A Qualitative Analysis of Elementary School Students' School Engagement Using Photo-Elicitation Interviews

Alexandra Maduro

A Thesis
in
The Department
of
Education

Presented in Partial Fulfillment of the Requirements
for the Degree of Master of Arts (Child Studies) at
Concordia University
Montreal, Quebec, Canada

August 2019

© Alexandra Maduro, 2019

CONCORDIA UNIVERSITY

School of Graduate Studies

This is to certify that the thesis prepared

By: Alexandra Maduro

Entitled: A Qualitative Analysis of Elementary School Students' School Engagement Using Photo-Elicitation Interviews

and submitted in partial fulfillment of the requirements for the degree of

Master of Arts (Child Studies)

complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

Signed by the final examining committee:

_____ Chair
S. Chang-Kredl

_____ Examiner
M. D'Amico

_____ Examiner
N. Howe

_____ Supervisor
H. Petrakos

Approved by _____
Chair of Department or Graduate Program Director

_____
Dean of Faculty

Date August 28, 2019

Abstract

A Qualitative Analysis of Elementary School Students' School Engagement Using Photo-Elicitation Interviews

Alexandra Maduro

School engagement is a personal characteristic that is multidimensional and composed of emotional, behavioral and cognitive components (Fredricks, Blumenfeld, & Paris, 2004). Students' patterns of motivation influence outcomes such as their style of engagement and their quality of learning (Gottfried, 1990; Russell, Ainley, & Frydenberg, 2005; Saeed & Zyngier, 2012). Therefore, understanding student engagement and its influence is important for understanding student academic performance and educational trajectories. Due to research indicating a decline in engagement after elementary school, research focusing on contextual factors impacting student motivation and engagement in childhood is critical (Fredricks et al., 2004; Mo & Singh, 2008).

The current research sought to understand students' motivation and engagement in school using a qualitative participatory research methodology, which allowed for the analysis of students' first-hand accounts of their schooling experiences. Five participants were selected from a grade five class based on their self-reported engagement in school. Over six research sessions, they provided experience sampling data and completed auto-driven photo-elicitation interviews, responding to prompts targeting their emotional, behavioral, and cognitive school engagement. This interview style offered participants autonomy regarding the themes and information they shared throughout the research process.

Findings from this study shed light on the role of contributing factors to student engagement. Common themes introduced by participants included students' relationships with parents, teachers, and other influential adults, classroom environments, and specifics of the school curriculum. These results also helped explain how students' personal motivational styles, which are not always clearly defined, related to their styles of school engagement.

Acknowledgements

I would like express my sincerest gratitude to the individuals who have supported me throughout the completion of my graduate studies in Concordia's Department of Education. This research was supported by the Social Sciences and Humanities Research Council of Canada under the Canada Graduate Scholarship-Master's (CGS M) award.

Firstly, I would like to thank my research supervisor, Dr. Hariclia Petrakos, for her guidance, encouragement, and constructive feedback throughout the development of this research project. I am truly grateful to have been mentored by someone with her warmhearted character, as well as her outstanding knowledge and experience. I appreciate all the time and energy she put in to ensuring the success of this project.

Next, I would like to thank my committee members, Dr. Nina Howe and Dr. Miranda D'Amico, for their continuous support and availability during this process. Partaking in their classes over the course of this degree also provided me with a wealth of valuable skills needed to successfully carry out this project.

The data collection process for this project would not have been possible without the help of my research assistant and sister, Stephanie Maduro. I am appreciative of her generous time commitment to the project and thankful for the efforts she made to ensure effective and successful data collection.

Furthermore, I extend my thanks to the five students who participated in this study for generously and enthusiastically giving their time and sharing their personal thoughts and perspectives for the benefit of this project.

Lastly, I would like to thank my wonderful friends and family for their love, advice, and unwavering support.

Table of Contents

List of Tables

List of Figures

List of Appendices

A Qualitative Analysis of Elementary School Students' School Engagement Using Photo-Elicitation Interviews

School Engagement and Motivation

Student engagement in school, hereafter referred to as school engagement, has previously been defined as "psychological investment in and effort directed toward learning, understanding, or mastering the knowledge, skills, or crafts that academic work is intended to promote" (Newmann, Wehlage, & Lamborn, 1992). It is typically recognized as a multidimensional construct and often conceptualized by models including emotional, behavioral, and cognitive components to be measured within student, peer group, classroom, and schoolwide contexts (Fredricks, Blumenfeld, & Paris, 2004; Furlong et al., 2003). Emotional engagement refers to students' feelings, and attitudes toward teachers, peers, academics, and the school. Behavioral engagement refers to students' participation in learning activities. Lastly, cognitive engagement refers to a students' investment in school and learning strategies. Overall, school engagement is a personal characteristic that is malleable and highly influenced by one's motivations and mindset, as well as contextual factors such as one's school environment, peers, and family (Fredricks et al., 2004; Newmann, Wehlage, & Lamborn, 1992; Reschly & Christenson, 2006). The study of school engagement is crucial for understanding student performance, behavior, and educational trajectories (Fredricks et al., 2004). Research has shown that students with increased levels of engagement and commitment to school tend to have more positive outcomes in terms of academic achievement, educational attainment, and lifetime well-being (Bempechat & Shernoff, 2012; Casillas et al., 2012). This construct has increasingly become a topic of concern due to the general decline seen in school engagement after elementary school, as well as the overall decline in academic motivation and engagement in school, leading to increasing occurrences of low

achievement, boredom, alienation, and school dropout seen in past decades (Fredricks et al., 2004; Mo & Singh, 2008). Therefore, research focusing on factors impacting student engagement in school is critical in order to understand children's development and school success.

Motivation is a necessary precursor to engagement: motivation is the intent, and engagement is the action (Russell, Ainley, & Frydenberg, 2005; Saeed & Zyngier, 2012). Intrinsic motivation is characterized by internal pleasure and has been described as the inherent tendency to "seek out novelty and challenges, to extend and exercise one's capacities, to explore, and to learn". In contrast, extrinsic motivation refers to the performance of an activity motivated by an external cause, such as a reward, threat, deadline, evaluation, or imposed goal (Ryan & Deci, 2000a). Research has demonstrated that the use of extrinsic rewards can undermine intrinsic motivation (Deci, Koestner, & Ryan, 1999). Patterns in motivation have been found to remain steady across childhood and are significant in influencing the success and quality of students' learning outcomes. (Gottfried, 1990).

Intrinsic and extrinsic motivation are related to growth and fixed mindsets, respectively, as conceptualized by Dweck (2010). These mindsets are developed over time and have a direct influence on grades and school engagement. Students who have developed a growth mindset tend to conceptualize their intelligence as malleable and views errors as opportunities for knowledge development, while becoming resilient when faced with setbacks (Dweck, 1986; 2010). These students attempt to develop their intelligence by devoting effort to activities they partake in and seeking out learning opportunities. Researchers have found that growth mindsets are particularly important for students who may be influenced by a negative stereotype about their abilities, such as students with learning disabilities or those from diverse cultural

backgrounds. When these students maintain a growth mindset, they tend to be more highly engaged and are higher achieving than students who have not adopted this style of mindset (Blackwell, Trzesniewski, & Dweck, 2007). Students who have adopted a growth mindset also tend to have a mastery goal orientation; they desire to improve their skills and deeply understand what they want to learn. These types of students are usually more invested in, and tend to enjoy school more. In contrast, students with fixed mindsets tend to avoid challenging tasks and view errors as indicative of failure (Dweck, 2010). Individuals with a fixed mindset view intelligence as a static trait and are less willing to engage in tasks that would challenge their intelligence than students with a growth mindset, as they believe that hard work will not change their capabilities fundamentally. These students tend to have a performance goal orientation, which causes them concern with appearing smart and outperforming their peers, rather than actually engaging in tasks for the purposes of pleasure and acquiring knowledge to master a skill. Mueller and Dweck (1998) found that students praised for performing well receive fixed-mindset messages, which indicate that their intelligence is valued most. On the other hand, students praised for effort and problem-solving strategies are sent a growth mindset message: that their abilities can be built up through hard work.

Saeed and Zyngier (2012) conducted a qualitative study with the goal of better understanding the link between student motivation and school engagement using Ryan and Deci's (2000b) Self-Determination Theory. They assessed grade five and six students' perceptions of their own motivational style and how it might impact the authenticity of their school engagement. They explored engagement using Schlechty's Student Engagement Continuum, which is composed of 'authentic engagement', 'ritual engagement', 'passive compliance', 'retreatism', and 'rebellion' (Schlechty, 2002). These distinct categories

demonstrate the varying degrees of school engagement for students. The results of this study revealed that intrinsic motivation supported authentic school engagement; students who were intrinsically motivated felt compelled to work hard in order to achieve mastery along with high academic results. Extrinsically motivated students, however, typically demonstrated ritual engagement, where their efforts were motivated by tangible rewards. In these cases, students may value the task they are completing due to its instrumental purpose in securing another end goal or reward. These students' motivations come from accomplishing a separate personal endeavour, therefore maintaining their sense of autonomy. This is in contrast to a situation where a student completes an assignment out of compliance, for example, and has very little autonomy (Ryan & Deci, 2000b). Interestingly, Saeed and Zyngier (2012) emphasize that extrinsic motivators can have positive effects when a student's intrinsic motivation is not naturally high. In cases where extrinsic motivators are necessary, they should only be used in a way that enhances intrinsic motivation rather than undermining it. The authors believe that the results of this study can be used to help teachers provide environments and lessons that may both intrinsically and extrinsically motivate students, but ultimately lead to increases in school engagement and better student outcomes.

Contextual Factors

In addition to the influence of student motivation on school engagement, many contextual factors also play a role in students' school engagement, as can be illustrated by Bronfenbrenner's eco-systemic perspective (1977), which emphasizes the importance of taking into account the inter-connectedness among individuals and across settings, and Epstein's theory of overlapping spheres (1995, 2011), which places students at the center of their home, school, and community contexts. Both emotional and instrumental support across students' contexts and environments is

fundamental for increasing their motivation and school engagement. Parents and teachers are particularly influential players in students' motivational orientations, values toward education, and ultimate engagement in school due to their thorough knowledge of the student and their needs (Bempechat & Shernoff, 2012). Supportive networks of parents, school staff, and the schooling institution are crucial in fostering healthy motivational styles and patterns of school engagement in the students that depend on them.

Parents. Parental engagement and parenting style are key factors in children's school engagement. Even before the beginning of formal schooling, parents' actions and attitudes have the power to influence their children's subsequent attitudes toward education. Gottfried, Fleming, and Gottfried (1994) have found that parenting practices in the home environment contribute largely toward academic motivation. Parents who encourage choice, curiosity, persistence, and exposure to new experiences, who acknowledge their children's feelings, and who provide opportunities for self-direction, help enhance their children's intrinsic motivation by equipping them with a sense of autonomy, competence, and control (Bempechat & Shernoff, 2012; Deci & Ryan, 1985). Along with encouraging the development of intrinsic motivation, parents who are perceived by their children to value education and have high expectations for academic success are more likely to have children with high levels of engagement and confidence toward school (Fan & Williams, 2010). In a 4-year longitudinal study by Simons-Morton and Chen (2009), positive relationships were found between authoritative parenting styles, parental monitoring, and their children's effort and motivation to do well in school. Generally, parental involvement in children's schooling has been associated with positive outcomes (Broussard & Garrison, 2004). Parental engagement, defined as proactive involvement in students' education, commonly influences students' own educational engagement (Mo &

Singh, 2008). Parents who help with homework, attend school events such as extracurricular activities, and remain informed about their child's school progress have children who are more likely to stay engaged in school and have better academic performance (Steinberg, Lamborn, Dornbusch, & Darling, 1992). Although general declines are seen in school engagement and intrinsic motivation after elementary school, perceived parental support and steady parental involvement buffers against this decline (Mo & Singh, 2008). Moreover, the style of contact that parents have with the school can also affect student engagement. Contact relating to matters such as academic programming, future educational plans, and helping students at home has been found to positively relate to student school engagement and intrinsic motivation (Fan & Williams, 2010). In contrast, contact regarding poor performance or behavior problems is negatively related to these constructs.

Teachers. One of the most important relationships in terms of the development of student motivation and school engagement is the relationship between the teacher and the student. Within the school context, teachers are the most influential adult for students and are central to their school engagement (Zepke & Leach, 2010). Saeed and Zyngier (2012) emphasize the importance of pedagogic reciprocity (Zyngier, 2011), which highlights the teacher's responsibility to design academic activities that will authentically engage students and lead to productive outcomes. By creating active and collaborative learning opportunities for students, and implementing educational experiences that are challenging, enriching, and attempt to extend students' academic abilities, teachers can work toward enhancing students' feelings of autonomy, competence, and relatedness. In their study, Saeed and Zyngier (2012) found that when students' needs for feelings of autonomy, competence, and relatedness were fulfilled by their teacher, their motivation and school engagement improved. These results are in line with

Ryan and Deci's Self-Determination Theory, which finds the aforementioned factors imperative for optimal functioning, growth, and fostering the development of intrinsic motivation (Ryan & Deci, 2000a; 2000b). Moreover, Klem and Connell (2004) found that students who were most academically engaged in school were those who had caring and supportive relationships with their teachers. These students reported more positive academic attitudes, values, and satisfaction. Furthermore, students who perceived teachers as having high expectations but who are clear and fair, were more likely to be engaged in learning. Skinner and Belmont (1993) found empirical support for a reciprocal relationship between teachers' behavior and student engagement. Specifically, teachers' interactions with students, as measured by student perceptions of interactions with their teachers, predicted student's behavioral and emotional engagement. In turn, high levels of student engagement elicited more positive teacher behaviors, such as involvement, consistency, and autonomy support.

School. Beyond the classroom, the actual schooling institution and its curriculum structure also have the ability to affect students and their school engagement. In a study examining relationships between students' perceptions of their school environment, motivation, and school engagement, students' motivational styles mediated the link between the school environment and their school engagement (Wang & Eccles, 2013). Intrinsically motivated students were likely to be more engaged in school when they perceived the school environment to provide clear expectations, consistency, predictability, emotional support, opportunities to learn and master meaningful material, and support of personal goals and interests. Moreover, a moderating effect of academic ability was found to influence the link between student autonomy and behavioral engagement. In order for the provision of choice and autonomy to increase students' behavioral engagement in the classroom, it needs to be structured and suitable to their

academic ability and within their zone of proximal development. Furthermore, competitive school atmospheres often have consequences for students' motivation, resulting in declines in intrinsic motivation and authentic engagement, and increases in motivation for external incentives such as competition for grades and participation in school activities. However, schools that have high standards for learning and conduct and promote meaningful and engaging curriculum can enhance school engagement and students' feelings of connection toward the school (Klem & Connell, 2004). Finally, Zepke and Leach (2010) suggest that schools provide environments that are conducive to learning by ensuring that these institutions welcome students from diverse backgrounds, invest in a variety of support services, and are capable of adapting to changing student expectations.

Curriculum. In recent years, schools have begun to replace traditional teaching approaches with alternative curriculums that promote inclusivity and individualized instruction for all students (Spooner, Baker, Harris, Ahlgrim-Delzell, & Browder, 2007). Some of these educational reforms, which emphasize personalized curriculums and learning environments, have obtained results indicating increased student perception of teacher support, leading to increased school engagement and academic success. One such example of this type of curriculum is the Universal Design for Learning (UDL), which is a framework described as a "blueprint for creating flexible goals, methods, materials, and assessments that accommodate learner differences" (CAST, 1998). Instead of retrofitting curricula to match students' needs, the purpose of UDL is to provide an adaptable approach to education using instructional approaches that support individual differences in learning and encourage student engagement (Edyburn, 2005; Lancaster, 2008; Pisha & Coyne, 2001). The Three-Block Model of UDL, proposed by Katz (2012a), emphasizes social and emotional learning, inclusive instructional practices in the

classroom, and the systemic structures supporting these practices. Applied research has found it to increase student engagement, autonomy, and self-concept in elementary and high school students (Katz, 2012a; Katz, 2012b; Sokal & Katz, 2015).

