the value in multiple modes of communication such as digital portfolios and periodic face-to-face conferences. “I found that the information on FreshGrade was very helpful so I
would know what to ask about in meetings.” She shared an example of a reading assessment posted on the portfolios with “all sorts of tips” that, although helpful, she gained more confidence “when I went to see her to ask for a bit more she gave me a helpful handout but, I would not have asked for it if I did not see her reading assessment more immediately on FreshGrade.

4.5 Summary

The findings presented in this chapter indicate the ways digital portfolios might influence parental engagement and how parents perceive digital portfolios as a tool to support learning at home and facilitate communication between home and school. Semi-structured interviews allowed parents to share their thoughts through conversation, and coupled with portfolio documentation, the findings relate parents overall experience to the research questions. The findings in my study describe the experience, opinions and suggestions of one group of parents where digital portfolios are used in their child’s grade one/two classroom.

In general, parents were satisfied with digital portfolios as a way to connect with their child’s learning at school and appreciated the opportunity for a virtual glimpse into the classroom. Although there was some disagreement among parents as to the ideal amount of information on the portfolio, all parents acknowledged the value of constant access to their child’s learning through the digital portfolio. Parents felt more connected to their child’s school experience and credited digital portfolios as a good conversation starter and resource for understanding what their child was learning at school. Personalized evidence of learning, where student-specific goals are highlighted, and suggestions for improvement given, was viewed as valuable by all parents. In addition, parents appreciated the opportunity afforded by digital portfolios for student ownership and accountability for their learning.
Parents felt that clarity around purpose and expectations were important for teachers to consider when using digital portfolios. At some point during interviews all parents either mentioned report cards or another assessment tool in comparison to digital portfolios. They were not certain if digital portfolios were intended to have the same amount of information as traditional reporting methods or how to find the information they were used to seeing. Parents also wondered if they were expected to comment directly on the portfolio, if so how often, and they wondered if there was another way to acknowledge the portfolio if they did not know what to write in the comment section or had a conversation with their child instead. Finally, parents agreed that their experience is rooted in a positive relationship with their child’s teacher and appreciate that digital portfolios are part of other modes of communication and resources. Chapter 5 includes a discussion of these findings as they relate to current literature, implications for practice and possibilities for future research.
Chapter 5: Discussion and Recommendations

5.1 Introduction

How might educators use digital portfolios to foster parent engagement in their child’s learning? This question was explored through a qualitative case study designed to gain insight into how parents understand, use and perceive digital portfolios provided by classroom teachers to capture and communicate student learning. Six parents, with children in a grade one/two classroom, shared their perspectives through an online survey, semi-structured interviews and portfolio documentation. The findings of my study indicate that digital portfolios can have a positive impact on how parents support learning at home and communicate with their child’s teacher. My study also revealed several attributes that parents appreciate about digital portfolios as well as identified limiting factors.

The previous chapter explored the relationship between digital portfolios and parent engagement through three research questions: (a) In what ways do digital portfolios support parent engagement; (b) what do parents appreciate about digital portfolios; and, (c) what do parents perceive as limitations to the effective use of digital portfolios? In this chapter, findings are discussed within themes that align with current literature of home-school communication and parents supporting learning at home, with consideration given to the influence of digital tools. In addition, findings that highlight the process of parent engagement as described by Hoover-Dempsey & Sandler’s (1997) model and Bronfenbrenner's (1979) ecological theory, introduced in Chapter 2, are discussed along with pedagogical implications and recommendations for the use of digital portfolios in elementary classrooms. Finally, this chapter includes directions for future research and concluding remarks.
5.2 School-Home Communication

Communication between school and home is often cited as a key component for parent engagement, building connections between teachers and parents and ultimately positive student outcomes (Epstein et.al, 2018; Henderson & Mapp 2002; Sanders, 2008). The most effective way to initiate, maintain and promote effective communication, however, varies across time and place in relation to complex factors such as family dynamics and school culture, while foundations such as trust, respect and goal consensus are pivotal (Bronfenbrenner, 1979; Hoover-Dempsey et al., 2005; Pushor, 2014). It is of particular importance during this time of significant change to gain insight into the perspective of parents and gauge the effectiveness of new tools such as digital portfolios.

All parents in my study appreciated the mode of communication afforded by digital portfolios and agreed that they felt more informed about their child’s experiences at school. Some parents choose to engage in two-way communication directly on the portfolio by adding comments or questions through the parent portal, while others used it as a school-home information source. In either situation, parents reported that staying informed on a regular basis was important to them and that digital portfolios offered useful information about their child’s learning while providing new ways to communicate with their child’s teacher. Findings in my study suggest that digital portfolios provide a platform for virtual conversations and help parents feel more comfortable with face-to-face meetings. For digital portfolios to foster meaningful school-home communication, parents in my study felt that a good relationship with the classroom teacher was key, along with other opportunities to connect, such as parent-teacher conferences.
5.2.1 Virtual and Personal Connections

During interviews parents often mentioned the connection they felt to their child’s learning at school because of the ongoing nature of digital portfolios and variety of artifacts, such as videos and photos, where they could hear their child’s voice or actually see what they were doing. Parents referred to the experience as a “sneak peak” or “window” into their child’s classroom and found digital portfolios strengthened communication between school and home. This finding is consistent with other studies investigating digital portfolios, or similar technology, used to communicate with parents (Bavuso, 2016; Gallagher, 2018; Goodman & Cherrington, 2015; Higgins & Cherrington, 2017; McLeod & Vasinda, 2009; Olmstead 2013; Thompson, Mazer & Grady, 2015). Gallagher (2018) found that by making learning in the classroom visible, digital portfolios ease the “friction of distance” often felt by parents and young children (p. 25). In secondary schools, parents report that timely updates provided by digital tools are a convenient way to stay informed about what their child is learning at school and to connect with teachers (Bavuso, 2016).

For parents in my study, access to their child’s digital portfolio often influenced personal interactions, with both their child and the classroom teacher. Prior research in in a variety of educational settings, such as early childhood centres and secondary schools, also found that the impact of digital tools extends beyond a virtual connection (Bavuso, 2016; Beaumont-Bates, 2017; Goodman & Cherrington, 2015; Higgins & Cherrington, 2017). Parents in Bavuso’s (2016) study, for example, indicated that a private Facebook group provided information through pictures and notes thus “opening the lines of communication” and what is viewed might spark “parent interest in what they are learning and lead to a conversation” with their child or the classroom teacher (p. 73). In a study by Higgins and Cherrington (2017) digital portfolios were
used in a preschool to share learning stories and invite comments from parents and extended family. Higgins and Cherrington (2017) found that the information parents continuously received through digital portfolios “led to more meaningful conversations with their child” (p. 23).