Measurement

Within the literature, there is considerable variation in the conceptualization and measurement of the construct of school engagement (Appleton, Christenson, & Furlong, 2008; Fredricks et al., 2004). These discrepancies constitute a challenge for comparing findings across research studies, as the style and content of measures used to assess school engagement varies considerably (Fredricks & McColskey, 2012). Methods that have been used to assess student engagement in school include self-report measures, experience sampling techniques, teacher ratings, interviews, and observations. Self-report measures are the most common method of assessment, as they can take into account students' subjective perceptions of their engagement and are practical and easy to administer to many students and in classroom settings. One self-report questionnaire designed specifically for students is the Motivation and Engagement Scale (Martin, 2016a), which has been adapted for students in junior school (aged 9-13 years old), high school (aged 12-19 years old) and college or university. This scale is used to assess each part of the Motivation and Engagement Wheel (Martin, 2003), a multidimensional approach to motivation and engagement consisting of positive and negative facets of cognition and behavior. In this theoretical model, cognitive and behavioral elements of motivation and engagement are structured into adaptive (positive) and maladaptive (negative) higher order dimensions, which each contain various first order dimensions. The dimensions are as follows: Adaptive Cognition (*self-efficacy, mastery orientation, valuing*), Adaptive Behavior (*persistence, planning, task management*), Maladaptive Cognition (*uncertain control, failure avoidance, anxiety*), and

Maladaptive Behavior (*self-handicapping, disengagement*). In updated versions of the Motivation and Engagement Wheel, some of the terminology has changed but can be used interchangeably. Adaptive and Maladaptive Cognition have become Positive and Negative Motivation, and Adaptive and Maladaptive Behavior have become Positive and Negative Engagement. Self-efficacy has changed to self-belief, mastery orientation to learning focus, and self-handicapping to self-sabotage. All dimensions are represented by a series of questions, which students are asked to respond to on a Likert scale ranging from 'disagree strongly' to 'agree strongly' (Martin, 2009). However, self-report measures may not always reflect students' actual behaviors if they choose not to answer honestly and may also contain broadly worded items that do not reflect the construct of engagement in specific situations (Fredricks & McColskey, 2012). In certain cases, such as with young children, the use of teacher ratings to assess students' school engagement may be useful.

The use of experience sampling is also common for measuring student engagement and is linked to Csikszentmihalyi's Flow Theory (1990). Flow theory predicts that identification of contexts in which high levels of concentration, interest, and enjoyment are experienced together is important to understanding student engagement in school (Shernoff, Csikszentmihalyi, Schneider, & Shernoff, 2003). When using experience sampling, participants answer a series of questions regarding their engagement during or immediately after participating in a task, typically in the form of journaling, in order to minimize problems related to recall and social desirability bias (Fredricks & McColskey, 2012). This methodology allows for researchers to collect detailed engagement data from participants in the moment rather than retrospectively. Using this method, there may be a significant time commitment required from participants who respond to every experience sampling request adequately and thoughtfully.

Interview methods have also been used to assess and collect data concerning individuals' school engagement. A benefit to conducting interviews is that participants are typically able to provide detailed insight regarding their perspectives and feelings about their school engagement.

Photo-elicitation is a unique qualitative research method used in the social sciences, in which photographs are inserted into research interviews in order to elicit dialogue by encouraging reflection from participants about their understanding and perceptions of a particular topic (Harper, 2002; Schänzel & Smith, 2011; Torre & Murphy, 2015). Although primarily rooted in anthropological and sociological research, photo-elicitation has increasingly been used for research purposes in the fields of psychology and education (Harper, 2002). The purpose of incorporating photos into traditional verbal interviews is based on differences in human responses to verbal and visual stimuli. The combination of word exchanges and presentation of visual images seems to elicit more information as well as more precise, detailed, and comprehensive information, and less fatigue, repetition, and misunderstanding, than conventional verbal interviews (Collier, 1957).

In auto-driven photo-elicitation interviews, the participant is responsible for supplying self-selected photographs that they have taken themselves to be used as stimuli for commentary and discussion, therefore 'driving' the interview session (Heisley & Levy, 1991). These photos are typically taken within specific parameters set by the researcher regarding the theme or context for the photographs. During the interview, the interviewer may ask open-ended questions about the photos, such as "why was this photo chosen?" and "what does it mean?", but ultimately listens as participants explain and interpret their personal photographs (Shaw, 2013). The auto-driven photo-elicitation method allows for the research to become a collaborative experience between the participant and researcher, where the participant maintains ownership over the

production and discussion of the photographs (Schänzel & Smith, 2011). In her research, Shaw (2013) found that auto-driven photo-elicitation contributed to reflections and thoughts by participants that may not have arisen using a standard interviewing technique. Additionally, she found that participants were eager to actively participate in the research and interviewing process, and that the practice of taking photos with a particular purpose in mind created a richness and depth to the information offered by participants in response to their photographs during the interview process.

Children are often disadvantaged in traditional interviews due to the cognitive, social, and language skills necessary to understand various questions, participate in question-and-answer format dialogue, and explain their understanding of certain concepts and experiences (Torre & Murphy, 2015). Farrell (2005) emphasizes the ethical necessity to be aware of children's vulnerability and the importance of their unique perspectives and experiences. In line with this, auto-driven photo-elicitation interviews have been markedly used in research with children, allowing them to become active subjects, rather than passive objects, of research. Clark (1999) contends that auto-driven interviews are advantageous in interviewing youth, and found that sharing in the activity of looking at pictures helped create an egalitarian context between the researcher and child participant, and empowered the child by allowing them the control and authority to select and explain their own photos. When photo-elicitation interviews are used with children, it acknowledges them as active participants in their own lives, and can serve to help them understand their own experiences (Torre & Murphy, 2015). In sum, the use of auto-driven photo-elicitation interviews with children include advantages such as an improved interview experience due to the use of prompts to refresh children's memory, increased validity of participant response, introduction of child's own content areas based on photographs taken, and

ease of rapport establishment between the researcher and child participant (Clark, 1999; Clark-Ibáñez, 2004; Schänzel & Smith, 2011; Torre & Murphy, 2015). Furthermore, auto-driven photo-elicitation increases trustworthiness of data and triangulation of the research in terms of data sources, as these interviews offer multiple perspectives and the use of several participant voices during qualitative inquiry (Hays & Singh, 2012; Shaw, 2013).

Although photo-elicitation interviews are a traditionally anthropological technique and are not commonly used by education researchers, Torre and Murphy (2015) suggest that their use in education research is helpful in empowering and better understanding school children, parents, staff, and communities. Photo-elicitation interviews have been used in school settings by both researchers and school practitioners with the goal of understanding students' classroom-based learning experiences in kindergarten students (Pyle, 2013), personal stories regarding issues such as learning obstacles faced by students (Zenkov, Ewaida, Bell, & Lynch, 2012) and issues of race, class, and gender (Sensoy, 2011). Interestingly, the use of photo-elicitation interviews in classroom settings was found to motivate and engage children due to the hands-on nature of the activity as well as the demonstration by teachers of their care and willingness to understand students' perspectives (Zenkov et al., 2012). Photo-elicitation interviews have also been used in action research in order to discover or emphasize issues needing attention within the context of the school, such as bullying (Thomson & Gunter, 2008). Despite their infrequent use in this domain, photo-elicitation interviews have been cited as a valuable tool for researchers, practitioners, and policy makers within the education profession to amplify students' voices and viewpoints about their experiences in school (Torre & Murphy, 2015).

The Current Study

The current study aims to examine school engagement among elementary school students

using a qualitative methodology. The study of school engagement and its contributing factors in elementary school students in crucial due to the decline seen in school engagement after elementary school, and the nature of this construct, which is highly influenced by motivation, a construct tending to remain stable across childhood and adolescence. After elementary school, students' motivation stabilizes, and those who had lower intrinsic motivation in childhood are likely to be at greater risk for poor academic achievement over their lifetimes (Gottfried, Fleming, & Gottfried, 2001). The purpose of this exploratory research study is to understand elementary students' perceptions of their experiences in school as they relate to their school engagement. The current study will explore students' first-hand accounts of their schooling experiences and their behavioral, cognitive, and emotional engagement in school using methodological approaches intended to elicit their perceptions.

Students in the fifth grade will be selected for participation using the Motivation and Engagement Scale – Junior School (Martin, 2016a) and invited to participate on the basis of their self-reported behavioral and cognitive school engagement and in consultation with school staff. Students will be active participants in the research process, participating in regular photo-taking, reflective logging, and the creation of a personal digital media project. Photos taken by participants will be used to elicit commentary and gain understanding about their personal perspectives on school engagement during auto-driven photo-elicitation interviews. Questions asked in the reflective logbooks will target specific facets of school engagement, and will be answered by participants directly after class participation, in line with an experience sampling model. Lastly, the creation of a personal project is intended to capture and display students' perceptions and give voice to their experiences in school through the use of their personal digital photos taken over the course of the study. Notably, the school that participants will be selected

from employs a unique curriculum aimed to enhance leadership, personal growth, and authentic engagement in school. These values are in line with many of the principles of UDL and the Three-Block Model (Katz, 2012a).

Researchers have called for the integration of qualitative data in the study of students' learning beliefs (Bempechat & Shernoff, 2012). By employing a qualitative methodological approach in this study using methods such as experience sampling and auto-driven photo-elicitation interviews, researchers will have the opportunity to examine the data in regard to different aspects of the child's life and educational context. The qualitative data collected will be analyzed and used to understand students' perceptions of their schooling experiences and how their different styles and levels of engagement may contribute to different experiences in school, as well as how they believe their experiences and different contextual factors may contribute to their school engagement.

Method

Design

This study examined elementary-aged students' experiences and engagement in school using a participatory research methodology and a case study design. Photo-elicitation interviews (PEI) were used, along with participants' reflective logbook entries, and researcher field notes, in order to gain qualitative data about students' experiences in school and factors that may affect their levels of engagement. These data were gathered and coded into themes arising from students' statements in their interviews. These data were then analyzed, with focus placed on common themes and potential differences between the data collected from more highly engaged students and students appearing to be disengaged or at risk for disengagement from school. These students were identified according to their results on a preliminary questionnaire. The

themes that emerged from the students' data were used to understand their school engagement styles in relation to their mindsets, motivation, and other contextual factors. Relationships between students' comments and certain underlying principles and strategies used by the school to promote engagement were also examined.

The theoretical tradition of phenomenology was used in this study, as the researcher was seeking to discover and understand each participant's direct experience as a student and their personal perceptions of factors relating to their school engagement. Phenomenology emphasizes the importance of participants as 'co-researchers' because of their extensive firsthand knowledge of their lived experiences (Hays & Singh, 2012). Therefore, this study examined students' school engagement using an exploratory approach, which was appropriate due to the unpredictability of research findings.

Participants

Participants consisted of five students attending an all-girls private school in Montreal. They were selected from a Grade 5 classroom, consisting of 25 students, using purposive sampling, a sampling approach that requires meeting specific criteria before data collection occurs. All Grade 5 students received a parental consent form and a cover letter detailing the purpose of the research (see Appendix A). Students who returned a signed consent form completed the Motivation and Engagement Scale – Junior School (MES-JS: Martin, 2016a), given by the researcher, during class time. Students who did not obtain parental permission to complete the MES-JS were excluded from the study. Following completion of the MES-JS, twelve students were nominated for participation in the study based on their scores. Six students were nominated dependent on scores indicating high engagement in school. These students obtained higher scores than their peers on the Positive Motivation subscale, which consists of

factors ‘self-belief’, ‘learning focus’, and ‘valuing’, and the Positive Engagement subscale, which consists of factors ‘persistence’, ‘planning’, and ‘task management’. Likewise, six students were nominated dependent on scores indicative of disengagement from school or risk for disengagement. These students obtained higher scores than their peers on the Negative Motivation subscale, which consists of factors ‘anxiety’, ‘failure avoidance’, and ‘uncertain control’, and the Negative Engagement subscale, which consists of factors ‘self-sabotage’ and ‘disengagement’. Of the twelve eligible students, the five students who were selected to participate in the study returned a second consent form, signed by a parent or guardian, giving them permission to participate (see Appendix A). Additionally, at the beginning of each session of the study, these participants were asked for their verbal assent to continue participating (See Appendix A). Three of the participants had scores consistent with high motivation and/or engagement on the MES-JS, and two students’ scores indicated low motivation and/or engagement.

Procedure

All eligible grade 5 students completed the MES-JS during class time. Following completion of this questionnaire, five students were selected for participation on the basis of their scores and on parental consent to participate. Students selected to participate in the research project met with the researcher and a research assistant once to twice weekly for a period of four weeks. These meetings took place after regular school hours and within the physical limitations of the school. In total, there was an approximate one-and-a-half-hour time commitment per session for the participants. At the beginning of each session meeting, participants completed a reflective log containing questions targeting their engagement regarding the class they participated in immediately prior to the beginning of the session. This portion of each meeting

lasted approximately 10 minutes. Then, the researcher presented a theme regarding the construct of school engagement to participants, who were immediately asked to engage in a short discussion period amongst themselves for approximately 5 to 10 minutes regarding their thoughts and perceptions about the theme. Following their discussion, participants were given 20 minutes to take personal photos within the school environment representing their perceptions of this theme. Field notes were taken by the researcher and research assistant at this time, who were supervising participants as they took their photos. After the photo-taking session, the researcher and research assistant spent approximately 15 minutes with each participant conducting a photo-elicitation interview. For five participants, the total interview time lasted approximately 45 minutes. Participants were asked to choose a maximum of five photos per session to be used as stimuli for the interview. Each photo-elicitation interview was audio-recorded and later transcribed. During this time, participants who were not being interviewed had the opportunity to create and work on a personal digital media project (e.g., a website, video, digital scrapbook, etc.) that incorporated their photographs taken within the context of the study. Following their completion of this personal project, participants had an opportunity to present their projects to peers, staff, and parents.

Materials

Motivation and Engagement Scale – Junior School. The Motivation and Engagement Scale – Junior School (MES-JS: Martin, 2016a) is a self-report questionnaire that was used as a tool for measuring students' engagement in school (See Appendix B). The MES-JS is designed for students aged 9-13 years old and was adapted from the original instrument, the Motivation and Engagement Scale – High School (MES-HS). The MES-JS aims to be as similar as possible to the original instrument, with minor adjustments made in terms of terminology and scale

complexity. The MES-JS is a 44-item instrument, which is comprised four subscales based on the Motivation and Engagement Wheel (Martin, 2003): Adaptive Cognition/Positive Motivation (α = .84-.90), Adaptive Behavior/Positive Engagement (α = .72-.80), Maladaptive Cognition/Negative Motivation (α = .51-.87), and Maladaptive Behavior/Negative Engagement (α = .72-.89) (Martin, 2009). The eleven factors composing these categories are: self-belief (e.g., "If I try hard, I believe I can do my schoolwork well"; α = .77), learning focus (e.g., "I feel very pleased with myself when I really understand what I'm taught at school"; α = .82), valuing (e.g., "Learning at school is important"; α = .75), planning (e.g., "Before I start a project, I plan out how I am going to do it"; α = .85), task management (e.g., "I usually do my homework in places where I can concentrate"; α = .86), persistence (e.g., "If I can't understand my schoolwork, I keep going over it until I do"; α = .77), anxiety (e.g., "When I have a project to do, I worry about it a lot"; α = .66), failure avoidance (e.g., "The main reason I try at school is because I don't want to disappoint my parents"; α = .85), uncertain control (e.g., "When I get a bad mark I don't know how to stop that happening again"; α = .78), self-sabotage (e.g., "I sometimes don't work very hard at school so I can have a reason if I don't do well; α = .79) and disengagement (e.g., "I've given up being interested in school"; α = .70). Each factor is comprised of four items, which are on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). The four items are then converted to one raw score out of 100.

Raw scores on the MES-JS can also be converted into normative Motivation Quotient (MQ) scores (M = 100, SD = 15), which can be compared across subscales, unlike raw scores (Martin, 2016b). For the six positive motivation and engagement factors (self-belief, persistence, learning focus, valuing, task management, planning), higher MQ scores are better. For the five negative motivation and engagement factors (disengagement, self-sabotage, uncertain control,

failure avoidance, anxiety), lower MQ scores are better (See Table 1). Global Positive Motivation scores are the mean of self-belief, learning focus, and valuing MQs. Global Positive Engagement scores are the mean of persistence, task management, and planning MQs. Global Negative Motivation scores are the mean of uncertain control, failure avoidance, and anxiety MQs. Global Negative Engagement scores are the mean of disengagement and self-sabotage MQs (See Table 2). These MQs correspond with Global Grades: A-grade is considered excellent, showing an area of strength for the student. B-grade is considered good, indicating that this may grow into an area of strength for the student. C-grade indicates to students that extra work is needed. D-grade indicates that relatively more work is needed for the student to excel in the domain (See Table 2).