Likewise, parents in a study by Beaumont-Bates (2017) felt that it was “the speed and frequency with which their child’s learning and development was being communicated, which has led to more effective collaborative partnerships with teachers” (p. 355). Similar to the opinions expressed by parents in my study, Higgins & Cherrington (2017) also found parents appreciated the new connection afforded by digital portfolios with comments such as:

> We've loved receiving the updates of what Colin has been up to, and are thrilled with the posts submitted - everything ranging from simple tasks, funny stories, and group activities - the teachers at [the centre] keep us up to date on everything and we love it (p. 43).

### 5.2.2 Parent Participation

From parents’ feedback during interviews and comments on their child’s portfolios it appears that digital portfolios were mostly seen as a way to receive information from the classroom teacher. Although a few parents engaged in two-way communication as seen in Figure 14, most of the comments made by parents were affirmations for their child such as “good work” or “I like how you read that book.” Comments made by parents were most often directed at the classroom teacher in the form of an acknowledgement such as “thank you for posting” or “this is great.” In a study investigating how digital learning stories might improve communication between preschool teachers and parents, Higgins & Cherrington (2017) reports similar results, where affirmations account for almost half of the types of comments made by parents. Likewise, Higgins & Cherrington (2017) found parents also made comments “as a way of showing
appreciation of teachers” (p. 63) and that two-way conversations focused on learning were minimal.

Although educators may choose to use digital portfolios as a way to engage parents in dialogue beyond affirmations and acknowledgement, this type of informal conversation may be an important stepping stone. As indicated in other studies, casual conversations between parents and teachers help to build trust and rapport (Higgins & Cherrington, 2017; Reedy & McGrath, 2010; Wong-Vilacres, Ehsan, Solomon, Pozo Buil & DiSalvo, 2017). According to Bronfenbrenner’s (1979) ecological model outlined in Chapter 2, trust is a key element for effective two-way communication and sustaining reciprocal relationships. Previous studies investigating the role of trust in parent-teacher relationships further support this notion, and the significance of trust in fostering parent engagement (Forsyth, Adams & Hoy, 2011; Santiago, Garbacz, Beattie & Moore, 2016).

The existing research also suggests that with regards to technology, parents need to be viewed as learners and given time to gain confidence or improve their skills (Clark, 2011; Lewin & Luckin, 2010; Katz, Moran & Gonzalez, 2018). Moreover, when parents feel a connection with the classroom teacher, they will be more likely to participate and ask for guidance. This underscores the critical role of parent-teacher relationships in the success of any tool or strategy intended to strengthen parent engagement (Elias, Patrikakou & Weissberg 2007; Goodall, 2016; Pushor 2010). Therefore, the dominance of casual comments made by parents on digital portfolios, seen in my study and others, may shift to deeper conversations over time and in relation to their experience with technology or relationship with their child’s teacher. For example, parents indicated that their experience with digital portfolios during the course of my study was influenced by their comfort with technology in general, familiarity with FreshGrade,
and their interactions with the classroom teacher. Although several parents used FreshGrade in previous years with their children or a different teacher, they indicated that there is still a learning curve and during the course of interviews were surprised to learn about features they were unaware of. Interestingly, all parents spoke to the importance of the classroom teacher and indicated that their satisfaction was related to their comfort level speaking with the classroom teacher and the other opportunities she provided such as after-school conversations and formal parent-teacher interviews. One parent in particular articulated this finding:

the communication has been quite good this year … at any time I could ask [the teacher] for a meeting and she is always kind and willing to talk to me and there are also conferences which I also think is a great way to communicate about your child with a teacher.

Parent participation with the digital portfolio may also depend on factors such as work schedules, family dynamics and culture. As outlined in Hoover-Dempsey & Sandler’s (1997) model, life context is a significant variable in parent engagement. Perceptions of the time and energy parents feel they can afford to give will influence their decisions and, in turn, the degree to which they are engaged in their child’s learning (Green, Walker, Hoover-Dempsey & Sandler, 2007; Hoover-Dempsey & Sandler, 1997). Historically, parent options for interacting with their child’s teacher or receiving information about progress and goals has been based on school hours and schedules; it has also been very one-sided, mostly information going from school to the home. Although the flexibility and asynchronous nature of digital portfolios allows parents to access information when they want and choose how to proceed, parents may need guidance in doing so or time to recognize the new possibilities. Parents in my study, for example, showed a range of responses to portfolio documentation such as adding a written comment through the
parent portal, using it as a conversation starter with their child, seeking additional resources from the classroom teacher or reviewing the portfolio to stay up to date on classroom activities. Although they accessed portfolios to varying degrees and frequency, all parents saw value in the tool and found it connected them to their child’s school experience. As many classroom populations continue to diversify in terms of culture, family structure and socio-economics, it is increasingly important to have options and flexibility for school-home communication. Technology and tools such as digital portfolios provide teachers, students and parents with a dynamic mode of communication that can be customized for individual needs.

Prior research on the role of technology and parent engagement is consistent with this finding and highlights the importance of tools such as digital portfolios when personal interactions are difficult – due to a language barrier, for example, or not possible because of conflicting availability. In the book, *Family Engagement in the Digital Age*, Simon (2016) authors a chapter about digital tools that can facilitate parent engagement and strengthen communication between home and school. She describes digital portfolios as an innovative addition to parent engagement strategies as they share student progress and allow for a continuous flow of information alongside resources for learning beyond the classroom. In accordance with the findings of the current study, Simon agrees that although face-to-face interactions are ideal, it is not always possible, and digital tools offer new “options that can connect us to families when, where, and how they want us to connect” (p. 169).

For the parents in my study, the main limitation to their use of portfolios as a two-way communication tool was uncertainty as to the purpose of the portfolios and their role as parents; in particular expectations for adding written comments through the parent portal. Parents often mentioned an appreciation for the efforts of the classroom teacher and found the information
posted helpful, yet, they were not sure what to say in response. Moreover, some parents specifically mentioned how they talked with their child and did not know if it was necessary to repeat this conversation in writing on the portfolios. From interview conversations it appears that parents were not sure if the digital portfolio was a replacement for report cards; in which case their comments would mainly be questions for the teacher, or a showcase of their child’s progress and success; where their affirmations would add encouragement. Furthermore, parents were often unsure what to do with information posted on the portfolio and concerned about adding to a teacher’s workload if all parents started commenting directly on the portfolio. Studies by Higgins and Cherrington (2017) and McLeod and Vasinda (2009) echo these sentiments and suggest role construction and portfolio purpose are important precursors to the implementation of digital portfolios.

5.3 Learning at Home

Research in the area of family literacy offers valuable insight into how parents support learning in multiple ways, beyond helping with school-initiated activities (Lipps & Yiptong-Avila, 2000; Purcell-Gates & Dahl, 1991). As a social practice where children make meaning through multiple modes, literacy is continuous, and deeply connected to a child’s daily life (Cope & Kalantzis, 2000; McTavish, 2007; Purcell-Gates, 1996; Teale & Sulzby, 1986; Kress, 2003). Hoover-Dempsey and Sandler et al., (2005) highlight the importance of parent self-efficacy where their belief in the impact they can have is a limiting factor. As such it is important for educators to find ways to connect with their families, view parents as a resource and engage in practices that will provide clarity for parents on how learning is fostered in multiple ways. Learning beyond the classroom takes various forms such as talking about a child’s experiences at school, making connections to a specific topic in the community, expressing interest in what
learning is introduced at school and helping with school work (Hoover, Dempsey & Sandler et al., 2005). Although it is not clear from my study how parents might use specific documentation such as video to facilitate learning at home, parents did provide insight as to what they appreciate and find useful. Personalization was a common theme as parents discussed digital portfolios. Parents appreciated feedback that was detailed and specific to their child’s goals instead of generic comments such as “please continue to read with your child.” Also, parents wanted resources and suggestions for support that would align with their child’s learning goals and help to build consistency between home and school.

5.3.1 Personalization

All parents in my study commented on the need for information that is intended to address their child’s specific learning goals in relation to grade level expectations and curriculum. One parent in particular noted that although it is nice to see what they are doing in class, there is potential for digital portfolios to be “a bit fluffy” and unless she is also getting a detailed report card, she “likes that this year [her child’s] portfolio includes what he needs to work on and that sort of thing”. The most favoured type of documentation shared on digital portfolios helped parents see progress, clarify goals that had been met and provided specific ideas for support at home. In particular, most of the parents mentioned how powerful it was to hear their child’s voice in short videos reading to the class or conversing with the teacher. These finding correlate with other studies focused on digital tools and parent engagement (Beaumont-Bates 2017; Higgins & Cherrington 2017; McLeod & Vasinda, 2009). In an exploratory study designed to understand how digital portfolios (referred to as electronic portfolios) are perceived by students, parents and teachers in an elementary school setting, for example, McLeod and Vasinda (2009) found parents primarily wanted to see progress and student reflections on digital
portfolios. Likewise, Higgins and Cherrington (2017) found that sharing progress was a desired area for improvement and although parents appreciated the learning stories shared through digital portfolios parents were “interested in comparing [their] child’s skill development over time.”

The option for timely, two-way communication with digital portfolios provides an opportunity for collaborative goal setting and a space for parents to clarify and build their own understanding. Several studies support the import role of collaborative goal setting in parent-teacher relationships (Cox, 2005; Epstein, 2013; Henderson & Mapp, 2002; Higgins & Cherrington, 2017; Cherrington & Loveridge 2012). Furthermore, goal consensus is a key component of effective two-way communication according to Bronfenbrenner’s (1979) theoretical model. In my study, when parents did engage in two-way communication on the portfolio, beyond affirmations and acknowledgements, it was to expand on or clarify learning goals described by the classroom teacher. Cherrington and Loveridge (2014) also found that documenting student experiences initiates dialogue in a way that promotes shared understanding of goals. An example from the current study is seen in the activity Just Right Reading described in Chapter 4, where the teacher added personalized feedback to a general statement about grade level expectations and curriculum connections. This particular portfolio entry does not include picture or video, just details of expectations related to curriculum and how students are supported in their oral reading at school. In addition, each student portfolio included detailed feedback in relation to personalized goals and steps moving forward. This prompted the parent to ask questions and gather more information about ways to support that goal at home.

5.3.2 Modelling and Resources

As teachers provide comments to students on digital portfolios they are, in turn, modelling for parents effective ways to give feedback and helping parents use similar language
and strategies at home. Through pictures and videos, parents are also able to see various learning opportunities that likely contrast their own personal experience with school. This helps to provide consistency between settings, highlight differences and similarities regarding contemporary school experiences, and strengthen communication. With 24/7 access to portfolios, the digital platform becomes a valuable resource for parents as they can use learning evidence, resources added by the classroom teacher such as website links, and strategies being employed at school to help their child make connections, share their thinking or complete work on school-related activities. Previous research suggests that discrepancies between settings, from understanding of content to language used, are often barriers to effective communication between home and school, and that technology may offer a new opportunity to curb common miscommunication (Goodall & Montgomery, 2014; Ho, Hung & Chen, 2013; Passey, 2011). As parents in my study, and others investigating digital portfolios, suggest, a variety of evidence along with descriptive feedback from the teacher helps to make learning visible and build understanding of how learning is approached in classrooms today (Higgins & Cherrington, 2017; McLeod & Vasinda, 2009). One parent in particular found this very helpful as “it is all so different from the way we learned” and when students share their thinking out loud in a video, as they create math equations using manipulatives for example, you can “really hear that they understand.”

5.4. Pedagogical Implications

Digital portfolios offer a unique opportunity for improved parent engagement where educators: (a) Make decisions aligned with the needs of their students and family context; (b) clearly establish the purpose of digital portfolios and share expectations with all stakeholders;
(c) personalize digital portfolio evidence; and, (d) communicate student learning in a variety of ways.

5.4.1 Know Your Students and Their Families

As described in Chapter 1, the driving force behind digital portfolios in many school districts is the desire to build ongoing and collaborative relationships with parents. Ideally then, digital portfolios will provide a space for parents to contribute their knowledge and experiences to conversations about their child’s learning and foster reciprocal relationship. With this in mind, it is important for educators seeking to engage families through the use of digital portfolios to recognize that not all portfolio experiences will be the same. Although it is clear from my study and previous research that digital portfolios offer new opportunities for communication between home and school, “just because the means of communication exist, does not ensure that communication will take place or yet that this communication will be effective” (Goodall, 2016, p. 122). Meaningful, two-way conversations focused on learning take time to actualize and, according to Bronfenbrenner (1979), include trust, a balance of power, and goal consensus. Moreover, parent participation on the platform, and the way they use the information shared on digital portfolios, will vary in accordance with factors such as family structure, culture and comfort with technology (Hoover-Dempsey & Sandler, 1997). Therefore, a critical first step to the successful implementation of digital portfolios will be for classroom teachers to gather background information such as the primary language spoken at home, availability for face-to-face meetings, preferred method of communication, goals or expectations for their child’s learning, and comfort level with technology. This information will guide their use of portfolios and how they might help parents understand their role and appreciate the benefits of a collaborative partnership. Possibilities to collect this information include a survey, student files
and new school year routines, such as inviting families to a classroom open house, may also aid in the collection of useful information. Once a teacher has a sense of how parents might access and use digital portfolios, they can then make more informed decisions about what type of documentation is included, how often additions are made to the portfolio and how portfolios will be supplemented by additional forms of communication.