Themes of engagement by session. Six themes were presented to participants over the course of the six sessions. Each of these themes represented a different feature of school engagement, which participants were asked to reflect on and share their thoughts and ideas about through photo-taking and subsequent photo-elicitation interviews. These themes were intended to prompt thinking and were related to aspects of behavioral, emotional, and cognitive school engagement. Themes were presented as follows: “The learning environment (what does school look like to you?)”, “School makes me feel…”, “My strengths and areas for improvement”, “Best things about school”, “Relationships in school”, and “School in my spare time”. Following presentation of each theme, participants were given a 5- to 10-minute allowance for discussion and brainstorming about the theme. At this time, the researcher and research assistant provided answers to participant questions and examples if necessary. However, instruction was minimal, as the goal of the activity was for students take photos representing their reality and personal interpretation of the theme.

Photo-elicitation interviews (PEI). The researcher identified one theme of interest pertaining to school engagement during each session of the study and invited participants to take pictures relevant to this particular topic. Participants had 20 minutes during each session to take photos pertaining to their perception of this theme within their school environment. Following this photo-taking session, each participant partook in an auto-driven PEI with the researcher or research assistant, which lasted approximately 15 minutes. Participants were asked to select a maximum of five personal photos as guides for their interview. The interviewer asked open-ended questions regarding the photos in order to elicit participant commentary (see Appendix C). Different probes were used based on individual participants' photos and the resulting discussion.

Reflective logbooks. Reflective logs were written by participants at the beginning of each session, immediately following participation in their last-period class. Participants were asked to record some of their personal experiences in the class and were prompted with questions targeting their engagement, such as "How much effort were you putting into your work?", "What did you find interesting about this activity?", and "Did you enjoy what you were doing?" (see Appendix D). These questions incorporate components of emotional, cognitive, and behavioral engagement, and are reminiscent of central phenomenological features of Flow theory (Csikszentmihalyi, 1990): concentration, interest, and enjoyment. The researcher practiced filling out a logbook during the first meeting with participants. Each session thereafter, the researcher and research assistant were present when participants completed their reflective log, but did not intervene during this time.

Analyses

The data gathered in this study were coded qualitatively. Participants' reflective logs and transcriptions of their interviews were both coded, creating a rich selection of data to analyze.

Initial coding was used, followed by focused coding, allowing for categories to be created on the basis of participant statements. This type of analysis allowed all emerging themes and patterns from students' narratives to be acknowledged and explored (Saldaña, 2016).

Academic Rigour

Triangulation of data sources is an important aspect of academic rigour used in this study to increase the validity of the data (Hays & Singh, 2012). Data from participants' reflective logs was combined with their PEI data as well as field notes taken by the researcher and research assistant in order to create more opportunities to look at participants' perspectives of their engagement. With regard to the PEI, the interview questions used were open-ended, and allowed for participants to respond freely, voicing and describing their experiences and perspectives without constraint. The same interview questions were used during each interview with all participants, with the addition of different probes that arose based on participants' comments. Therefore, the interview was adapted to the individual participant based on their choice of photos and the direction of the resulting discussion. Additionally, member checking was used throughout all photo-elicitation interviews with the goal of representing participants' perspectives as authentically as possible. The researcher and research assistant often repeated back participant statements in slightly different words, and asked for examples and elaboration to make sure participants were properly understood. The field notes and memos taken by the researcher and research assistant during each session facilitated in maximizing trustworthiness and credibility in this study and in reducing possible bias. The relationship that developed over the sessions between the participants and investigators also contributed to the trustworthiness of the study. Participants began to feel increasingly familiar with the investigators and therefore gradually more at ease during the photo-elicitation interview process. Increased feelings of

comfort may have enabled participants express their emotions and perspectives more clearly. Multiple interviews also allowed the investigators to become familiar with participants and their interviewing styles, which aided in them knowing how to ask questions effectively and elicit commentary from the participant.

Role of the Researcher

The student-researcher gained access to this school setting because she is a former student and has maintained contact with staff and members of the administration since graduation. Because of this maintained association with the school and faculty members, she was aware of many of the policies and practices in place, which may have been beneficial when analyzing participant perspectives of their engagement and experiences in the school environment. However, in order to minimize possible instances of researcher bias, the student-researcher was actively collecting data alongside a research assistant. They worked collaboratively to ensure that any instance of possible bias was eliminated and that the methods of the study were adapted appropriately to suit the needs of each individual participant. The student-researcher and research assistant also took detailed field notes and memos during each session with participants. The student-researcher determined the session themes and the protocol for each session (Appendix E), and handed out and collected materials used for the reflective logs and photo-taking periods. Additionally, the researcher collected PEI data for at least half of the participants.

Findings

This project involved spending approximately 15 hours total with the participants during after-school hours. During this time, the participants developed familiarity with both the researcher and research assistant, who were both present during the logbook, discussion, and

personal project creation portions at each of the sessions. Each participant was interviewed consistently by the same individual (either the researcher or research assistant), ensuring that the participants were given equal opportunity to potentially develop stronger relationships with their particular interviewer. This consistency in interviewing also allowed for the interviewer to gain knowledge of the participants' prior interviews and statements, and use this information accordingly when prompting the participant in subsequent interviews. The information and summaries to follow take into account participant photo-elicitation interviews, group discussions, and researcher field notes.

Child A

The photos that Child A used to represent the given session themes seemed to consistently revolve around themes such as homework, her likes and dislikes, participation in activities beyond the typical classroom curriculum, and members of her school community.

Although Child A expressed that she liked answering questions in class and felt "mad sometimes" when the teacher asked questions and did not call on her, she also described her classes as "boring" and "not very organized". Some of the examples she gave to illustrate why she considered various classes boring include: "all we had to do was repeat", "I already know all the lyrics to the songs", and "we corrected a math test that I got all right…. I had nothing to do"

Child A also expressed her disdain for homework over the course of her interviews. She stated that she was happy when there was no homework as this would give her free time to do whatever she wanted to do at home. Furthermore, she stated that not having homework made her feel "less stressed" and eager to go to school the next day. She also used the word "jailed" to describe a photo she took to represent the amount of homework she had, and contrasted it to a photo she took to represent having no homework, which she described as "free" (Figure 1). She

also stated: “Homework is like, you have to bring school home. I wish I was in Finland. They don’t have homework there. They only have like one test”. Child A believed: “If you listen in class you don’t need to study. Because you know it. If you don’t listen in class then you don’t know it. I sometimes don’t listen in class but most times I do. Sometimes I already know the stuff they teach”. Although Child A said she did not like to study and found it boring, she often connected having homework and studying with her future educational goals: “I’m not excited for exams because then you’ll have to study hard and I don’t like studying. I don’t study a lot. I don’t want to fail. I want to go to UCLA or Cambridge.” Child A compared the stress of homework to that of math contests, which she participated in outside of school. Although these contests made her feel stressed, she said that she enjoys math and considers this subject to be one of her strengths: “I love math and I’m, like, not bad at it. I’m pretty good at it…I like solving word problems…the math contests are word problems”.

Figure 1. Photo Child A described as making her feel “jailed”.

As previously mentioned, Child A often described her classes as “boring”. She even said “I don’t love school…Sometimes it’s really, really boring. My parents pay so much for it!” Perhaps this is because she doesn’t feel as though she is being challenged enough. For example, she spoke about her love for math and her “passion for reading”, yet also mentioned that “math is really boring” and that she “hate[s] the school reading list” because she has already read all of the recommended books. With regard to the library, which she considered her “favorite place”, she mentioned that most of her peers still read in the junior school section, whereas she prefers the “older section” (Figure 2). However, it seemed as though these interests may be being accommodated by advanced or additional activities supported by the school. For example, Child A and a peer participated in an advanced math class once weekly where they completed “extra projects”. According to Child A, her parents and the parents of her peer asked the school to put this class in place for them, and the school accepted. Similarly, Child A was given the opportunity to participate in a children’s literature competition with some peers from school who also enjoy reading in their spare time.

Figure 2. Photo of part of the “older section” of the library

Throughout her interviews, Child A appeared to have a somewhat indifferent attitude toward her relationships with her teachers and the school community. She stated numerous times that she didn't really like her teachers, at times making comparisons between her like for teachers of previous years compared to her dislike for her current teachers: "I don't like any of my teachers this year", "I liked my Kindergarten teachers" and "I like my Grade 4 teacher better". Although she used words such as "immature" and "boring" to describe her current teachers, she also described them as "nice". Interestingly, Child A acknowledged the importance of her teacher and of a strong teacher-student relationship with her homeroom teacher: "She's like a big part of the school…because, well, she teaches us…we have to have a strong relationship with her". However, she went on to state: "I don't actually have a particular relationship with anybody, well, any of our teachers. I just have one because, well, she teaches us and, like, she knows us…I don't have, like, something super special with her or anything. It's not like my parents are really good friends with her or whatever. She's just our teacher."

Moreover, Child A demonstrated a similar attitude toward the rest of the school community. She said: "The teachers say like, our whole school is a big family. Eh, it's not really… There's some people I don't like… There's most people like I don't know so, like, I won't consider us a big family. Just like, maybe we're just like a really like tight school." Upon being asked if she developed relationships with younger students who partook in the school musical alongside her, she answered "No, I still hate them…they're really rude and annoying…but there's also like two or three girls who are pretty nice".

On the other hand, Child A mentioned that "the people" are one of the best things about school for her. She said: "There's always some people I don't like, but like, most of the people are really nice…the teachers teach us and, well, the friends are, like, the girls are like really

nice…We're united!" (Figure 3). When it comes to Child A's friends, she stated that she has two best friends, whom she mentioned often over the course of the interviews. She says that these friends are the only classmates she spends time with outside of school. Although she mentioned one specific other classmate multiple times throughout the interviews in contexts such as their alphabetical placement on the class list, in anecdotes about their roles in the school musical, their mutual participation in an advanced math class, and their participation and rankings in math competitions, she clearly stated, without prompting, that this student is not her best friend. She denied that they have a lot in common, reasoning: "She wants to be a neuroscientist or, like, astrophysicist or something. I want to be an actress or an archaeologist…I have my friends, she has hers…when we do our extra projects, well, yeah, that's when we hang out.".

Figure 3. Photo taken by Child A representing unity between classmates.

Child A's remarks in response to both interview and logbook prompts tended to be quite straightforward, and she appeared to have reflected and thought critically about many aspects of

her educational environment and future goals. Child A also seemed to frequently demonstrate instances of behavioral engagement in school, and sometimes demonstrated cognitive engagement as well, which is rather consistent with her results on the MES-JS questionnaire (see Table 1 and Table 2). However, she did make several comments contradicting the principles of the 'learning focus' and 'valuing' dimensions of the Adaptive Cognition subscale. For example, Child A often described things by making comparisons or implying rankings between herself and others, and made comments devaluing the usefulness of her schoolwork. Child A's narrative also seemed to be consistent with her self-reported scores on the maladaptive cognition and maladaptive behavior dimensions of the MES-JS, as she rarely made comments mentioning the dimensions on these subscales. Moreover, she reported a lack of emotional engagement toward her peers, teachers, and the school community. In general, she seemed ambivalent and potentially disinterested in her learning environment and the individuals within it. Lastly, Child A seemed to demonstrate 'ritual engagement', a form of extrinsic motivation, where her efforts were motivated by rewards such as the accomplishment of future personal and educational goals.

Child B

The photos that Child B used to represent the session topics seemed to frequently incorporate themes such as her emotions, likes, and dislikes in school, her preparedness, and her relationships in school. At times, Child B's interview responses were vague and she regularly required further prompting in order to fully explain a thought.

Throughout Child B's interviews and logbook responses, she repeatedly associated her school subjects and locations within her school with specific emotions and feelings. For example, when describing her class schedule, she stated: "It just kind of reminds me, like, what we have next. So I know, like, to be grumpy if I have French and, like, happy when it's, like,

art.". She also spoke about the students' locker room, saying: "It's the first place we go after school and we're going to leave so I'm happy, cause I get to go home… We also go there when it's like the start of recess and then it's good cause we can talk, but then when it's the end of recess we just have to go back and study.". When asked about her feelings before each of her classes, she responded "I would feel excited if there's good periods, but if there's, like, French first period then I would be like "I don't want to go to school"." Child B also mentioned that she felt " happy" when she was prepared for class or whenever it was the end of the school day.

Child B seemed to explain these feelings, and provided some important reasoning. Throughout her interviews, Child B consistently expressed a dislike of French class. Because of Child B's statements and the fact that she recently moved to Canada and had no prior knowledge of the French language, it can be assumed that some of her dislike for this subject is because of her difficulty in it: "I'm not good at French…I came from, like, China, so like we didn't really learn French there. So it's, like, hard.". She also stated "I came here like two years ago. And like French is like a hard language to learn. You have to like kind of be born in it.", and said that she could "maybe" get better at it. Child B was also enrolled in French classes outside of school, which she prefers to her French classes at school. She attributed this to having a one-on-one learning environment with her teacher, who "is really nice". She mentioned this in comparison to her school's French classes, where there are many students and "you don't really do, like, activities. You just do what she says on the board.".

In contrast to Child B's feelings about French, she was confident about her math abilities: "I'm good at math…math is like, my best subject.". However, she also said that her math class is "too easy". She attributed her proficiency in math to her old school and her mother, who she said "makes me do a lot of math, and she teaches me a lot of math". However, Child B said that she

only “sometimes” enjoyed doing math, and especially disliked the math contests that she participates in outside of school, seemingly because of the practicing and studying involved with her mother: “My mom makes me practice and then after all the questions I get wrong she explains so much. And then she gets to, like, another thing and then starts explaining the other thing and it takes forever… It’s boring. And she says to do, like, one hour and then you can, like, do something else that you like, but then she takes like three hours explaining everything.”. In addition to this math practice, Child B’s mother also provides her with extra work related to her other subjects in school because “She wants me to have better grades. Like good grades. Like 100.”.

Child B mentioned her love of reading multiple times, even stating that reading would be an enjoyable alternative to homework. She said that ‘library’ was one of her favorite school periods and that the books there were one of the best things about school. Child B said that reading made her feel better and that one of the reasons she enjoys reading is because she doesn’t really “have to think”. Interestingly, she also stated that the fact that she reads a lot is both a strength and also an area for improvement. She explained: “I read really fast. I don’t, like, take my time to like, think about it. I just want to know, like, the story…Everybody’s like “Read slower, read slower. Think about it.”, and I want to, but I can’t.”. She continued: “I’m a rushed person. I do everything fast… My mom says it, my friends say it. And…it’s like the biggest part of me that I need to, like, improve.”. She attributed some of her “rushing” to getting tired as well as wanting to finish tasks in order to have “more time to do other stuff”, such as reading. In order to illustrate her thoughts, Child B chose to talk about a photo of a tea mugs that she took, which she compared herself to (Figure 4): “Everybody’s always like, “Be careful of this. Be careful of that. Don’t rush”. Cause like, mugs are like, fragile, so if you like, don’t like, pay much attention

or like, you just like don't really care about it, it's just going to break… I don't have the patience to, like, wait and do stuff carefully and re-check.". Although Child B acknowledged that "rushing" was an area for improvement for her, she remained hesitant about wanting to improve it, stating: "In some ways I do, but like, I don't, I still don't want to double-check. Cause it takes too much time.". She then continued her analogy about the tea mug, stating "Yeah. I'd break. Except…then you don't get a good future. If you like, have bad marks. Cause you don't get into a good university.".

Figure 4. Photo of mugs taken by Child B.

Child B's self-description as "a rushed person" may be linked to other topics that arose over the course of her interviews, which seemed to have negative consequences for her at times.

For example, she mentioned not doing or forgetting her homework and explained that "the teacher would get mad at you" in these instances and that she would be "really stressed out". When asked about how she felt in instances where she was not ready for class, she replied "I'm not looking forward to it". On the other hand, she explained a photo she took of the words "I'm ready", saying "When I do my homework I'm prepared. Or like a test and like I did something that's going to like, kind of like, be good for me. And then like, I'm ready for this class. I've done all my stuff and I have everything.". The classes that make Child B feel "ready" are math, art, English, and library.

Throughout her interview and logbook responses , Child B seemed to express that she did not put much effort into her work and rarely found classes interesting, or enjoyed the content of her class. Her responses suggested that she prefers to engage in classes or activities where minimal effort or expended energy was required. Perhaps these were activities that came more naturally to her. For example, she said: "Art is my favorite subject. I always look forward to art. It's really fun and, like, we don't really have to put like so much energy into, like, doing stuff…When you're finished, it's like, pretty, and you feel satisfied.". She also mentioned that she enjoys reading in her free time at school because "it's better than like studying or like working and like thinking and like doing stuff.". In addition to her previous comments, she gave an example of the school laptops used by students to demonstrate her preference to use the computer to type, rather than write, and use the computer's software to correct spelling and grammar mistakes rather than rather than looking for them and correcting them herself. She also said that she liked to use the school laptops to create presentations, which she compared to making art (Figure 5).