5.3.2 Define Purpose and Roles

The recent influx of technology tools used by students in school and by teachers to connect with families can be overwhelming for parents, especially due to the varying ways these tools are used. Digital portfolios, for example, may be used by one classroom teacher to supplement more traditional forms of communication such as report cards, or; as in my study, used to formally communicate student learning in lieu of report cards. In the latter situation the digital portfolio is not merely a report card replacement. It represents a significant shift in the way teachers capture, curate and share learning with parents. As such, it is important for educators to clarify, perhaps for themselves first, what the purpose and intention is for digital portfolios. Secondly, the purpose needs to be clearly defined and shared with students and parents. Appendix 8 shows an example of the first portfolio post shared by many teachers in the school district where my study took place. The information shared (also sent home on paper) is intended to help parents recognize the difference between report cards and the ongoing sharing of learning seen with digital portfolios such that a continuous dialogue is facilitated, and student progress is highlighted. Many schools in this district, including the site for my study, also offer an information night for parents where they can see a sample portfolio and ask questions. As suggested by Bond, Tierney, Bertelsen and Bresler (1999) with regards to student-led conferences, resistance of some form is likely where parents are unfamiliar or do not have their
expectations met. As digital portfolios, like student-led conferences, will be uncharted territory for many parents, clear communication beforehand may help to alleviate any resistance from change or shifting power dynamics. Furthermore, insight from parents in my study suggest it is also important for teachers to clarify the expectations when viewing a portfolio, adding comments and so on, while acknowledging that life context will influence their participation. Finally, specific features such as how to access on various devices and options like Google Translate will be important for teachers to review with parents depending on the particular needs of the community. Appendix 9 includes a sample letter for parents about digital portfolios, how it will be used, and possible prompts for their participation through the parent portal.

Digital portfolios, in essence, provide a virtual conferencing space where each stakeholder brings a unique perspective, and this can be challenging for the classroom teacher to navigate without prior knowledge of the family and a plan to encourage dialogue. Knowing your families and using that knowledge to guide conversations prior to and throughout the process of implementing digital portfolios will help to align the expectations of parents, students and teachers. As seen in student-led conference research where the interaction is face-to-face, there are multiple relationships to consider – parent-teacher, teacher-student and parent-child – therefore the “culture of the home, the community and the school meet, all converging within a school context” (Bond, Tierney, Bertelsen & Bresler (1999, p. 10).

5.3.3 Personalize the Experience

It is clear from my study and others that, although all parents appreciate the virtual window into the classroom, their preference is for documentation that is focused on learning and their child’s specific goals (Beaumont-Bates, 2017; Gallagher 2018; Higgins & Cherrington 2017; McLeod & Vasinda, 2009). There is a potential for information overload and as parents in
my study suggested; balance is key. There are instances, such as oral reading, where video can be very powerful by allowing parents to hear how a child is guided through text when they are stuck for example; however, all learning need not be shared via picture or video. As indicated by feedback in my study, this is an important consideration for both the teacher’s time and the parent experience. Parents in my study acknowledge that videos of reading, for example, are ideal when coupled with teacher feedback; however, anecdotal notes can be just as effective when they include individual goals and specific strategies. As one parent mentioned she “hears [her child] read all the time,” it is the teacher suggestions to help she is most interested in. In addition, parents in my study often mentioned an appreciation for the individual feedback or documentation provided that showed progress, current goals and next steps, as opposed to a constant flow of information about what was done as a class.

5.5. Future Research

As indicated in Chapter 3, one of the limitations to my study was a small and homogenous sample size. Culture and language can play a significant role in the implementation and success of digital portfolios as a tool to engage parents in their child’s learning. Current research in parent engagement shows that these are common barriers for establishing connections between home and school (Bower & Griffin, 2011; Dretzke & Rickers, 2016; Epstein, 1995). In a study with Latino families, for example, De Gaetano (2007) found that respect for the particular role of schools and teachers often limits communication, more so when English is also not the primary language used in the home. As technology and platforms such as digital portfolios offer a new opportunity to connect with parents and foster culturally responsive practices this would be a valuable addition to the literature on parent engagement.
The original intention for my research was to explore the potential for digital portfolios to influence the ways in which parents support early literacy learning at home. After several years as a grade one teacher I recognized a significant discrepancy between my understanding of literacy and that of parents and, in turn, the way literacy learning was supported at home and at school. Moreover, the parents of my students did not seem to acknowledge the value of everyday literacy activities that they might engage in to support their child, such as writing birthday cards, reading labels at the grocery store and singing songs. As McTavish (2007) and others have found, these informal or daily literacy events can play a significant role in a child’s literacy development (Heath, 1983). Although digital portfolios in my study were viewed with a focus on literacy activities it was not possible to determine how documentation on the portfolio might enhance parents understanding of literacy and help the support their child in a way more aligned with classroom activities. A more extensive study aimed to gather information about parents’ beliefs and how they support literacy at home before and after exposure to digital portfolios would be a valuable addition to the area of study. Furthermore, research exploring if and how parents use specific documentation, such as video, to support learning beyond the classroom would be a valuable addition to this area of study.

5.6 Conclusion

Although there is a significant research base to support the importance of parent engagement in a child’s learning, how it is understood and actualized remains a challenge in many schools. Given the increasing complexity of family structures, cultural diversity and the myriad of new options afforded by technology, effective communication between home and school must be dynamic and responsive. Moreover, curriculum updates reflective of the skills, knowledge and competencies students need to be successful in the 21st century often create a
discrepancy between a parent’s school experience and that of their child. In British Columbia, for example, a significant curriculum redesign implemented in 2016 changed the way teachers design learning experiences, report progress and approach curriculum goals. This can make it difficult to maintain consistency between a child’s learning experiences at home and school. Digital portfolios are gaining popularity as a replacement for, or supplement to, traditional communication tools such as report cards. They often serve as a means to maintain communication between the home and school, offer resources for parents to support learning, and highlight learning experiences in the classroom. With limited research specific to digital portfolios in elementary schools it is a critical time to explore their effectiveness and potential in facilitating parent engagement.

In my study digital portfolios were shown to increase communication between school and home. The asynchronous nature of digital portfolios coupled with various types of documentation including anecdotal notes, pictures and videos, provided parents a unique view into their child’s experiences at school. For parents, this translated to improved conversations with their child and allowed them to feel more connected to their child’s school. Although parents valued the information provided and frequent interaction with digital portfolios, their experience with portfolios was closely associated with a positive parent-teacher relationship and multiple sources of information in addition to portfolios. Possible barriers to the effective use of digital portfolios revealed in my study include: (a) Generic information; (b) unclear purpose with regards to student learning; and, (c) lack of additional resources and means to communicate.

Digital portfolios offer a platform for authentic evidence of learning where a child’s progress and goals, in relation to grade-specific curriculum, are shared in real time alongside references for parents such as teacher modelling, links to helpful websites and strategies used in
the classroom. The benefit is twofold: parents have valuable resources to engage in rich conversation or support learning at home, and they have opportunities to build a relationship with their child's teacher. A positive relationship built on trust, goal consensus and balance of power (Bronfenbrenner, 1979), alongside personalized and dynamic evidence of learning offered by digital portfolios presents an innovative opportunity to bridge the “home-school gap” by fostering collaborative, learner-focused and ongoing conversations between all stakeholders.

5.7 Summary

This chapter reviews the findings from my study in relation to current literature and the theoretical framework detailed in Chapter 2 in order to better understand how educators might use digital portfolios to foster parent engagement in their child’s learning. My study aligns with the findings of similar research where the potential of digital portfolios is seen in enriched support for learning at home and improved communication between home and school. Specific attributes of digital portfolios that support parent engagement are also described in this chapter including virtual and face-to-face connections, personalization of feedback, resources and parent participation. Limiting factors to the effective use of digital portfolios, such as comfort with technology, cultural differences and the parent-teacher relationship are also discussed. Finally, this chapter includes recommendations for educators when implementing digital portfolios and suggestions for future research.
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Appendix 1: Recruitment Letter

Dear Parents/Guardians,

My name is Mrs. Karen Fadum and I am a graduate student in the Department of Language and Literacy Education at the University of British Columbia (UBC). As part of my thesis for a Master of Arts degree, I am conducting research on how classroom use of digital portfolios (such as FreshGrade) may affect parents’ views of their children’s literacy development. Dr. Marlene Asselin is an Associate Professor at UBC and will be the Principal Investigator supervising this research.

This letter is to inform you about the study titled *Digital Portfolios: Parents Supporting Early Literacy*, being conducted in Division 10 at South Meridian Elementary School and invite your volunteer participation. Your child’s teacher and the school principal have reviewed the research proposal. It has also been reviewed by the Surrey School District.

**Purpose of the Study**

The aims of this research are (a) to understand the influence of digital portfolios as a home-school communication tool; and (b) to gather feedback from parents on how notes, pictures and videos added to portfolios to demonstrate learning may affect the ways they support their child’s literacy development at home.

Research question: In what ways can the use of digital portfolios engage parents and influence early literacy learning?

**Study Procedures**

This study does not involve students and seeks volunteer participation from parents/guardians only. If you would like to be a part of this study you will be asked to complete one online survey and take part in two, thirty-minute interviews over a 14-week period. Participants will be given the opportunity to review interview transcripts and delete, modify, or elaborate on any responses. There will be an option for Skype, telephone and face-face interviews. Permission to access your child’s *FreshGrade* portfolio for read-only purposes will also be requested from participants.
Participation in this study is voluntary and outside of regular classroom communication with your child’s teacher. If you choose not to participate, you and your child will not be excluded from any classroom activities or communications. If you choose to participate you may refuse to answer any questions, or withdraw from the study at any time.

Confidentiality

Any and all information collected will be used for research purposes only. All data will be encrypted and stored in password protected electronic files or in locked cabinets. UBC requires that all data be stored for at least five years once the study is complete in a secure UBC facility. As any publications of this study or presentation of results may include direct quotes from participant interviews, pseudonyms will be used in an effort to protect the privacy of participants.

Questions and Consent

If you would like to participate in this study, consent will be required. You may choose to indicate your interest as a volunteer participant and request a consent form be sent home with your child or attend an information session where consent forms will be available. The information sessions are not required to participate and intended to give possible participants more information, meet the researcher and ask questions.

If you are interested in volunteering to be a participant or learning more about the study Digital Portfolios: Parents Supporting Early Literacy please return the attached form to school by _______________________. Please feel free to contact Mrs. Karen Fadum directly with any questions.

Sincerely,

Mrs. Karen Fadum _________________________
Digital Portfolios: Parents Supporting Early Literacy

Date: __________________________

Parent/Guardian Name:

_____________________________________________________

☐ I would like to volunteer as a participant for the study Digital Portfolios: Parents Supporting Early Literacy and request a consent form be sent home with my child

☐ I would like to attend an information meeting about the study Digital Portfolios: Parents Supporting Early Literacy.

☐ I would like more information about the study Digital Portfolios: Parents Supporting Early Literacy and am unable to attend the scheduled sessions. Please contact me to arrange an alternative.

Contact information: ___________________________________________________

___________________________________________________________________________

Information Sessions

Two optional thirty-minute information sessions will be held in the library at South Meridian Elementary School on:

Wednesday March 29, 2017 at 6:00pm
Thursday March 30, 2017 at 2:45 pm

The researcher, Mrs. Karen Fadum, will facilitate information sessions. Your child’s teacher Ms. Fraser and principal Mrs. Donovan will also be present.
Appendix 2: Consent Form

Department of Language & Literacy Education
Education Centre at Ponderosa Commons
6445 University Boulevard
Vancouver, B.C. Canada V6T 1Z2
Tel: (604) 822-5788
Fax: (604) 822-3154
Email: lledeg.uwe@ubc.ca

Consent Form
Digital Portfolios: Parents Supporting Early Literacy

Thank you for your consideration to be a part of a research study being conducted with Division 10 parents/guardians at South Meridian Elementary School. Please read the following carefully and return the signed consent form if you would like to participate.

Who is conducting the study?

Principal Investigator: Dr. Marlene Asselin, Associate Professor, Language & Literacy Education, University of British Columbia.

Co-Investigator: Mrs. Karen Fadum, Curriculum & Innovation Helping Teacher, Surrey School District. This study is being conducted for a thesis as part of a MA degree in Language & Literacy Education at UBC. Participants will be working directly with the co-investigator (all correspondence, interviews etc.)

Why are we doing this study? Why is your participation needed?

You are being invited to take part in this research study because your child is in a classroom where FreshGrade digital portfolios are being used instead of paper report cards. We are interested in how the use of digital tools might influence home-school communication and student learning. This study will help us gain valuable feedback from parents who are receiving ongoing communication through digital portfolios. We are conducting this study to learn more about effective home-school communication and how this might support early literacy learning. Participation in this study is voluntary and outside of regular classroom communication with your child’s teacher.

What happens if you say, “Yes, I want to be in the study”? 

It is expected that the total amount of time required to participate in this study will not exceed two hours over a fourteen-week period.
If you say ‘Yes’, your participation will include:

- Permission for the co-investigator, Mrs. Karen Fadum, to view your child’s existing FreshGrade portfolio for read-only purposes.

  Notes will be taken on the type of reading, writing and speaking activities added to your child’s portfolio. We will also take note of conversations between home and school that may appear on the portfolio. Any recorded data used to illustrate evidence will be edited so that no identifiable information is available.

- One online Survey

  The survey will be made available by email and will take approximately 10 minutes to complete. It is intended to gather information about your child’s home literacy practices and how learning is being communicated from your child’s teacher.

- Two interviews: one during the first month (March) and one during the last month (May)

  Each interview will not exceed 30 minutes and involve open-ended questions to gather your thoughts and feedback about digital portfolios. You will have the option for Skype, telephone or face-to-face interviews (at the school or a location of your choosing). With permission, interviews will be audio recorded, otherwise, notes will be taken. Participants will be given the opportunity to review interview transcripts and delete, modify, or elaborate on any responses. Mrs. Karen Fadum will conduct all interviews and audio recordings will be done with a digital recording tool (Camtasia) installed on Mrs. Fadum’s computer. This will be an audio recording only and stored in a password protected electronic file.