Figure 5. Photo of Child B's school laptop and personal project presentation.

Child B's impression of her school subjects may be somewhat tied to her impression of that subject's teacher. She explained why she considers her relationship with her teachers to be important, saying: "Relationships with teachers are like, one of the most important…if you have a bad relationship with a teacher…they won't give you, like, good grades.". Perhaps Child B has associated having negative feelings toward, or relationships with, teachers with obtaining worse grades in the subject they teach. Regarding her art teacher, Child B said: "The teacher is nice, I like her.". Similarly, Child B expressed her fondness for her math and English teacher, saying "She's one of my favorite teachers, mostly because she's funny.". However, Child B seemed to dislike both the French subject and her French teacher, saying "I have a bad relationship with French." and that her teacher "Sets a bad mood". She expressed frustration with this teacher, giving an example of the teacher telling her to "figure it out yourself" shortly after offering her help: "you can ask me any questions".

Child B seems to have positive friendships at school with two other students in particular, whom she regularly sees outside of school. Although she mentioned that she had encountered bad relationships with "mean bullies" that made her feel angry, she stated that bullying did not happen in her class. She did not want to talk further about the subject.

Child B seems to be a creative and artistic child who may feel compelled to succeed in traditionally "academic" subjects such as math and French. Her comments about her school and engagement often appeared to involve an emotional component, and she also appeared to be somewhat critical of herself at times. Furthermore, Child B tended to demonstrate a fixed mindset and a performance goal orientation throughout her narrative. Because she may feel less engaged intrinsically, Child B may feel a sense of disempowerment and therefore looked to the environment for feedback regarding her strengths and areas for improvement. In general, her comments about her cognitive and behavioral engagement are comparable to her self-reported scores on all global dimensions of the MES-JS (see Table 1 and Table 2). In particular, her 'self-belief' score was reflective of several of her comments and implications throughout the data, and her low 'learning focus' score was reflective of a performance goal orientation. Additionally, Child B's heightened 'disengagement' and 'anxiety' scores were also reflective of many of her comments. Although Child B appeared to have some emotional engagement in school, this engagement may be fleeting. Perhaps if Child B felt more value placed on areas where she excelled, then a positive increase would be seen in both her motivation and engagement scores and her comments about them.

Child C

Child C frequently spoke about her impressions of various school subjects and experiences in her classes, strategies she uses in order to develop her academic skills, and

improvements she has made academically with the help of a tutor. Her interview and logbook responses were typically detailed, clear, and extensive, leaving little room for much further prompting or misinterpretation. It is worth noting that this was Child C's first year attending this school.

Interestingly, Child C stated that she felt she'd been more courageous this year, explaining "I used to not, like, raise my hand a lot, and now I do.". She then explained why she took a photo of a motivational poster, which read "I believe in my dreams", explaining that attaining her goals would require "doing well in school. And if you don't understand something, to like, get help". Child C seemed to demonstrate positive affect toward all of the classes, teachers, and assignments she spoke about over the course of her interviews. For example, she described her classroom as "fun", saying "I learn a lot there" and that it is a space to "develop my brain". She described her teachers as "funny", "nice", and "helpful", and described subjects as "exciting" and as making her "feel happy". In her logbooks, she frequently wrote comments highlighting her enthusiasm for school such as 'I love school!' and 'I liked learning about it and when I put in a lot of effort I get more work done'. Moreover, Child C relayed her enthusiasm for her homework and different assignments and projects. When speaking about having school work in her spare time, Child C said "I actually like doing homework for some reason…it's kind of fun doing it.". Child C was also enthusiastic when describing an English essay where she was allowed to choose the topic. Additionally, even though she discussed struggling in French class throughout her interviews, Child C explained her eagerness for French projects: "It's fun, like, doing them. A lot of people don't have fun doing them but I don't know why… I go search up everything and I get all my material, and then it's fun, like, making it.".

Over the course of her interviews, Child C described some strategies put in place by her teacher for students regarding their homework and academic assignments, as well as some of her own strategies she has learned and continued to use. One of the teacher's strategies in place for students was the 'Homework & Reminders' board (Figure 6), which was updated daily. The teacher also gave students printed photos of this board and checked students' agendas because, according to Child C, "kids don't write in it a lot and then they would, like, depend on their brain to like, remind them". Child C mentioned that she used the 'Homework & Reminders' board to write her homework in her own agenda, and said: "I highlight everything that's, like, due and like, all the due dates and then it reminds me of what I have to do.". Child C also explained another routine put in place by one of her teachers, which is to serve the students tea during quiet reading time or during tests in order to create a calm environment. Child C said "It always calms me down if I'm nervous about something".

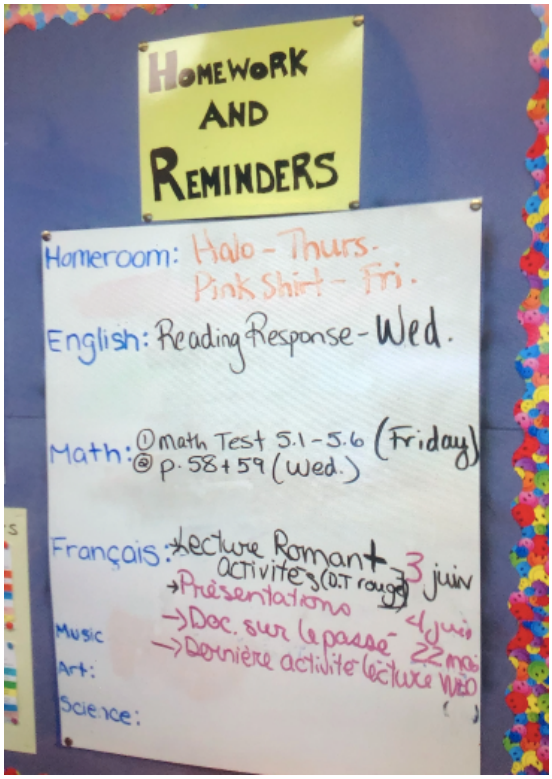

Figure 6. Photo of the 'Homework and Reminders' board.

Child C also seemed to have her own academic strategies in place, which she applied herself and with the help of her parents and tutor. For example, there are no assigned seats in Child C's French classroom, which gives students the opportunity to choose where they sit. Although some students choose to "sit with their friends that they fool around with", Child C noted that she prefers to sit next to her teacher in order to be able to ask questions easily. Regarding her homework, Child C said "As long as I do it the day I get it, I usually start working on it. Cause a lot of kids leave it to the last minute in my class and then forget to do it, but then when I start doing it, I feel like I'm not that clumped up with homework a lot.". She also said "I like studying for things because, like, if I study then I know I'm going to do well, and then it gives me, like, a good feeling…If I study once, I study again so I'm, like, sure that I'm going to get a good mark.". She also explained a strategy that her tutor put in place for her: "[She] made me like, a little agenda, on how to like, organize your work, so there's like different hours of the day that I could do different types of homework to keep myself on track.". When reflecting on an instance where she didn't perform well on a science test, Child C described the strategy she used to improve her learning: "I only got one test that I didn't do really well on and I'm like "Fine, I'm gonna take notes". I'm gonna review it at home and go a bit slower. So then it would stick in my head.". Although Child C said that she considered science class an area for improvement at the beginning of the year, by the end of the year she considered it a strength.

Child C referenced getting academic help from a tutor multiple times over the course of the interviews. She explained that her homeroom teacher contacted her parents, who arranged for her to get a tutor. Child C seemed to appreciate this help and associate it with positive outcomes. She explained: "I was doing well in English and then when I realized that some things were going wrong, my mom helped me and got me a tutor.". A frequent area for improvement

mentioned by Child C were her French language skills, which she has been working on over the course of the school year with her parents and tutor: “I got better, but I still think I could do better…. I read [French books] before I go to bed with my mom and dad. And then if they realize I’m getting it wrong they print me…reading comprehensions, and then I get better at it.”. When speaking about a French reading evaluation that she didn’t feel she performed well on, Child C said “It made me feel like I would, I could like practice even more, like, reading even slower so I could understand it, cause there was some words I didn’t really get.”. Although Child C often expressed her love for math, this is one of the subjects that she was being tutored in. She explained that typically, regarding math, her tutor will teach her material before it is taught in class, which is a useful strategy for her. Child C expressed her enjoyment of math and sense of accomplishment, saying “I really like math and when I do math, I don’t know why, but it makes me happy. I used to like, um, not like understand a lot of math, but now that I like get help a lot, I understand it more and then it makes me feel happy to know that I, like, am doing well.”.

Child C’s comments about her experiences and personal engagement in school were overwhelmingly positive and seemingly self-assured. She seemed to demonstrate enthusiasm toward her education and have genuine admiration for her teachers and the strategies put in place to help her succeed. Child C also appeared to be highly cognitively and behaviorally engaged in school, and had developed a growth mindset and a mastery orientation toward her learning. Her scores on the MES-JS reflected this (See Table 1 and Table 2). Her particularly high score on the Global Positive Engagement dimension reflected her persistence, task management, and planning abilities, which she frequently spoke about in her interviews. Likewise, she also spoke about strategies used to keep herself organized and accountable, as well as to reduce her anxiety, which were accurately reflected in her low Global Negative Engagement score. Moreover, Child C

appeared to be highly emotionally engaged in school, based on her comments about her sense of belongingness, attitudes toward school, and relationships in school. Her comments demonstrated the appearance of high intrinsic motivation and authentic engagement in school. Perhaps her personal context of being a first-year student at this school and contrasting her current experiences and environment to her previous one played a role in her comments and perspectives.

Child D

The logbook entries written and photos taken by Child D over the research sessions appeared to revolve around themes such as friendships, self-description, her understanding of her learning process, and her preferences in terms of her classes and school work. During the research process, Child D appeared to enjoy spending time with her peers as well as creating her personal presentation using her photos.

Some of the most important things at school for Child D appear to be her friendships and her free time: “I socialize with my friends every day. It’s the main part of having fun for me at school”. She seemed to highly value the times allocated to spend with her friends during school hours, such as recess and lunch time. At the beginning of her first interview, she immediately stated “recess is the best time of school for me, cause I don’t really like learning. I just like playing with my friends.”. Throughout the course of her interviews, she reiterated this sentiment frequently, stating “If I had no friends there I’d be, like, very bored, and like, I’d just learn all day, and I don’t really like learning all day without like a little break.” and “Without [friends] I would not want to go to school. And school would be like, a negative, and there wouldn’t be, like, any part that I enjoyed about school.”. Child D’s friendships seemingly play a large role in her schooling experience and her impressions about school. She described friends as “very, very

important", and warmly stated "I am grateful to have friends and I'm happy to play with them when they're all smiling, which makes me happy.". In line with the comments previously indicated, Child D simply said "I like being happy", and further described herself as "mostly positive and happy", noting this demeanor as a personal strength of hers. Although Child D noted the importance of friends to her in school, she did not speak about her relationships with her teachers or other members of the school administration.

Child D broadly spoke about the concept of 'learning', as well as about her strengths and favorite subjects in school. Regarding learning, Child D said "learning is good because, like, I won't be stupid when I grow up…and learning is definitely good because I don't want to fail my grades.". She said that although "school is all about learning", playing is her favorite thing to do. She mentioned that her teacher organized games for the students that include mathematical concepts, such as battleship, so that they can "pretend to learn". She seemed to enjoy her teacher's approach, saying "everybody says school is supposed to be fun and, like, games makes it more fun to me". Child D expressed that math is a strength for her and she considers it "easy" and "fun". She noted that she gets high marks in math and considered herself as "advanced" in her class. However, she noted that her parent told her that she must "keep improving" because she is not yet the best in the class. Some of her motivation to do well in this subject appears to come from her parent, as she explained that she is often encouraged to work on math and was "forced" to learn math concepts at home from a young age. According to Child D, her parent would consider it "not acceptable" for her to not be in the "top five" of her class in this subject. Although she did express her enjoyment of math at times, Child D prefers subjects such as art class, gym class, and library period.

Child D reasoned that art was her favorite class in school due to the lack of homework and the fact that "you get to talk with your friends". Moreover, she enrolls in an art classes outside of school. She also expressed her enthusiasm for drawing and crafting, and the importance of art for her future goal of becoming an interior designer. Similarly, Child D expressed that she likes gym class because there is no homework, she doesn't "need to learn anything", and because she gets to play and let her "craziness" out, as opposed to in other classes, where she has to "sit there for an hour and write on papers and type on computers". Child D also considered sports and athletics to be a strength of hers, above and beyond anything else. She mentioned that physical activity is good for her growth and that she prefers gym class to other classes, saying "I have all the energy on me but I can't do anything with it, I just, like, use it on my brain and it's really boring that way."

Child D also frequently expressed her love of library period and reading, but interestingly also said that reading is a weakness of hers as she doesn't feel that she reads very much in comparison to her friends. She stated that she is encouraged to read more by her parents in order to improve her writing skills. She also mentioned that "reading is a big part of learning" and alluded to enjoying being able to relax while reading in comparison to doing other types of school work. Moreover, Child D expressed that library period is enjoyable to her because she doesn't need to study for it and equated it to missing class time. She also mentioned that she likes the teacher for her library class, and that "it's important to have, like, a fun teacher" because it changes the impression of the class to her.

One of Child D's teachers also set up a 'comfy corner', which Child D described as a "fun place" as well as an "educating place", where students go to play, read, or do school work (Figure 7). Child D also described the 'Homework & Reminders' board, which students look at

daily to copy the homework into their agendas. She said that it's "kind of fun" to do homework and that writing down her homework made her feel "happy and calm". Child D explained that French homework can be difficult for her, as she came from China and started learning French later than most of her peers, so she "[doesn't] really care" about it. Child D views homework as a "big part of school" and said "If you don't, like, do your homework you will kind of not pass the grade, and that's not good.". She continued: "If I don't do homework I'm gonna, like, literally stress out so much. I'm gonna freak out, my mom's gonna get really mad at me, and I don't want that.". In her logbooks, Child D acknowledged that some of the effort she puts into her work stems from her wanting a good grade, though she would rather not have to put in much effort or study, especially if she dislikes the activity or class, or finds it "boring".

Figure 7. Photo of the 'comfy corner'.

Child D explained that a lot of her screen time and laptop use can be attributed to school. It seemed that most of her teachers use Google Classroom in order to communicate with students regarding their homework and assignments. She explained that she frequently checks Google Classroom to see what her teachers have posted and that it is a good tool for her to use if ever she misses a day of class. She also stated that she uses her computer to send messages to her friends both regarding questions about homework and in order to socialize with them. Child D referred to herself as a "perfectionist" and said that this was a good thing due to the fact that she is usually on time and organized with her homework.

In addition to her homework, Child D said that she also participated in many activities outside of school. She mentioned the current photo-elicitation research project, saying "this is kind of an out of school activity but we still do it in school, so it's kind of both mixed at the same time.". She said that "it's really fun" because she gets to stay with her friends and do an activity that uses her brain, which her parent tells her she needs to do more of. She continued, stating "I think it's good for me because I really need to get more activities, even though I have a lot already, but I think I need to have more so I can be more successful when I grow up, like, to get into a good high school and stuff.". Child D also alluded to the near future multiple other times throughout her interviews, saying that she feels as if she needs to "be careful" and that seeing the school entrance for the older students "reminds [her] that [she is] getting older, which [she doesn't] know if it's a good thing or not".

Child D appears to be a child who thrives on connecting with others, particularly her peers. She seemed to demonstrate strong emotional engagement in school in terms of feeling a sense of belongingness and comfort in her school environment. Although Child D obtained very high scores on the MES-JS with regard to Global Positive Motivation compared to her peers (see

Table 1 and Table 2), this was not necessarily reflected in her commentary. In her interviews, she seemed to be ambivalent about aspects of her cognitive engagement in school, particularly in terms of valuing school. She also seemed to demonstrate 'ritual engagement', as the efforts she put in to schoolwork appeared to be motivated by rewards related to future academic success. Interestingly, Child D appeared to appreciate and excel in aspects of school which are not traditionally considered "academic", and therefore did not necessarily equate them to schoolwork or learning. Although she appeared to be a balanced student, she may have minimized some of her strengths if they were not seen as significant by others. There also seemed to be a discrepancy between Child D's scores on the Global Negative Motivation dimension and her interview and logbook data. Although she received a Global Negative Motivation A-Grade, her comments indicated that she experienced some anxiety related to school, and actively attempted to avoid disapproval from others such as parents and teachers.