**How will the results of this study be used?**

The results of this study will be reported in a graduate thesis. Results may also be published in journal articles or books and used during presentations for school boards, parent groups or at educational conferences. Participants may request a copy of study results by providing a mailing address below.

The information gathered in this study will in no way be used to harm or misrepresent you or your child. Should you consent to participate in this study, you have the right to refuse to be involved or to withdraw at any time. Such withdrawal or refusal to be involved will not jeopardize you and/or your child in any way. You do not waive any of your legal rights by signing the consent form.

**Are there any potential risks involved?**

You may feel compelled to only give positive feedback and be uncomfortable to share any frustrations or concerns you have with the type of information you are receiving through digital portfolios. The intention of this study is to gather authentic feedback about the use of digital portfolios to communicate student learning
and you will be invited to share openly and honestly. However, you are welcome to stop an interview at any
time or skip any questions. Because we are engaging in discussions about your views on your child’s
learning, you may be sensitive to disclose information that you think may reflect poorly on them. Although
the focus of the study is not on your child’s specific learning goals you are welcome to skip any questions that
make you uncomfortable and all efforts will be made to respect your child’s personal learning goals.

*What might participants gain from being in this study?*

Participation in this study may strengthen your understanding of the valuable role parent’s play in
their child’s education. Reporting practices are changing in school districts across the province of
British Columbia to align with the newly revised curriculum and parent feedback can help to guide
this change. You may also find that you are interacting more with your child about the learning that is
documented on their digital portfolio.

*How will your identity be protected? How will your privacy be maintained?*

Your privacy will be respected during this study and in the sharing of results. Your participation is
private and will not be shared with the classroom teacher or school principal. All identifiable data
collected through the survey and interviews is also private and will not be shared with your classroom
teacher, school principal or district staff. Pseudonyms will be assigned to all participants. Your name
and your child’s name will not be used in the discussion of findings or any publications of this study,
unless you request otherwise. The online survey will be conducted with a Canadian based site and
deleted once the researcher has collected responses. All interviews will be audio recorded, with your
permission, and take place at South Meridian Elementary or a location of your choosing. Where
Skype and telephone interviews are preferred the Mrs. Karen Fadum will be in a private office and
audio record with your permission only using a digital tool called Camtasia. Recordings and notes
from interviews will be encrypted and kept on the researchers computer in a password-protected
folder. Consent letters and all hard copy data will be stored in a locked filing cabinet. All data
collected from this study will be stored in a secure UBC facility under the supervision of the primary
investigator for at least 5 years.

*Will you be paid for your time/taking part in this research study?*

No. There is no payment for participation in this study. Your participation is voluntary and you may
choose to withdraw at any time.

*Who can you contact if you have questions about the study?*

If you have any questions or concerns about what is being asked of you please contact the co-
investigator, Mrs. Karen Fadum. If you require translation or any assistance in reading this form
please contact Mrs. Karen Fadum. You are also encouraged to contact Mrs. Karen Fadum at any time
during the duration of this study to provide additional feedback, seek clarification on any procedures,
ask questions or share concerns.
Who can you contact if you have complaints or concerns about the study?

The UBC Behavioural Research Ethics Board has issued certificate HXX-xxxxx for this study. If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics at 604-822-8598 or if long distance e-mail RSIL@ors.ubc.ca or call toll free 1-877-822-8598.

Taking part in this study is entirely up to you. You have the right to refuse to participate in this study. If you decide to take part, you may choose to pull out of the study at any time without giving a reason and without any negative impact on you or your child.

The consent form, requiring your signature is on the following page and requests consent for the following:

I consent to my participation in the study titled “Digital Portfolios: Parents Supporting Early Literacy.” as described above.

I consent / do not consent audiotaping during the study as described above.

I consent / do not consent to give Mrs. Karen Fadum access to the FreshGrade digital portfolio of ____________________________ (Child’s name)

PLEASE KEEP THIS LETTER FOR YOUR FILES AND RETURN THE ATTACHED CONSENT FORM

PLEASE RETURN THE ATTACHED CONSENT FORM (pages 6 and 7) IN THE ENVELOPE PROVIDED TO THE RESEARCHER OR THE SCHOOL OFFICE
Digital Portfolios: Parents Supporting Early Literacy
Participant Consent Form

*Taking part in this study is entirely up to you. You have the right to refuse to participate in this study. If you decide to take part, you may choose to pull out of the study at any time without giving a reason and without any negative impact on you or your child.*

I ____________________________ consent to my participation in the study titled “Digital Portfolios: Parents Supporting Early Literacy.” as described above.

Signature: ____________________________ Date: ____________________________

I ____________________________ consent / do not consent audiotaping during the study as described above.

Signature: ____________________________ Date: ____________________________

I ____________________________ consent / do not consent to give Mrs. Karen Fadum access to the FreshGrade digital portfolio of ___________________________________________.

(Child’s name)

Signature: ____________________________ Date: ____________________________

I acknowledge that I received a copy of the letter and consent form for my own files.

Signature: ____________________________
Contact Information

Email of the Participant (to receive online survey)

Please indicate your preferred method of contact from the researcher (to set up interview times)

☐ email

☐ telephone ________________________________

☐ other (please specify) ________________________________

☐ I would like to receive a copy of the study results.

Mailing address __________________________________________________________
Appendix 3: FluidSurveys Questions

Participant Survey
The following questions refer to your child associated with the study Digital Portfolios: Parents Supporting Early Literacy

What is your name and relationship to the child?

What is the primary language spoken in your home?

Is English your first language?
- Yes
- No

Please list any other languages spoken in your home or a home the child frequents (Grandparents)

Does your child attend after-school care? If so please indicate how many days a week.
- No
- Yes ______________________

Parent Activities
How often do you (or others in the house) engage in the following activities in the presence of your child? Please choose the option that best applies to you for each question.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read books, newspapers or magazines.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Read digital text (kindle, e-book)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Write (letters, journal, lists, notes etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Listen to talk radio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follow a recipe from a cook book</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type on a computer or tablet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Parent-Child Activities
Listed below are different activities you (or another family member; parent, grandparent, older sibling etc.) may or may not be doing with your child. There is no expectation that you engage in all activities. Please indicate how often you have done these things with your child now or in the past six months.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read books to your child</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Listen to your child read books</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Read magazines, newspapers or other print materials with your child</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visit the public library and/or bookstores</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Play board games
Sing songs and/or recite nursery rhymes
Use a computer or tablet for educational material (e-books, book creator, spelling apps, etc.)
Listen to your child tell stories
Work on school related activities (home-reading, journals etc.)