Child E

Emergent themes from Child E's interviews and logbook entries included her friendships and relationships within the school community, her struggles with organization, and her preferences in terms of school classroom styles, subjects, and strategies. During the interviews, Child E seemed to have difficulty at times expressing herself in a coherent manner, seemingly due to loss of concentration or distraction. She also appeared to take her photos in somewhat of a hasty or hurried fashion, as many of them were slightly blurry. However, Child E appeared to be enthusiastic about the interview process and often gave detailed explanations and anecdotes regarding the photos she took. Interestingly, she was also the only participant to show and talk about more than the limit of five photos, during multiple interview sessions.

Child E spoke frequently about her relationships with her friends, teachers, and acquaintances within her school community. Regarding her friendships in school, she said “the best part of school is, like, having all my friends…social is, like, a big aspect of school, actually.”. She further stressed the importance of “good relationships” with classmates, reasoning that she must interact with them daily, and that positive relationships with classmates can help “get you in the mood to go to school”. She also noted in a logbook entry that she enjoyed the topic of conversation in her ERC class that day, writing “I like learning about how to keep and maintain friendships”. For Child E, knowing that she has peers she can speak to freely and have fun with seems to be an important aspect of her school experience. She demonstrated her curiosity about her classmates when she spoke about reading their autobiography assignments whenever she has time, which are posted outside of her classroom: “I just like to read through it in my spare time and it’s interesting to find out about what all my friends do in their spare time.”. However, Child E also mentioned the possibility of negative interactions and fights among peers, which she attributed to “spending so much time with your friends”, but said that she tries to stay out of fights and competitive behavior because it becomes stressful and causes tension.

Upon showing a photo that she took of a board that included photos of numerous students in the school, Child E explained “It’s…important to have good relationships with, like, not only your teachers and your classmates and your friends but, like, everyone in the school, cause like…you’re also surrounded by all these people.”. She continued to speak about the importance of getting to know other students because “you might actually like them”. Child E also spoke about her experience practicing for the school musical, where she developed close relationships with other students, and described a class in place at school during which students in different grades work together to work on projects and different activities as a group on a regular basis. In

line with this, she also brought up the importance of using the "school values", by being mindful of others and being "nice and kind" to both others and oneself in order to "set a better tone" for everyone in the classroom. Despite her positive attitude regarding the importance of creating relationships with peers, Child E mentioned "I don't open myself up to other people…that's kind of sad to think about.".

A noteworthy member of the school community that Child E chose to speak about was the school receptionist, who she described as "trustworthy" and as "kind of like a friend". Child E said that she felt comfortable talking to the receptionist and felt that she was quite helpful. Child E also spoke about another adult member of the school community, a teacher, with whom she feels she has a very good relationship. Child E appeared to appreciate this teacher's efforts, warmth, and encouragement, noting that she constantly supports students' endeavors and activities outside of school and is a listening ear when it comes to "friendship issues". She enjoyed this teacher's classes because she "tries to make [teaching] fun", an effort that Child E acknowledged many times and genuinely seemed to appreciate. Child E also stated that this teacher is "hard on us if we need [it]", and exemplified this by saying "She, like, really helped me realize, like, I just have to be more organized…teachers haven't taught me that before.".

Child E described herself as "messy" and "unorganized" at times during her interviews. She acknowledged that these were areas for improvement for her and mentioned that teachers have told her that the state of the belongings in her personal locker space was "unacceptable" and have made her clean it up (Figure 8). In addition to this example of her messiness, Child E also mentioned her tendency to procrastinate, and stated "I don't know how to organize myself, like, I don't know how to get organized to, like, do my homework. Like, I just have to have someone to

tell me…I need help with that.". Although Child E brought up possible solutions and strategies to help with her procrastination, she also revealed: "I get distracted really easily".

Figure 8. Photo of Child E's belongings taken to demonstrate her "messiness".

Child E spoke in depth about the different classroom styles she is exposed to this year and her views on her learning in each of them. Child E described one of her classrooms as an "active learning" classroom (Figure 9), and the other one as a more traditional style classroom. Interestingly, she gave contradictory statements about each of the classrooms across interviews. In her first interview, Child E stated that it was easier for her to learn in the active learning classroom because she had options regarding she wanted to sit each day (i.e., the sofa, a desk, the 'patapouf', etc.). She usually chose to sit with the teacher in order to be able to concentrate: "it's easier to concentrate…she can make sure that I'm concentrating and working." However, in her

second interview, Child E said that she "[doesn't] really like working" in the active learning classroom, where it is "harder to work", and that she prefers sitting at her assigned seat in the traditional classroom, where she can "focus better" (Figure 10). She continued: "It's just so much easier to work at my own desk than, like, at other places. So like, I prefer that…I have my own, like, special place and like, I just know that, like, I'd get [work] done there better than I do, like, in the other classroom." Furthermore, Child E stated that she believes she works better and can concentrate better with the use of a computer: "Instead of dozing off into, like, looking anywhere, I have the screen kind of looking at me, so I remember to, like, keep working.".

Figure 9. Photo of the 'active learning' classroom.

Figure 10. Photo of Child E's assigned seat in the traditional-style classroom.

Child E also spoke about her likes, dislikes, and strengths in school, as well as some strategies she uses in order to improve. Two strengths she named were math and English. She said that she enjoys both of these subjects and that "it just comes easily", and explained "a big part of the strengths for me is I have to find it fun". In an instance where Child E wrote about correcting math tests in class, she noted "I was happy with my result…I liked learning how to do the things I got wrong in the right way.". Child E also spoke about her enjoyment of athletics and her participation in sports outside of school. She explained the lengths she went to in order to practice and improve her skills when she found a sport she really enjoyed. She stated "Sports is

kind of like, my thing that, like, makes me feel good, makes me feel more confident.", and added: "I'm more of, like, an outdoors, I'm more into sports than, like, sitting, like, I'm more into sports than art.". Child E mentioned her dislike for art and music classes throughout the interviews and her logbook entries. She noted that she doesn't "have the patience" and therefore becomes "very restless" and becomes unable to focus, which leads her to thoughts such as "I don't want to do this" and "I don't really care about this anymore", as well as actions such as not working hard during class or putting effort into the projects and assignments. She stated: "I don't want to do it because it's hard for me to do, I just don't have any motivation to do it.". However, she also said "I want to get better at it…I think art is really cool…I think if I, like, tried harder or had the patience…then I would be more, pay more attention to it.".

In addition to her enjoyment of athletics, Child E stated that participating in physical activity calms her down and makes her feel better if she is feeling stressed or anxious. Similarly, Child E is passionate about reading and finds it to be a "relieving" activity. She enjoys library class as it is "like a break from school" and allows her to relax amidst her "hectic" day. Child E believes that everyone has something that can calm them down, make them feel good, or help them focus, but said that it is just a matter of finding out what it is.

Child E appeared to be a determined student who encountered difficulties at times in her school environment. She also seemed to be rather introspective and thoughtful in her comments, and referred to the current project as an "eye-opener". Child E spoke frequently about her different relationships within the school and their meaningfulness to her, as well as the importance of adhering to the 'school values' during her interactions with others. Based on her comments, she seemed to prioritize and demonstrate high emotional engagement in school. In general, Child E's comments seemed to be in line with the scores she obtained on the MES-JS

(see Table 1 and Table 2), indicating a sense of self-awareness. Interestingly, although her self-rated score on the Global Positive Engagement dimension was low, her comments indicated that she was a persistent student seeking to improve her task management and planning abilities. At times during her interviews, she spoke critically of herself; it is worth wondering if perhaps she also rated herself critically on the MES-JS. In general, Child E seemed to have a somewhat positive outlook toward her schooling experiences and environment. She also made multiple comments indicating the presence of intrinsic motivation and a growth mindset. However, these attributes may be shielded by the presence of some maladaptive thoughts and behaviors such as disengaging from schoolwork, self-handicapping, and becoming anxious in academic-related contexts.

Common findings

Participant interviews and logbooks revealed some frequent mentions of common themes in the analysis of the participant's statements. Although participants did not necessarily individually elaborate enough on some of these themes when analyzing their individual findings, the collective references to these themes among participants is noteworthy. These themes include computer use, the physical environment of the school, and school routines and values.

One of the most common practices that four of the five participants brought up was their computer use, typically in regard to their homework. The participants concurred that they do a lot of their work in school on computers and that most of their homework was also accessible through, and done on, a computer. The grade 3, 4, and 5 students at this school have access to shared laptops, which they are free to use throughout the day and during class time, as allowed by the teacher. Examples of students' use of computers during school hours include typing stories and essays, creating presentations, and doing art projects. The participants generally

seemed to enjoy this, making comments such as “I love making the presentations” and “When we work on the computers you can do it like, your own style… you could do so many different, kind of like, styles of like working… You could, like, work on a document, you could work on, like, a slideshow. Like, you could do it in a lot of different ways”. Participants also commented that use of the computers makes their work “easier” and “prettier”, in addition to providing different programs that help with spelling and grammar. Moreover, students continue their computer use at home, where they have access to online homework and various school assignments through the use of Google Classroom. They seem to enjoy this and are aware of their responsibility concerning their homework: “If I don’t have [a computer] it’ll be really hard for me to, like, catch up with all the homework. If I, like, miss a day…our teachers post everything on Google classroom so if we miss like school, we have to go check on it.”. The participants also spoke about using their computers for situations besides homework. They each spoke about playing games, which is sometimes a source of distraction. However, they also spoke about using computers in order to connect with their peers in order to ask questions about homework or to just “socialize”.

Participants also collectively spoke about the physical environment of the school, and how some of the physical features may support individual students’ learning. Every participant spoke about the school library as a space they enjoyed (Figure 11). They made positive comments about the library itself, calling it a “favorite place”, as well as about library period, where they have the opportunity to read, borrow books, and have books read to them. Similarly, the grade five teachers constructed areas within and just outside of the classroom for the students to enjoy while reading or partaking in school work. The “reading corner”, which is in the grade five English classroom, consists of a large beanbag pillow and shelves filled with books and is a

space where students can lounge and read (Figure 12). The “comfy corner”, or “reading nook”, is located outside of both grade five classrooms and serves as a space for students to read or do school work quietly if they wish to leave the classroom (Figure 7). Students also spoke about more individual spaces within the school, such as their personal desk or cubby space. In general, they seemed to value these spaces for providing privacy as well as an opportunity to personalize an individual area within the school. Each student has a lift-top desk, where they keep their school material as well as some personal possessions such as pictures, cards from friends, mementos from previous teachers, and notes from parents. They also have individual cubbies, labeled with their names, in a communal locker room area (Figure 13). The students customize and organize this area as they please, which they seem to enjoy, in addition to the sentiment of privacy it provides. Child D said “I like my locker a lot because I also have my own privacy”, and Child C made a similar comment: “It’s the best part because it’s organized and I put all my stuff and I pass by the everyday… And then I have this thing in my locker that makes it like, smell nice…I feel like I have like my own space…Even though it doesn’t have a door or a lock, I still feel like it’s, like, good to have my own space.”. In addition to these physical features within the school, participants also mentioned certain educational plans that were set up both for students who need to be challenged more in a specific subject area, and for those who “need help in class”.

Figure 11. Photo of part of the school library taken by Child E.

Figure 12. Photo of the ‘reading corner’ taken by Child B.

Figure 13. Photo of students' cubby spaces taken by Child B.

Moreover, school routines and values were also central to students' collective discussion. One routine mentioned was a weekly assembly held for all students from kindergarten to grade five. The purpose of this assembly is to inform and prepare students for different school activities and events coming up. Students also sing a school song weekly at another assembly. Another school routine in place is a collaborative class for grade 3, 4, and 5 students. According to one participant, the goal of this course is to build relationships with students in the school beyond one's classmates by working on various projects and activities in groups comprised of students of different grade levels. The school also promotes values for students to live by, which were acknowledged by participants. Photos of the board displaying the school values were taken by multiple participants and described by one as "the values we live by" (Figure 14). Another student compared her school to other schools, saying "at our school they teach like, life

lessons.”. It seemed as if these values were also being enforced in person by school administration, as one participant described the principal “constantly” coming to her classroom and telling students to “remember to use your values”. As understood by this student, this meant to be kind, be yourself, and be mindful and aware of others in order to set a “better tone” in the classroom or school environment. Although this student described what the values meant to her, she also stated that she should pay more attention to the school values posters. Another participant spoke about pictures posted in various locations around the school reminding students to be respectful and containing words of encouragement, as well as a “classroom rules” contract that was signed by all grade five students at the beginning of the school year.

Figure 14. Photo of the school values taken by Child E.

Discussion

This research project sought to understand grade five students' schooling experiences and school engagement using a unique participatory research methodology. Through the use of use of a self-report questionnaire targeting students' cognitive and behavioral school engagement, photo-elicitation interviews guided by session themes, and student logbook data, the perspectives of each participant regarding their experiences in and attitudes toward school were taken into account and analyzed. The emerging themes resulting from participants' narratives reflected their realities as students within their school environment and also as individuals beyond it. The qualitative methodology used was essential in understanding how participants' differences in engagement contributed to their different experiences and perspectives, and vice-versa.

Motivation and Engagement

The data collected appeared to support research indicating that patterns in motivation are influential for students' learning outcomes (Gottfried, 1990). Participants who appeared to be more intrinsically motivated tended to present behaviors related to the development of a growth mindset, whereas participants demonstrating extrinsic motivation tended to have a fixed mindset mentality (Dweck, 2010). Although some participants demonstrated clear tendencies toward either intrinsic motivation, the development of a growth mindset, and a mastery goal orientation, or extrinsic motivation, the development of a fixed mindset, and a performance goal orientation, most participants made comments indicating some degree of ambivalence. Interestingly, although researchers have found that growth mindsets are exceptionally important for students who may be influenced by negative stereotypes about abilities and are from diverse cultural backgrounds, data from the current study indicated that it was students fitting these criteria who tended to demonstrate fixed mindset tendencies, such as Child B and Child D, two students who

recently moved to Canada from China (Blackwell et al., 2007). The current findings indicate that these are complex constructs that are still being developed and influenced shortly before students make the transition out of elementary school, at which point students' motivation tends to stabilize (Gottfried et al., 2001).

The findings from the current study were supported by results from Saeed and Zyngier's (2012) study, which aimed to better understand the link between student motivation and engagement using Ryan and Deci's (2000b) Self-Determination Theory. Specifically, they emphasized the existence of multiple categories of school engagement, as explained in Schlechty's Student Engagement Continuum (Schlechty, 2002). Participants demonstrating intrinsic motivation in the current study typically appeared to be authentically engaged in school (i.e., Child C), whereas those demonstrating extrinsic motivation typically demonstrated signs of ritual engagement (i.e., Child B and Child D), where their efforts in school were motivated by potential for future personal and academic success. Participants seldomly made comments indicating the manifestation of passive compliance, retreatism, or rebellion. This may indicate efforts by the participants' school and teachers to enhance their feelings of autonomy, competence, and relatedness, the central elements of Self-Determination Theory for optimal student functioning (Ryan & Deci, 2000a; 2000b).

It is important to remember that emotional, behavioral, and cognitive engagement are dynamic and interrelated aspects of a student's overall engagement in school. These dimensions of school engagement cannot be isolated from one another and should be conceptualized as being on a continuum (Fredricks et al., 2004). The current research highlighted some of the qualitative differences within each component of school engagement. Although comparison between students and between different dimensions and subscales on the MES-JS was relatively simple

and straightforward due to its use of a numerical scale that could be converted into grades, the logbook and interview data revealed the true complexity of students' engagement in school. For example, it was difficult to assess a participants' emotional, behavioral, or cognitive engagement due to the range of features that they encompass, as well as the presence or absence of them depending on the child's context within the school. If anything, this should warn against labeling a student as simply "motivated" or "engaged", or the opposite.

Students' cognitive and behavioral engagement in school has implications not only for their school grades, their ability to work effectively on difficult schoolwork, and their understanding of schoolwork, but also for their enjoyment of school. Therefore, increased cognitive and behavioral engagement may have implications for students' emotional engagement (Martin, 2016). Although findings from the current study did not necessarily corroborate these results due to the sample size and nature of the research, this would be an avenue worth researching.

Parents. The current findings also support previous research declaring that parents and teachers are the most influential individuals for students' motivational orientations (Bempechat & Shernoff, 2012). Participants in the current study made multiple comments about their perceptions of their parents' and teachers' expectations and perspectives about their education. Based on their comments, the parents of participants in this study generally seemed to be involved in their education. As previous research has shown, parental engagement and parenting practices at home, as well as parental contact with the school, are important contributors toward children's academic motivation and engagement (Bempechat & Shernoff, 2012; Fan & Williams, 2010; Gottfried et al., 1994;). Data from the current study supported this, as the comments made by participants about their parents were in line with previous research in terms of the

motivational styles and mindsets that appeared to be developing (Bempechat & Shernoff, 2012; Deci & Ryan, 1985). Undoubtedly, the interpretation of these comments by students is instrumental in the development of their motivational styles.

Teachers. The findings from the current study regarding the role of teachers were also supported by previous research (Saeed & Zyngier, 2012). Interestingly, different participants made similar comments about their teachers. The teachers that they appeared to like most were those who appeared to engage in pedagogic reciprocity by creating active and collaborative experiences for students and implementing purposeful activities designed to challenge them. Therefore, the teachers that students appeared to enjoy most were likely also those who were authentically engaging them the most. These teachers were also the ones that students perceived as being caring, supportive, fair, and as having high expectations of them. Notably, every participant mentioned enjoying the subject or classes taught by these teachers at some point throughout the course of the study. These findings fall in line with previous research by Klem and Connell (2004) and Skinner and Belmont (1993). The current findings speak to the influence that individual teachers can have on students' engagement in school. When effective, the strategies used by teachers to engage their students may function within their classes. However, students' engagement in a specific class cannot be understood as their school engagement in general. Taken together, the findings of this study related to participants' parents and teachers call for influential adults in students' lives to be mindful of what they emphasize and how they approach and speak about topics surrounding their education.

School and curriculum. This school appears to have high standards for learning and conduct, aims to promote meaningful and engaging curriculum, welcomes students from diverse backgrounds, and offers support services to students, which should be ideal for enhancing

student's school engagement and their feelings of connection toward school; despite this, it is possible that there is an underlying competitive school atmosphere that may mute the potential benefits of the aforementioned strategies (Klem & Connell, 2004; Zepke & Leach, 2010). Although participants in this study did not mention teachers or school staff offering external incentives or encouraging competition for grades, some of them did mention these ideas being instilled by their parents. Three of the five students mentioned planning for a competitive academic future, participating in classes or exams outside of school, and feeling pressured by parents to perform at the top of their class. This may account for some of these students' lack of authentic engagement in school and their tendencies to focus on extrinsic rewards.

Typically, in Montreal, private schools are chosen by parents to ensure smaller classes and a close monitoring of their children's progress. This particular school appeared to accommodate learner differences by implementing teaching approaches and a curriculum consistent with promoting inclusivity and individualized instruction. Participants took note of these efforts, and appeared to enjoy the adaptable learning environments, inclusive instructional approaches, and personalized programs and spaces offered within the school. This school also aimed to implement school values and a sense of community and connectedness among students. These attempts were clearly understood and acknowledged by the students, as participants casually commented on them during their interviews. However, it appeared that only certain students truly internalized and appreciated these initiatives by the school. Besides infrequent mention of these school initiatives, they did not appear to be central to students' perspectives of their learning environment, despite being a fundamental part of the school's objectives and curriculum. These results are somewhat reflective of those by Wang and Eccles (2013), which indicated that the link between the school environment and students' school engagement was

mediated by students' motivational styles. Perhaps it is necessary for students to be intrinsically motivated in school in order to welcome these additional initiatives by the school aimed to enhance their engagement.

Methodological Reflections

The use of the MES-JS (Martin, 2016a) was an asset in this study. Completion of this self-report questionnaire allowed for participants to receive a quantitative score on measures of their subjective cognitive and behavioral engagement. Although these scores were not to be used as defining markers of their engagement in school, they served as a way of comparing and contrasting with each individual participant's thoughts and comments, as well as getting an overview of the range of possibilities across the different students. This scale lends itself very well to engaging students in self-reflection and in the identification of their strengths and areas for improvement. Moreover, the author of this scale has listed suggestions for developing strategies for remediation for students who have obtained scores indicating a need for improvement in any evaluated construct (Martin, 2016b). Therefore, an additional benefit of the MES-JS is its potential for direct application and implications for practice.

The auto-driven photo-elicitation technique used to interview participants was a strength of the current study. The introduction of session themes related to aspects of cognitive, behavioral, and emotional school engagement, and the subsequent brief group discussion gave participants adequate guidance and motivation to take their photos. The variety of all photos taken, even within the same session, demonstrated participants' individuality and their unique representation of the themes as they related to their lives. The participants appeared to thoroughly enjoy taking photos and self-selecting photos for the interview process. They were typically eager to discuss their photographs and the stories or ideas behind them, and welcomed

interviewer questions and prompting. The photo-elicitation technique appeared to allow participants to express themselves in ways that traditional interviews may not allow. For example, they were able to point out specific parts of photographs, compare photos to one another, and introduce concepts that otherwise would have not have been included in a traditional interview due to lack of knowledge by the researcher. Additionally, conducting multiple interviews served as a useful tool for creating accurate participant narratives and representing their perspectives authentically.

Lastly, the use of experience sampling via logbooks created a host of additional data that was used to help understand, confirm, and elaborate on participant interview statements. Logbooks were also a good tool to use in order to target specific aspects of school engagement in specific contexts, and stimulate participant reflection and self-awareness regarding their sentiments about their most recent schooling experiences. The authentic representation of participants' perspectives was crucial in this study. Overall, the combination of tools used in this study provided good triangulation of data sources, increased the trustworthiness of the data collected, and allowed many opportunities for member checking and taking field notes, therefore reducing the possibility of researcher bias.

Limitations

One limitation of the current study involved scheduling challenges and time constraints. After the initial self-report questionnaire was completed by all consenting grade five students, twelve students were deemed as eligible for the current study on the basis of their self-reported engagement in school. However, only five were available to participate, presumably due to the project's time commitment. Due to the students' various after school activities, they were only available at certain times and on certain dates after school hours. Luckily, every participant was

able to complete each session, though some make-up sessions had to be arranged with individual participants during their school lunch hour. Moreover, there was limited time to complete this project, as the school year was nearing its end. This introduction of the project at the end of the school year was necessary but less than ideal considering that students' schedules were already set, and the introduction of new activities at this time was uncommon. Meetings with students were typically held twice weekly and continued into their last week of school, therefore making it difficult to postpone or rearrange session dates when necessary.

Furthermore, although the 1.5 hour length of time for each session was adequate, an extra half hour per session would have been preferable, although this was not possible due to conflicts with the participants' other commitments. Allotting more time per session would have allowed for flexibility and more ease of flow in terms of the discussion, logbook, and interview process. It would also have allowed for participants to spend more time thinking about ideas for and creating their personal digital media projects, an aspect of the study that seemed to be rushed and overlooked at times.

A final limitation of this study is that there was no self-report emotional engagement questionnaire or component included. It would have been useful to have incorporated a self-report emotional engagement component to refer to when analyzing students' comments about their school engagement. Ideally, this type of questionnaire would contain questions related to students' feelings about their school, teachers, and peers, as well as their identification with the school in general. Unsurprisingly, due to students' academics being situated within a larger social context, the participants made many comments referring to their emotional school engagement. It would have been interesting to discover whether participants' self-reported scores were consistent with their commentary throughout the sessions.

Implications

The methodological approach used in this study allowed for abundant information about participants' personal perspectives regarding their schooling experiences and similar topics to be revealed and explored. The current study demonstrated the significance of the use of a qualitative methodology, in particular the use of photo-elicitation interviews, with elementary school students in education research. Findings of the current study demonstrated the variety, depth, and uniqueness of information disclosed by each child.

The results of this exploratory research study have implications for the integration of qualitative data in the study of students' school engagement. The data collected were used to understand students' perceptions of their schooling experiences and how they may contribute to their styles of engagement, and vice-versa. Moreover, the results of this study shed light on the role of important contributing factors to engagement.

The themes emerging from students' narratives provided insightful information about their personal experiences in school and supported previous research on contributing factors to engagement. However, more qualitative research is necessary in this domain in order to more thoroughly examine the complex relationships between students' motivational styles, experiences in school, the classroom environment, school principles, and curriculum in place. The implementation of alternative curriculums that emphasize individualized instruction for students, and have begun to replace traditional teaching approaches in recent years, appeared to be a positive venture in this school, as acknowledged by participants.

Future Directions

Future studies should aim to combine and contrast students' perspectives with those of their teachers, parents and school administrations. This additional data will allow for and

contribute to a more ecological and systemic account of students' experiences to be created. The availability and use of this added information will contribute to and consolidate important information in order to help explain and support students' perspectives. It will also potentially help develop appropriate strategies and recommendations for students' increased motivation and engagement in school. Moreover, future research may seek to conduct mixed methods research comparing students' self-perceptions of school engagement in elementary school with their self-perceptions of engagement in high school, as well as with measures of well-being, records of academic achievement, and later educational attainment. The implications of this study lend support to the importance of research including qualitative measures of self-perceptions of student engagement.

In sum, this study successfully used methodological approaches that elicited students' personal accounts of their experiences and engagement in school. It was also possible to examine the relationships between their schooling experiences, engagement and their educational environments. The current research contributes to knowledge regarding the influence of motivation and contextual factors on student engagement, as experienced by elementary school-aged children, and highlights the intricacy of the interactions between students and their environment.

References

Appleton, J. J., Christenson, S. L., & Furlong, M. J. (2008). Student engagement with school: Critical conceptual and methodological issues of the construct. *Psychology in the Schools, 45*, 369–386. doi: 10.1002/pits.20303

Bempechat, J., & Shernoff, D. J. (2012). Parental influences on achievement motivation and student engagement. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 315-342). New York, NY: Springer. doi:10.1007/978-1-4614-2018-7_15

Blackwell, L., Trzesniewski, K. ,& Dweck, C.S. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and intervention. *Child Development, 78*, 246–263. doi:10.1111/j.1467-8624.2007.00995.x

Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist, 32*, 513–531. doi:10.1037/0003-066x.32.7.513

Broussard, S. C., & Garrison, M. E. (2004). The relationship between classroom motivation and academic achievement in elementary-school-aged children. *Family and Consumer Sciences Research Journal, 33*, 106-120. doi:10.1177/1077727x04269573

Casillas, A., Robbins, S., Allen, J., Kuo, Y. L., Hanson, M. A., & Schmeiser, C. (2012). Predicting early academic failure in high school from prior academic achievement, psychosocial characteristics, and behavior. *Journal of Educational Psychology, 104*, 407-420. doi:10.1037/a0027180

Center for Applied Special Technology (1998). *What is universal design for learning?* Wakefield, MA: Author.

Clark (1999) The autodriven interview: A photographic viewfinder into children's experience. *Visual Studies, 14*, 39-50, doi: 10.1080/14725869908583801

Clark-Ibáñez, M. (2004). Framing the social world with photo-elicitation interviews. *American Behavioral Scientist, 47*, 1507-1527. doi:10.1177/0002764204266236

Collier, J. (1957). Photography in anthropology: A report on two experiments. *American Anthropologist, 59*, 843-859. doi:10.1525/aa.1957.59.5.02a00100

Csikszentmihalyi, M. (1990). Flow: *The psychology of optimal experience*. New York, NY: HarperPerennial.

Deci, E., Koestner, R., & Ryan, R. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin, 125*, 627-668. doi:10.1037/0033-2909.125.6.627

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York, NY: Plenum.

Dweck, C. S. (1986). Motivational processes affecting learning. *American psychologist, 41*, 1040-1048. doi:10.1037/0003-066x.41.10.1040

Dweck, C. S. (2010). Mind-sets and equitable education. *Principal Leadership, 10*, 26-29.

Edyburn, D. L. (2005). Universal Design for Learning. *Special Education Technology Practice, 7*, 16-22.

Epstein, J. L. (1995). School/family/community partnerships: Caring for the children we share. *Phi Delta Kappan, 76*, 81-96. doi:10.1177/003172171009200326

Epstein, J. L. (2011). *School, Family, and Community Partnerships: Preparing Educators and Improving Schools (2nd edition)*, Philadelphia, PA: Westview Press.

Fan, W., & Williams, C. M. (2010). The effects of parental involvement on students' academic self-efficacy, engagement and intrinsic motivation. *Educational Psychology, 30*, 53-74. doi:10.1080/01443410903353302

Farrell, A. (2005). Ethics and Research with Children. In Farrell, A. (Ed) *Ethical Research with Children*. New York, NY: Open University Press.

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research, 74*, 59-109. doi:10.3102/00346543074001059

Fredricks, J. A., & McColskey, W. (2012). The measurement of student engagement: A comparative analysis of various methods and student self-report instruments. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 763-782). New York, NY: Springer.

Furlong, M. J., Whipple, A. D., Jean, G. S., Simental, J., Soliz, A., & Punthuna, S. (2003). Multiple contexts of school engagement: Moving toward a unifying framework for educational research and practice. *The California School Psychologist, 8*, 99-113. doi:10.1007/bf03340899

Gottfried, A. E. (1990). Academic intrinsic motivation in young elementary school children. *Journal of Educational Psychology, 82*, 525-538. doi:10.1037/0022-0663.82.3.525

Gottfried, A. E., Fleming, J. S., & Gottfried, A. W. (1994). Role of parental motivational practices in children's academic intrinsic motivation and achievement. *Journal of Educational Psychology, 86*, 104-113. doi:10.1037//0022-0663.86.1.104

Gottfried, A. E., Fleming, J. S., & Gottfried, A. W. (2001). Continuity of academic intrinsic motivation from childhood through late adolescence: A longitudinal study. *Journal of Educational Psychology, 93*, 3-13. doi:10.1037/0022-0663.93.1.3

Harper, D. (2002). Talking about pictures: A case for photo elicitation. *Visual studies, 17*, 13-26. doi:10.1080/14725860220137345

Hays, D. G. & Singh, A. A. (2012). *Qualitative inquiry in clinical and educational settings*. New York, NY: The Guilford Press.

Heisley, D. D., & Levy, S. J. (1991). Autodriving: A photoelicitation technique. *Journal of Consumer Research, 18*, 257-272. doi:10.1086/209258

Katz, J. (2012a) *Teaching to diversity: The Three-Block Model of Universal Design for Learning*. Winnipeg, MB: Portage & Main Press.

Katz, J. (2012b). Reimagining inclusion. *Canadian Association of Principals Journal, Summer*, 22-26.

Klem, A. M., & Connell, J. P. (2004). Relationships matter: Linking teacher support to student engagement and achievement. *Journal of School Health, 74*, 262-273. doi:10.1111/j.1746-1561.2004.tb08283.x

Lancaster, P. (2008). Universal design for learning. *Colleagues, 3*. Article 5. Retrieved from http://scholarworks.gvsu.edu/colleagues/vol3/iss1/5

Martin, A.J. (2003). *How to motivate your child for school and beyond*. Sydney: Bantam.

Martin, A.J. (2009). Motivation and engagement across the academic lifespan: A developmental construct validity study of elementary school, high school, and university/college students. Educational and Psychological Measurement, 69, 794-824. doi: 10.1177/0013164409332214.

Martin, A.J. (2016a). The Motivation and Engagement Scale (16th Edition). Sydney, Australia: Lifelong Achievement Group (www.lifelongachievement.com).

Martin, A. J. (2016b). The Motivation and Engagement Workbook (16th Edition). Sydney, Australia: Lifelong Achievement Group (www.lifelongachievement.com).

Mo, Y., & Singh, K. (2008). Parents' relationships and involvement: Effects on students' school engagement and performance. *RMLE online, 31*, 1-11. doi:10.1080/19404476.2008.11462053

Mueller, C., & Dweck, C. (1998). Praise for intelligence can undermine motivation and performance. *Journal of Personality and Social Psychology, 75*, 33–52. doi:10.1037//0022-3514.75.1.33

Newmann, F. M., Wehlage, G. G., & Lamborn, S. D. (1992). The significance and sources of student engagement. In F. Newmann (Ed.), *Student Engagement and Achievement in American Secondary Schools*. (pp. 11-39). New York, NY: Teachers College Press.

Pisha, B., & Coyne, P. (2001). Smart from the start: The promise of universal design for learning. *Remedial and Special Education, 22*, 197-203. doi:10.1177/074193250102200402

Pyle, A. (2013). Engaging young children in research through photo elicitation. *Early Child Development and Care, 183*, 1544-1558. doi:10.1080/03004430.2012.733944

Reschly, A., & Christenson, S. L. (2006). Promoting school completion. In G. Bear & K. Minke (Eds.), *Children's needs III: Understanding and Addressing the Developmental Needs of Children*. (pp.103-113). Bethesda, MD: National Association of School Psychologists.