How often do you (or someone else in the home) spend time working with your child on reading skills?
○ Never
○ Rarely (once a month)
○ Sometimes (few times a month)
○ Often (weekly)
○ Very Often (daily)

How often do you (or someone else in the home) spend time working with your child on writing skills?
○ Never
○ Rarely (once a month)
○ Sometimes (a few times a month)
○ Often (weekly)
○ Very Often (daily)

I have the knowledge and skill to help my child with their reading and writing.
○ Agree strongly
○ Agree
○ Not sure
○ Disagree
○ Disagree strongly

I have time to work with my child on their reading and writing.
○ Agree strongly
○ Agree
○ Not sure
○ Disagree
○ Disagree strongly

Parent-School
How often do you engage in the following activities at your child's school?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volunteer for fundraising activities (hot lunch, bake sale, movie night etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volunteer for learning support (morning reading, chess club, field trips etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volunteer for other school activities (games day, community runs etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participate in family social activities (school barbecue, fun night etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talk with other parents about classroom/school activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attend Parent Advisory meetings (PAC) or other decision making meetings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Participate in classroom activities where my child shares their learning (math mornings, read-with-me, genius hour, show-n-share etc.)
Talk with my child's teacher about behaviour and/or classroom rules.
Talk with my child's teacher about academic goals
Write in or sign a daily communication planner
Talk with my child's teacher about ways I can support learning at home
Visit the school or classroom website

I communicate with my child's teacher
Please check all that apply
☐ At scheduled face-to-face meetings
☐ At the school during drop off or pick up
☐ By email
☐ By phone
☐ School planner
☐ Other, please specify... __________________________

I feel well informed about my child's learning
☐ Strongly Agree  ☐ Agree  ☐ Not Sure  ☐ Disagree  ☐ Strongly Disagree

Add any other information about communication with your child's teacher or involvement at your child's school you feel is relevant.
Please leave this blank if you do not have additional comments.
Appendix 4: Sample Interview Questions

Digital Portfolios: Parents Supporting Early Literacy

Sample Interview Questions

Interview #1
This is not a complete list as the interviews are semi-structured and may be guided by portfolio observations or survey responses.

Do you have any questions about this study or the survey you completed?

Tell me a little bit about your child and the type of things he/she likes to do at home?

I notice on the survey ________________________, tell me more about? (participants may volunteer a lot or indicate that they read very often with their child for example and I will invite them to share more details).

What questions do you have about your child’s literacy (reading, writing, speaking) learning?

Tell me about your experience with communication coming home from school? Are there any things that limit your communication (comfort level, work schedule, time)?

Do you have any concerns or wonderings about your child’s literacy learning?

Interview #2
This is not a complete list as the interviews are semi-structured and may be guided by portfolio observations or interview #1 responses.

Tell me about your experience with digital portfolios? (this may lead to a conversation about technology limitations, shifting conversations with their child based on the learning posted on portfolios, frustrations or excitement and will likely guide further questions).

Thinking about your child and their literacy skills was there any documentation (note, video, pictures) that you found helpful in your understanding of how to support them at home?

Version 1: 1 February 2017 Page 1 of 1
Appendix 5: Survey Response Data

Parent Activities

How often do you (or others in the house) engage in the following activities in the presence of your child? Please choose the option that best applies to you for each question.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very Often</th>
<th>Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read books, newspapers or magazines.</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Read digital text (kindle, e-book)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Write (letters, journal, lists, notes etc.)</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Listen to talk radio</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Follow a recipe from a cookbook book</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Type on a computer or tablet</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>
Is English your first language?

<table>
<thead>
<tr>
<th>Response</th>
<th>Chart</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>No</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Responses</strong></td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

Does your child attend after-school care? If so please indicate how many days a week.

<table>
<thead>
<tr>
<th>Response</th>
<th>Chart</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Responses</strong></td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

Parent-Child Activities

Listed below are different activities you (or another family member; parent, grandparent, older sibling etc.) may or may not be doing with your child. There is no expectation that you engage in all activities. Please indicate how often you have done these things with your child now or in the past six months.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very Often</th>
<th>Total Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read books to your child</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Listen to your child read books</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Activity</td>
<td>Group 1</td>
<td>Group 2</td>
<td>Group 3</td>
<td>Group 4</td>
<td>Group 5</td>
<td>Group 6</td>
</tr>
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<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>Read magazines, newspapers or other print materials with your child</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Visit the public library and/or bookstores</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Play board games</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Sing songs and/or recite nursery rhymes</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Use a computer or tablet for educational material (e-books, book creator, spelling apps, etc.)</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Listen to your child tell stories</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Work on school related activities (home-reading)</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Activity</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Very often</td>
<td>Total</td>
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<td>-------</td>
<td>------------</td>
<td>-------</td>
</tr>
<tr>
<td>Volunteer for fundraising activities</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>(hot lunch, bake sale, movie night etc.)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volunteer for learning support</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>(morning reading, chess club, field trips etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volunteer for other school activities</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>(games day, community runs etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participate in family social activities</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Talk with other parents about classroom/school activities</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Activity</td>
<td>Count</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Attend Parent Advisory meetings (PAC) or other decision making meetings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participate in classroom activities where my child shares their learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talk with my child's teacher about behaviour and/or classroom rules.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talk with my child's teacher about academic goals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Write in or sign a daily communication planner</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talk with my child's teacher about ways I can support learning at home</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
How often do you (or someone else in the home) spend time working with your child on reading skills?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Often (daily)</td>
<td>6</td>
</tr>
</tbody>
</table>

Total Responses 6

I have time to work with my child on their reading and writing.

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree strongly</td>
<td>2</td>
</tr>
<tr>
<td>Agree sure</td>
<td>3</td>
</tr>
<tr>
<td>Not disagree</td>
<td>0</td>
</tr>
<tr>
<td>Disagree strongly</td>
<td>1</td>
</tr>
<tr>
<td>Disagree strongly</td>
<td>0</td>
</tr>
</tbody>
</table>

Total Responses 6

I have the knowledge and skill to help my child with their reading and writing.

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree strongly</td>
<td>3</td>
</tr>
<tr>
<td>Agree sure</td>
<td>1</td>
</tr>
<tr>
<td>Not disagree</td>
<td>2</td>
</tr>
<tr>
<td>Disagree strongly</td>
<td>0</td>
</tr>
<tr>
<td>Disagree strongly</td>
<td>0</td>
</tr>
</tbody>
</table>

Total Responses 6
I feel well informed about my child's learning

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Not Sure</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
</tbody>
</table>

I communicate with my child's teacher

<table>
<thead>
<tr>
<th>Response</th>
<th>Chart</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>At scheduled face-to-face meetings</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>At the school during drop off or pick up</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>By email</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>By phone</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>School planner</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Other, please specify...</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Total Responses</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

I communicate with my child's teacher (Other, please specify...)

<table>
<thead>
<tr>
<th>#</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FreshGrade</td>
</tr>
<tr>
<td>2</td>
<td>Through Fresh Grade</td>
</tr>
<tr>
<td>3</td>
<td>FreshGrade</td>
</tr>
</tbody>
</table>
Appendix 6: Digital Portfolio Purpose Statement Example

Welcome to our digital portfolios! This year we will be sharing our learning over the year in various ways including this platform. The purpose of the portfolio is to capture learning through picture, video and notes with the intention of showing progress, clarifying what your child can do and setting goals moving forward. We will also be sending things home, inviting you to the classroom and hosting conferences so that learning is communicated over the year in many ways. I will send home a printed overview of the portfolio with key areas of learning a few times over the year and a detailed summary report will go home in June.