Russell, J., Ainley, M., & Frydenberg, E. (2005). *School issues digest: Motivation and engagement*. Canberra, Australia: Australian Government: Department of Education, Science and Training.

Ryan, R. M., & Deci, E. L. (2000a). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology, 25*, 54-67. doi:10.1006/ceps.1999.1020

Ryan, R. M., & Deci, E. L. (2000b). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American psychologist, 55*, 68. doi:10.1037/0003-066x.55.1.68

Saeed, S., & Zyngier, D. (2012). How motivation influences student engagement: A qualitative case study. *Journal of Education and Learning, 1*, 252-267. doi:10.5539/jel.v1n2p252

Saldaña, J. (2013). *The coding manual for qualitative researchers*. Los Angeles: SAGE Publications.

Schänzel, H. & Smith, K. (2011). Photography and Children: Auto-driven Photo-elicitation. *Tourism Recreation Research, 36*, 81-85. doi:10.1080/02508281.2011.11081664.

Schlechty, P. C. (2002). *Working on the work an action plan for teachers, principals and superintendents (1st ed.)*. San Francisco, CA: Jossey Bass.

Sensoy, Ö. (2011). Picturing oppression: Seventh graders' photo essays on racism, classism, and sexism. *International Journal of Qualitative Studies in Education, 24*, 323-342. doi:10.1080/09518398.2011.561817

Shaw, D. (2013). A New Look at an Old Research Method: Photo-Elicitation. *TESOL Journal, 4*, 785-799. doi:10.1002/tesj.108

Shernoff, D. J., Csikszentmihalyi, M., Schneider, B., & Shernoff, E. S. (2003). Student engagement in high school classrooms from the perspective of flow theory. *School Psychology Quarterly, 18*, 158–176. doi:10.1521/scpq.18.2.158.21860

Simons-Morton, B., & Chen, R. (2009). Peer and parent influences on school engagement among early adolescents. *Youth & Society, 41*, 3-25. doi:10.1177/0044118x09334861

Skinner, E., & Belmont, M. (1993). Motivation in the classroom: reciprocal effects of teacher behavior and student engagement across the school year. *Journal of Educational Psychology 85*, 571 -581. doi:10.1037/0022-0663.85.4.571

Sokal, L., & Katz, J. (2015). Effects of the three-block model of universal design for learning on early and late middle school students' engagement. *Middle Grades Research Journal, 10*, 65-82.

Spooner, F., Baker, J. N., Harris, A. A., Ahlgrim-Delzell, L., & Browder, D. M. (2007). Effects of training in universal design for learning on lesson plan development. *Remedial and Special Education, 28*, 108-116. doi:10.1177/07419325070280020101

Steinberg, L., Lamborn, S. D., Dornbusch, S. M., & Darling, N. (1992). Impact of parenting practices on adolescent achievement: Authoritative parenting, school involvement, and encouragement to succeed. *Child Development, 63*, 1266-1281. doi:10.2307/113153

Thomson, P., & Gunter, H. (2008). Researching bullying with students: a lens on everyday life in an 'innovative school'. *International Journal of Inclusive Education, 12*, 185-200. doi:10.1080/13603110600855713

Torre, D., & Murphy, J. (2015) A different lens: Changing perspectives using photo-elicitation interviews. *Education Policy Analysis Archives, 23*, doi:10.14507/epaa.v23.2051

Wang, M. T., & Eccles, J. S. (2013). School context, achievement motivation, and academic engagement: A longitudinal study of school engagement using a multidimensional perspective. *Learning and Instruction, 28,* 12-23. doi:10.1016/j.learninstruc.2013.04.002

Zenkov, K., Ewaida, M., Bell, A., & Lynch, M. (2012). Seeing how to ask first: Photo elicitation motivates English language learners to write: Photos prompt middle grades English language learners to reflect upon and write about their lives. *Middle School Journal, 44*, 6-13. doi:10.1080/00940771.2012.11461842

Zepke, N., & Leach, L. (2010). Improving student engagement: Ten proposals for action. *Active Learning in Higher Education, 11*, 167-177. doi:10.1177/1469787410379680

Zyngier, D. (2011). (Re)conceptualising risk: left numb and unengaged and lost in a no-man's-land or what (seems to) work for at-risk students. *International Journal of Inclusive Education, 15*, 211-231. doi:10.1080/13603110902781427

Table 1

Motivation Quotient Scores Obtained by Each Child

Child	Self-belief	Persistence	Learning Focus	Valuing	Task Management	Planning	Disengagement	Self-sabotage	Uncertain control	Failure Avoidance	Anxiety
A	116	118	105	95	106	117	85	84	76	78	91
B	84	93	79	83	98	113	114	96	84	108	103
C	89	103	116	108	118	121	91	84	84	78	83
D	116	118	116	108	110	106	85	96	88	82	91
E	105	88	105	89	98	90	109	108	120	95	111

Note. MQs have a mean of 100 and a standard deviation of 15.

Table 2

Global Motivation Quotient Scores and Global Grades Obtained by Each Child

Child	Global Positive Motivation (Adaptive Cognition)	Global PM Grade	Global Positive Engagement (Adaptive Behavior)	Global PE Grade	Global Negative Motivation (Maladaptive Cognition)	Global NM Grade	Global Negative Engagement (Maladaptive Behavior)	Global NE Grade
A	105.33	B	113.67	B	81.67	A	84.5	A
B	82	D	101.33	B	98.33	B	105	C
C	104.33	B	114	B	81.67	A	87.5	B
D	113.33	B	111.33	B	87	B	90.5	B
E	99.67	C	92	C	108.67	C	108.5	C

Note. Global MQs are converted to Global Grades based on $M = 100$ and $SD = 15$ for Global MQs.

Appendix A

INFORMATION AND CONSENT FORM

Study Title: A Qualitative Analysis of Elementary School Students' School Engagement Using Photo-Elicitation Interviews
Researcher: Alexandra Maduro (M.A. candidate, Child Studies, Department of Education)
Researcher's Contact Information:
Faculty Supervisor: Dr. Hariclia Petrakos, Associate Professor, Department of Education
Faculty Supervisor's Contact Information: hariclia.petrakos@concordia.ca
Source of funding for the study: Social Sciences and Humanities Research Council of Canada

Your child is being invited to complete a short questionnaire for the purpose of participant selection for the research study mentioned above. This form provides information about what participating in this portion of the study would mean. Please read it carefully before deciding if you want your child to participate or not. If there is anything you do not understand, or if you want more information, please ask the researcher.

A. PURPOSE

The purpose of this portion of the research project is to understand elementary students' perceptions of their own school engagement (i.e., their thoughts about and behaviors toward school). Data collected from students will be used to select six participants for further involvement in this study.

B. PROCEDURES

If your child participates, she will be asked to complete a self-report questionnaire regarding her engagement in school. This questionnaire will be given during class time and is in pencil and paper format. In total, participating in this portion of the study will take approximately 10-15 minutes. Students who are not given consent to complete the questionnaire will be provided with a short word-search activity to complete if desired.

C. RISKS AND BENEFITS

There are no identifiable risks or benefits faced by participating in this research. This research is not intended to benefit participants personally. In the case that a student obtains a score on the questionnaire that the researcher finds concerning, school staff may be consulted, and the appropriate resources may be recommended.

D. CONFIDENTIALITY

We will gather the following information as part of this research: Participants' answers on a self-report questionnaire about school engagement. We will not allow anyone to access the information, except the people directly involved in conducting the research such as the student researcher and supervisor. We will only use the information for the purposes of the research described in this form. The information gathered will be coded. That means that the information will be identified by a code and the researcher will have a list that links the code to the participants' name. We will protect the information by storing all completed questionnaires in a locked filing cabinet in the researcher's office. The information gathered will only be used to select participants for the next phase of the study. We intend to publish the results of the research. However, it will not be possible to identify participants in the published results. We will destroy the information five years after the end of the study (i.e., five years after data collection is completed).

F. CONDITIONS OF PARTICIPATION

Your child does not have to participate in this research. It is purely your decision. If your child does participate, she can stop at any time. You can also ask that the information your child provided not be used, and your choice will be respected. There are no negative consequences for not participating, stopping in the middle, or asking us not to use your information.

G. PARENT/GUARDIAN'S DECLARATION

I have read and understood this form. I have had the chance to ask questions and any questions have been answered. I agree to allow my child to participate in this research under the conditions described.

NAME OF CHILD (please print) _____

GUARDIAN NAME (please print) _____

SIGNATURE _____

DATE _____

If you have questions about the scientific or scholarly aspects of this research, please contact the researcher. Their contact information is on page 1. You may also contact their faculty supervisor.

If you have concerns about ethical issues in this research, please contact the Manager, Research Ethics, Concordia University, 514.848.2424 ex. 7481 or oor.ethics@concordia.ca.

Dear Grade 5 students and parents,

My name is Alexandra Maduro and I am a Master's student in the Child Studies program (Department of Education) at Concordia University. I also have a B.A. in Psychology and am a former ECS student myself! I am interested in studying students' school engagement, which involves the degree of attention, interest, self-efficacy, and persistence students show in relation to learning and education. Specifically, I am studying how students' unique experiences in school, and their perceptions of these experiences, affect aspects of their cognitive and behavioral engagement in school.

Currently, I am seeking permission to collect students' answers on a self-report questionnaire about school engagement, which contains statements to be responded to on a scale from 1-5 such as "If I try hard, I believe I can do my schoolwork well" and "Before I start a project, I plan out how I am going to do it". This questionnaire will be given during class time, and should take approximately 10 to 15 minutes to complete. I will use the questionnaire responses as a parameter for participation in a research project. Students scoring highly on measures of cognitive and behavioral engagement will be nominated for participation, as well as students with results indicating that they appear to be less cognitively or behaviorally engaged in school.

The research project I will be conducting following the questionnaire will involve six grade 5 students chosen for participation based on the results of this questionnaire. I am interested in spending time with these students to learn about their daily experiences in school, in and out of the classroom. I plan to meet with the selected students either once weekly after school for eight weeks, or twice weekly after school for four weeks, in order to conduct a workshop highlighting themes of school engagement. Students participating in this workshop will spend time conducting a personal project of their choice using various types of digital media. If selected to participate in this portion of the research project, a more detailed description of the study and second consent form will be distributed.

Please read the attached consent form for more information regarding the questionnaire and note that all information gathered for this project will remain **confidential** at all times. I look forward to your participation!

Sincerely,

Alexandra Maduro

INFORMATION AND CONSENT FORM

Study Title: A Qualitative Analysis of Elementary School Students' School Engagement Using Photo-Elicitation Interviews

Researcher: Alexandra Maduro (M.A. candidate, Child Studies, Department of Education)
Researcher's Contact Information
Faculty Supervisor: Dr. Hariclia Petrakos, Associate Professor, Department of Education
Faculty Supervisor's Contact Information: hariclia.petrakos@concordia.ca

Source of funding for the study: Social Sciences and Humanities Research Council of Canada

Your child is being invited to participate in the research study mentioned above. This form provides information about what participating would mean. Please read it carefully before deciding if you want to participate or not. If there is anything you do not understand, or if you want more information, please ask the researcher.

A. PURPOSE

The purpose of this portion of the research project is to explore students' first-hand accounts of their own engagement in school using reflective logging and auto-driven photo-elicitation interviews intended to prompt discussion regarding their perceptions and experiences.

B. PROCEDURES

- If your child participates, she will be asked to meet with the other participants, the researcher, and a research assistant once weekly, after regular school hours, for approximately eight sessions. These meetings will take place at ECS and will not interfere with daily school curriculum or routines. Parents will need to arrange for pickup after school.
- At the beginning of each meeting, participants will be asked to complete a reflective log containing questions targeting their engagement about the class they participated in immediately prior to the beginning of this session. This portion of each meeting should last approximately 5 minutes.
- Participants will be presented a different theme each session regarding the construct of school engagement (e.g., 'relationships in school', 'best things about school', 'my strengths and areas for improvement', etc.), followed by a short discussion period about this theme. This discussion will last approximately five to ten minutes and will be audio-recorded.
- Following presentation of the session theme, your child will be asked to take photos representing this theme within the context of the school. This will take approximately 20 minutes.
- The researcher or research assistant will spend approximately 15 minutes per session interviewing each participant individually and using their photos as stimuli for discussion. For six participants, the total interview time should last approximately 45 minutes. No participant will wait longer than 30 minutes to be interviewed.
    - All interview sessions will be audio-recorded and field notes will be taken during each session.
    - During the period of time where your child is not being interviewed, she will have the opportunity to work on a personal project that incorporates her photographs taken within the context of this study. Students working on their projects will be supervised by a

Department of Education undergraduate student volunteer and will be in the same vicinity as the researcher and research assistant at all times.

- During the final meeting, participants will have to opportunity to partake in a group discussion about the workshop and finalize their personal projects.

The primary goal for participants is to create a digital media project involving technology with the photos they have taken over the course of the workshop (e.g; a video, digital scrapbook, PowerPoint presentation, etc.). This product will not be collected by the researcher at any time.

In total, participating in this study will take an approximate 1.5 hour time commitment per session.

C. RISKS AND BENEFITS

There are no identifiable risks faced by participating in this research. If any identifiable issues arise that the child needs help with, the parent may be informed to work closely with psychoeducational resources in place at the school. If the research reveals a situation or material incidental finding that has significant welfare implications for the participant or others, a second expert opinion may be sought and it may be reported to appropriate specialists or authorities. This project is not to be used as a diagnostic tool.

Potential benefits of participating in this study include the opportunity to learn about and practice recognizing various themes in school engagement such as self-belief, task management, and anxiety. Participants will also have the opportunity to create a personalized project using the photos taken over the course of the study, which will highlight and emphasize their unique perspectives and experiences in school.

D. CONFIDENTIALITY

- We will gather the following information as part of this research: The participant's name, completed reflective logbooks, photos taken pertaining to session themes, audio recordings of group discussions and each photo-elicitation interview, and researcher field notes taken over the course of all sessions.
- We will not allow anyone to access the information, except the people directly involved in conducting the research such as the student researcher and the supervisor. We will only use the information for the purposes of the research described in this form.
- The information gathered will be identifiable to the researcher. That means it will have your name directly on it. If you prefer, a pseudonym may be used. In terms of the published results, the information gathered will be kept confidential. This means that the researcher will know the participants' identity, but it will not be disclosed.
- We will protect all information by storing it in encrypted files on the researcher's laptop.
- We intend to publish the results of the research. However, it will not be possible to identify participants in the published results, as pseudonyms will be used.
- We will destroy the information five years after the end of the study (i.e., five years after the last data collection is completed).

F. CONDITIONS OF PARTICIPATION

Your child does not have to participate in this research. It is purely your decision. If your child does participate, she can stop at any time. You or your child can also ask that the information your child provided not be used, and your choice will be respected. There are no negative consequences for not participating, stopping in the middle, or asking us not to use your information. If a participant withdraws, their information may be discarded, destroyed, and excluded from analysis if requested by the participant or guardian. The limit to withdraw from the study would be at the end of the researcher's data collection or once the researcher begins data analysis.

G. PARENT/GUARDIAN'S DECLARATION

I have read and understood this form. I have had the chance to ask questions and any questions have been answered. I agree to allow my child to participate in this research under the conditions described.

NAME OF CHILD (please print) _____

GUARDIAN NAME (please print) _____

GUARDIAN E-MAIL ADDRESS _____

SIGNATURE _____

DATE _____

If you have questions about the scientific or scholarly aspects of this research, please contact the researcher. Their contact information is on page 1. You may also contact their faculty supervisor.
If you have concerns about ethical issues in this research, please contact the Manager, Research Ethics, Concordia University, 514.848.2424 ex. 7481 or oor.ethics@concordia.ca.

PLEASE INDICATE YOUR CHILD'S GENERAL AFTER-SCHOOL AVAILABILITY BELOW

Monday	**Wednesday**	**Friday**
3:30pm ☐	3:30pm ☐	3:30pm ☐
4:30pm ☐	4:30pm ☐	4:30pm ☐

Participation in this study will be based on availability as group sessions are required.