As parents, I hope that the portfolio will be a reference for you to assist your child in learning at home, help you understand how they are progressing towards their goals and spark conversations. Research shows that conversations and making connections between home and school is one of the best ways parents can be engaged in their child's learning. Although there is an option for parents to comment on the portfolio it is optional and I encourage you to use the portfolio in a way that works for you and your family. See resources below for more details about how parents can participate with digital portfolios.

Additions to the portfolio may be limited at first as I get to know your child, determine the best way to capture their learning and establish some specific social, emotional and academic goals in relation to the grade 2 curriculum.

There will be three main types of posts:

1) Progress: one type of post will be used to show progress towards specific learning goals. In this case, there will likely be some evidence of learning along with feedback and suggestions to
move forward, including support at home. This type of post will be re-visited over the year. An example will be Just Right Reading where I will document your child's progress in reading.

2) Snapshot: The second type of post will be a Snapshot related to specific curriculum areas to help you understand where your child is in relation to typical grade level expectations. The language used for this involves a scale moving from emerging—developing—proficient—extending. These posts are intended to be a quick view and will be supported by learning evidence in the more detailed posts described above. More information about the language used can be found in the resources below.

3) Conversation Starters: There will be a section on the portfolio intended to help you ask your child about their day and engage in a conversation about their experiences at school. This will often be a celebration of learning, art project or field trip and contain mostly pictures with a short description.

If you have questions or comments about anything on the portfolio you can add it directly through the parent portal, discuss with your child in person or contact me.

FreshGrade also includes an announcement feature and this will be used for general communication to the whole class. Please email me with any questions related to announcements. *Google translate is available for announcements and comments.

Looking forward to a great year where we can be partners in your child’s learning journey!
Appendix 7: Digital Portfolio Parent Letter Sample

FRESHGRADE: HOW TO USE THE STUDENT ONLINE PORTFOLIO

Dear Parents,

Using the student e-Portfolio is an easy way to stay in touch with your child’s learning throughout the year. Through pictures, videos, ratings scales and comments, it gives you a weekly view of what your child is learning and his or her progress. If you have questions, it gives you a place to ask the teacher; it gives you a way to encourage your child. Over time, your child will want to take snapshots of the things he or she feels proud of at school, and will share those moments with you. Best of all, the portfolio invites conversation at home. Some children say they don’t learn anything at school. Let’s just say this to be true. Their minds may be elsewhere. The portfolio gives you a prompting cue and a jumping off place for discussion. It is your window into the school. Enjoy! And let us know how it is going!

STEPS FOR EASY ACCESS:

1. Return the district’s technology consent forms to let the teacher know your child is able to participate. Note: your child’s portfolio is private and only sent to you. If you say “no” on the media form, we can still send you some photos that only include your child. In order to give you a complete picture of our classroom environment, it is beneficial to be able to send you pictures of students working in groups.

2. Provide your own email. Print clearly. More than one email can be included.

3. Download the free FreshGrade Parent App available on both iDevices or Androids. You can also access your child’s account using the web browser and type in www.freshgrade.com. Follow the prompts for parent access. * The app will notify you when the teacher has updated the portfolio. You may want it!

4. Log in with your own personal code that the teacher will send you via email. Tip: Take a screenshot of the code when you receive it so that you do not lose it. But, if you do forget, just inform the teacher and you will be sent a new code. Remember to use uppercase letters. Watch out for the fat letter O’s and the skinny 0’s. Tricky!!!
COMMON QUESTIONS AND SUGGESTIONS:

1. **How often should log in to the portfolio?**

Log in to the portfolio at least once a week **with your child.**

2. **How should I talk to my child about what I see?**

Invite open-ended conversation such as: Can you tell me about…? What do you like about…? What are you most proud of? What were you working on? What was your goal? **Keep it positive** to help your child feel open about sharing.

Avoid comparing your child’s work with siblings or peers. Suggestions for improvement are **not always necessary**, but if you want to address a need that you see, then **sandwich your comments** by first giving a positive comment, then discussing an area to work on, and end with another comment of encouragement.

**How often should I give written feedback to the teacher and to my child in the portfolio?**

Comment to your child and teacher **at least once a week**, but feel free to communicate more with the teacher if the need arises. Only your child and your child’s teacher see your comments. Positive comments are appreciated by all. 😊

**What kind of comments are helpful to my child’s learning?**

Instead of saying, good job, say “good job on…” You may also want to try “I like the way you are…” “I’m proud of you for…” Specific comments help the child become more aware of what they are doing - which is a powerful part of learning.

**How can I help my child at home?**

Respond **promptly** so that your child’s learning needs are being met in a timely fashion throughout the year.
Feel free to **make an appointment** with your child’s teacher to get resources and strategies. **Ask questions in the written feedback part of the portfolio** or through email.

**If I am having trouble using the portfolios, what should I do?**

Tell the teacher. The software is in the process of being developed and **we want to know about technical problems**, for example, not being able to open a video, pictures are too small, a button is not working etc. We pass that information onto the developers. **As well, it helps us to serve you better if we know what you appreciate seeing in the portfolio, what you want to see more of, and what you want to see less of.** Your **honest comments** are most helpful here. Two-way communication is important and that’s what it’s all about!
Appendix 8: Thematic Map
Question 2: What do parents like about Portfolios

Theme 1
- Timely feedback / communication
  - Portfolio conversation starter
    - 1:2.2
    - 2:5
    - 2:6
    - 2:7
    - 3:1
    - 4:3
    - 4:1.3
    - 5:2.1
    - 6:2
    - 6:2
  - Add comment
  - Parent to Child school connection
    - 3:2.6
    - 4:1.4
    - 4:2.5
    - 5:3.1
    - 5:2.4
    - 5:2.5
    - 5:3.2
    - 5:2.10
    - 1:2.1
    - 1:2.6
    - 2:2.7
    - 2:2.15
    - 4:2.4
  - Add comment
  - Add comment

Theme 2
- Connection 4.3.2
  - Portfolio conversation starter
    - 1:2.2
    - 2:5
    - 2:6
    - 2:7
    - 3:1
    - 4:3
    - 4:1.3
    - 5:2.1
    - 6:2
    - 6:2
  - Add comment

Theme 3: Evidence
- (4.3.3)
  - Video helps to clarify
    - 1:2.3
    - 2:2.1
    - 2:2.3
    - 5.2 (can be time consuming)
    - 4:2:2 (read feedback with it)
  - Add comment

Theme 4: Student Engagement (4.2-4)
- Student voice / participation
  - 2:2.1
  - 2:2.3
  - 4:2.1
  - 4:2.4 (probe)
  - Add comment

Variety of evidence
- 5:2.1
  - Add comment