Comments:

_____

_____

_____

_____

_____

UNIVERSITÉ Concordia UNIVERSITY

VERBAL ASSENT SCRIPT

Session 1

Hi, my name is Miss Alexandra and your parents/guardians know that I am meeting with you today, so I want to ask you too if you would like to meet with me. I would like to explain to you what we will be doing when we spend time together after school. I will first give you a journal to write down what you think about the last class you had today. Then, you will use a camera to take pictures and do a photography project on how you see your school, what you like about it, what you don't like about it, and why. I will also ask you questions about these pictures and about your thoughts, your feelings, and behaviors in school. I will not share your information with anyone. I will not tell your teachers, parents or other students about the information you shared with me, unless you share something with me that shows me you are not safe; then, I will tell you that I will have to tell an adult about it who could help you. Is this clear? Are you okay with working with me after school and taking pictures for this project? Do you have any questions?

Subsequent sessions

Last session, you wrote in your logbooks, took pictures, and discussed them. This session you will be doing the same thing. Do you want to continue today's meeting and work on your photography project?

If yes: Okay, we will keep working together today.

If no: That's okay, I will ask you again next session

If the child refuses twice in a row: Do you want to stop this project? *If the child says "yes", their work will be destroyed and the parents will be informed that the child is not interested in the project.*

NAME OF CHILD: _____ DATE: _____

Appendix B

Office Use Only

Lifelong

Motivation and Engagement Scale – Junior School

Andrew J. Martin PhD

Dear Student

Welcome to the Motivation and Engagement Scale – Junior School.

This survey has been given to you to examine your motivation and engagement, how you do your schoolwork, and what you think of yourself as a student.

There are no right or wrong answers. Just make sure that your answers show what you really think about yourself. When answering the questions, if you want to change an answer, just cross it out and circle the answer that you prefer. If you are not sure which answer to circle, just circle the one that is the closest to what you think. You should have only one answer for each question. For the purposes of the survey, it is best that you do not leave out any questions.

If before, during, or after the survey you have any concerns, please talk to your teacher, tutor, counselor, psychologist, or the person who gave you this survey.

There are some questions that are very similar to each other. This is not a trick. It is just that this type of survey needs to ask some similar questions in slightly different ways. Just answer them in a way that shows what you really think about yourself.

Thanks for your participation.

Before you start, here is an example:

Disagree Strongly	Disagree	Neither Agree nor Disagree	Agree	Agree Strongly
1	2	3	4	5

	Disagree Strongly				Agree Strongly
I work hard at school	1	2	3	④	5

This student circled Number 4 ('Agree') because he does work quite hard at school. He didn't circle Number 5 ('Agree Strongly') because he doesn't work hard all of the time. He didn't circle Number 3 ('Neither Agree nor Disagree') because he works hard most of the time.

Ask your teacher, psychologist, tutor, or counselor if you have any questions. You can now begin.

Surname _____ **First Name** _____

ID Number _____ **Grade/Year** _____

Gender (Circle) Girl Boy **Age** _____ years

SAMPLE

© 2015 Lifelong Achievement Group (visit www.lifelongachievement.com for Terms and Conditions)
This is a Sample Form – Not for Use

Motivation and Engagement Scale – Junior School

Andrew J. Martin PhD

Disagree Strongly	Disagree	Neither Agree nor Disagree	Agree	Agree Strongly
1	2	3	4	5

PLEASE CIRCLE ONE NUMBER FOR EACH STATEMENT	Disagree Strongly				Agree Strongly
1. If I can't understand my schoolwork, I keep trying until I do	1	2	3	4	5
2. I feel very happy with myself when I really understand what I'm taught at school	1	2	3	4	5
3. I usually do my homework in places where I can concentrate	1	2	3	4	5
4. I'm able to use some of the things I learn at school in other parts of my life	1	2	3	4	5
5. Sometimes I don't try hard at school so I can have a reason if I don't do well	1	2	3	4	5
6. When I don't do well at school I don't know how to stop that happening next time	1	2	3	4	5
7. I feel very happy with myself when I do well at school by working hard	1	2	3	4	5
8. Each week I'm trying less and less at school	1	2	3	4	5
9. If my homework is difficult, I keep working at it trying to figure it out	1	2	3	4	5
10. When I have a project to do, I worry about it a lot	1	2	3	4	5
11. The main reason I try at school is because I don't want people to think that I'm dumb	1	2	3	4	5
12. When I get a good mark I often don't know how I'm going to get that mark again	1	2	3	4	5
13. If I try hard, I believe I can do my schoolwork well	1	2	3	4	5
14. Learning at school is important	1	2	3	4	5
15. I don't really care about school anymore	1	2	3	4	5
16. When I get a bad mark I don't know how to stop that happening next time	1	2	3	4	5
17. When I do homework, I get organized so I can do it well	1	2	3	4	5
18. I don't know how to get good marks at school	1	2	3	4	5

© 2015 Lifelong Achievement Group (visit www.lifelongachievement.com for Terms and Conditions)
This is a Sample Form – Not for Use

Motivation and Engagement Scale – Junior School

Andrew J. Martin PhD

OTHER ITEMS WITHELD

SAMPLE

© 2015 Lifelong Achievement Group (visit www.lifelongachievement.com for Terms and Conditions)
This is a Sample Form – Not for Use

Motivation and Engagement Scale – Junior School

Andrew J. Martin PhD

OTHER ITEMS WITHELD

THAT IS THE END OF THE SURVEY

PLEASE CHECK YOU HAVE ANSWERED ALL THE QUESTIONS

THANKS

SAMPLE

© 2015 Lifelong Achievement Group (visit www.lifelongachievement.com for Terms and Conditions)
This is a Sample Form – Not for Use

Appendix C

Photo-Elicitation Interview Guide

I would like to ask you some questions about the photos you have taken to represent the session theme. If at any point you decide that you would like to take a break or stop the interview, you are free to do so.

Tell me about this photo

- What is this photo of?

Why is this picture important to you?

- Why did you take this picture?

How do you feel about this photo?

- Why do you like it? / Why do you not like it?

How would you incorporate this picture in your digital media project?

Appendix D

Reflective Log Template

Name: _____
Date: _____
Time: _____
What class did you just finish? _____

How much effort were you putting into your work? Why?

_____
_____
_____

What did you find interesting about this activity? Why?

_____
_____
_____

Did you enjoy what you were doing? Why?

_____
_____
_____

What did you not like about this activity? Why?

_____
_____
_____

Other comments:

_____
_____
_____

Appendix E

Session Chart

Session	Date	Content	Theme
Screening	April 24, 2019	Screening questionnaire – *MES-JS*	N/A
Introduction	May 7, 2019	1. Introduction 2. Participant assent 3. Instructions: The logbook, camera, pictures, and personal project 4. Wrap-up/conclusion	N/A
1	May 13, 2019	1. Participant assent 2. Logbook 3. Theme introduction & discussion 4. Photo-taking 5. Interviews/personal project	The learning environment (what does school look like to you?)
2	May 15, 2019 (Child A, C, D) May 17, 2019 (Child B, E)	1. Participant assent 2. Logbook 3. Theme introduction & discussion 4. Photo-taking 5. Interviews/personal project	School makes me feel…
3	May 22, 2019 (Child A, C, D, E) May 24, 2019 (Child B)	1. Participant assent 2. Logbook 3. Theme introduction & discussion 4. Photo-taking 5. Interviews/personal project	My strengths and areas for improvement
4	May 29, 2019	1. Participant assent 2. Logbook 3. Theme introduction & discussion 4. Photo-taking 5. Interviews/personal project	Best things about school
5	June 3, 2019	1. Participant assent 2. Logbook 3. Theme introduction & discussion 4. Photo-taking 5. Interviews/personal project	Relationships in school
6	June 5, 2019	1. Participant assent 2. Logbook 3. Theme introduction & discussion 4. Photo-taking 5. Interviews/personal project	School in my spare time
Wrap-up	June 10 ,2019	1. Participant assent 2. Group discussion 3. Presentation of personal projects	N/A

Session Protocol

Introductory session

1 Introductions and student assent

"Hi! I'm Miss Alexandra and this is Miss [Research Assistant]. We are going to be doing a photography project with you all over the next four weeks. You were invited to participate in this project because of your answers on the questionnaire that we distributed last time we were here. Your parent signed a form giving you permission to meet with us to work on this project. I am here to explain to you what we will be doing.

Twice a week, after school, you will be meeting with us for about one-and-a-half hours. At the beginning of each meeting, I will give you a log sheet that I am asking you to complete about the class that you had last period on the day that we meet. The log sheets will have questions for you to answer that will help you reflect on the tasks you were working on in class. These sheets will be collected as soon as you fill them out.

After you complete your logs, we will present a "session theme" to you, which you will have some time to discuss the meaning of with your peers. Each theme involves a topic about school that I want to understand your thoughts about. For example, these themes might be about your learning environment, feelings about school, and your strengths and areas for improvement.

In order for me to understand the meaning of these themes to you, I will give you an iPad that you can use for the next 20 minutes to take pictures representing your experiences of these themes inside your school.

After you have taken your pictures, we will begin an interview process, where you will have the chance to show either myself or Miss [Research Assistant] five photos of your choice. We will ask you questions about the pictures so that we can understand what you think and how you feel about the things you took pictures of. We will audio-record the things we talk about so that we won't forget what you said.

If you ever get tired when talking about your pictures, we can take a break and try again at another time. You do not have to answer any questions that you do not want to and you may also decide to stop at any time. Everything that you say is private and it will not be told to anyone unless I think that you are not safe and you need help. Then I will tell you if I have to tell an adult.

After we speak about your photos, at the end of each meeting, you will have an opportunity to work on a personal project involving technology. You will create this project using photos you have taken. This project can be in the form of a website, video, digital scrapbook, or another idea you may have involving digital media.

Do you have any questions?"

At this point, I will obtain verbal assent from participants for their participation in the project.

Do you want to meet with me to talk about the pictures you've taken and create a personal project with them?

1 Reflective logbook practice

I introduced the reflective logbooks to the participants by handing each of them a single logbook sheet. I read each of the questions out loud to them and then asked if they had any questions about it. Next, I asked them to fill out a logbook in order to practice, based on any class they had earlier in the day.

2 The iPad

I showed the students the iPads they would be using to take photos with. I explained how to turn it on, how to take a picture and how to see the pictures once they were taken.

3 The pictures

"You can take as many pictures as you would like. When we sit down to talk about the pictures, you can choose about five to talk about. However, you will be allowed to use any/all of them in your personal project.

There are some rules that you have to remember when taking pictures:

1. You need to ask permission before taking a picture of someone else. You can't take a picture of someone who doesn't want their picture taken.
2. Pictures must be taken within the school property/environment.
3. Cameras must be returned immediately at the end of the photo-taking session and cannot be taken off of school property."

The researcher and participants then discussed different scenarios that could arise while participants were using the cameras (e.g,. another student asking what the cameras are for, another student asking to use the camera, etc.) and how they could respond to them.

4 Personal project

"Your personal project will involve you using technology to display the photos you've taken over the course of this workshop. The topic of this project will relate to your life in school. Some ideas that I have include creating a website, video, or a digital scrapbook. If you come up with another idea, please mention it and we can try to make it work."

The research assistant and I then spent about 15 minutes with the students as a group discussing the decisions they were making about the format of their personal project. We then spent about 20 minutes preparing a framework for their desired projects.

At the end of the session, I asked the participants if they had any thoughts or questions concerning the details of the project, such as the logbooks, themes, photo-taking sessions, and the interview process. I also asked them to continue thinking about what kind of digital media project wanted to create with their personal photos over the course of the sessions.

Session 1

At the beginning of this session, I obtained verbal assent from participants for their continued participation in the study. Following this, participants completed and submitted their reflective logs. Then, I introduced the first session theme: "The learning environment (what does school look like to you?)". I asked students to think about places, people, and objects that represented their experiences in their learning environment best. I emphasized the idea of personal experiences, and explained that each of their photos might appear to be very different, because of the uniqueness of learning experiences, even within the same environment. The research assistant and I then facilitated a discussion amongst the students for approximately five minutes regarding this theme. I then distributed the iPads to students. At this time, I reminded students of the rules of the iPad and allowed them 20 minutes to take pictures within specific boundaries of the school. The research assistant and I were present during the photo-taking session. At the end of the session, students saved their photos to a secure electronic folder. Next, the research assistant and I took participants aside to conduct their photo-elicitation interviews using the photos previously taken as stimuli. We interviewed one participant at a time, and each interview lasted approximately 15 minutes. For six participants, the total interview time lasted approximately 45 minutes to one hour. During this time, participants who were not being interviewed had the opportunity to work on their personal projects.

Session 2

After obtaining verbal participant assent, participants completed and submitted their reflective logs. Then, I introduced the next session theme: "School makes me feel…". The research assistant and I lead a brief discussion about different emotions that might be felt in school and how photos can be used as a means of representation of these emotions. We then facilitated a discussion amongst the students for about five to ten minutes regarding this theme. Participants were then reminded about the rules of iPad use as they were distributed. They had 20 minutes to take pictures within specific boundaries of the school. The research assistant and I were present during the photo-taking session. At the end of the session, students saved their photos to a secure electronic folder. Next, the research assistant and I spent approximately 45 minutes conducting photo-elicitation interviews with participants, while those not being interviewed worked on their personal projects.

Session 3

After obtaining verbal participant assent, participants completed and submitted their reflective logs. Then, I introduced the next session theme: "My strengths and areas for improvement". The research assistant and I lead a brief discussion about individual strengths and weaknesses at school, and our perceptions about them. We then facilitated a discussion amongst the students for about five to ten minutes regarding this theme. Participants were then reminded about the rules of iPad use as the iPads were distributed. They then had 20 minutes to take pictures within specific boundaries of the school. The research assistant and I were present during the photo-taking session. At the end of the session, students saved their photos to a secure electronic folder. Next, the research assistant and I spent approximately 45 minutes conducting photo-elicitation

interviews with participants, while those not currently being interviewed worked on their personal projects.

Session 4

After obtaining verbal participant assent, participants completed and submitted their reflective logs. Then, I introduced the next session theme: "Best things about school". The research assistant and I lead a brief discussion about how our individual differences contribute to unique preferences concerning school (i.e., some students prefer traditionally academic aspects of school, while others might prefer extra-curricular activities, the social aspect of school, etc.). We then facilitated a discussion amongst the students for about five to ten minutes regarding this theme. Participants were then reminded about the rules of iPad use as I distributed the iPads. They then had 20 minutes to take pictures within specific boundaries of the school. The research assistant and I were present during the photo-taking session. At the end of the session, students saved their photos to a secure electronic folder. Next, the research assistant and I spent approximately 45 minutes conducting photo-elicitation interviews with participants, while those not currently being interviewed worked on their personal projects.

Session 5

After obtaining verbal participant assent, participants completed and submitted their reflective logs. Then, I introduced the last session theme: "Relationships in school". The research assistant and I lead a brief discussion about the different kinds of relationships that can occur in the school environment and their meaningfulness (e.g., the relationship between the teacher and the student, the school and the home, friendships among students, etc.). We then facilitated a discussion amongst the students for about five to ten minutes regarding this theme. Participants were then reminded about the rules of iPad use as I distributed the iPads. They then had 20 minutes to take pictures within specific boundaries of the school. The research assistant and I were present during the photo-taking session. At the end of the session, students saved their photos to a secure electronic folder. Next, the research assistant and I spent approximately 45 minutes conducting photo-elicitation interviews with participants, while those not currently being interviewed worked on their personal projects.

Session 6

After obtaining verbal participant assent, participants completed and submitted their reflective logs. Then, I introduced the next session theme: "School in my spare time". The research assistant and I lead a brief discussion about how we might encounter aspects of education and school during times when no "formal education" is happening. We then facilitated a discussion amongst the students for about five to ten minutes regarding this theme. Participants were then reminded about the rules of iPad use as I distributed the iPads. They then had 20 minutes to take pictures within specific boundaries of the school. The research assistant and I were present during the photo-taking session. At the end of the session, students saved their photos to a secure electronic folder. Next, the research assistant and I spent approximately 45 minutes conducting photo-elicitation interviews with participants, while those not currently being interviewed worked on their personal projects.

Wrap-up/final session

After obtaining verbal participant assent, the research assistant and I led a discussion with participants about their experiences over the course of the workshop and each of the session themes. We discussed similarities and differences in the photos they chose to take, and the participants who volunteered to do so shared their personal projects with their peers and one staff member, Lastly, I distributed small tokens of appreciation for the students' participation in the study.

Makeup sessions (when needed)

When necessary, makeup sessions were hosted for students who were absent during any of the main sessions in order for them to submit a logbook, take photos, and participate in an interview.