The Role of Hand-Held Devices in the Life of Two Preteens

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ABSTRACT

The Role of Hand-Held Devices in the Life of Two Preteens

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Handheld devices such as smartphones and tablets are found in most North American households and are being used by preteens to communicate with peers, watch videos on YouTube, play videogames, and become familiar with social media. Social media platforms such as Instagram and Snapchat are attracting children's attention with the onset age of social media use becoming younger every year. The aim of the following study was to better understand how preteens (1) engage with handheld devices and (2) perceive handheld devices and the social, emotional, and physical impact they might have. I conducted case studies of two preteens where multiple sources of information were gathered to illustrate their real-life experiences with handheld devices. Semi-structured interviews, journal entries, drawings, and activities were used to gather data from the child participants, their parents, and teachers. Findings revealed that devices were mostly used by the preteens to play games and stay connected with friends and family. The following study closely captured the perspective of preteens, their mothers, and teachers all at once, bringing the participants to share conflicting feelings towards the use of handheld devices and voicing both the positive and negative impacts such devices might have on preteens. Better understanding how preteens are impacted by our digital world will hopefully better equip us to create well-developed programs to enhance children's media literacy habits and awareness.

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The Role of Hand-Held Devices in the Life of Two Preteens

Partly due to our ever changing and evolving digital technologies, children are spending more time engaging with handheld devices (Nwatu, 2021). We especially saw changes in children's media use during the COVID-19 global pandemic when a majority of the population were asked to isolate at home (Rideout et al., 2022). Handheld devices are defined as portable devices, easy to carry and use while holding in the palm of one's hand (Rouse, 2015). Examples of handheld devices are tablets, smartphones, and portable game consoles such as the Nintendo Switch. The Canadian Communication Monitoring Report (2020) found that 90% of Canadian households used a mobile phone as a communication service and 89% of families were subscribed to an internet service in 2017. I would argue that this number likely increased during the global coronavirus pandemic when adults were required to work remotely, and children were transitioned to online learning. Another study looking at access and personal ownership of media devices among U.S. families reported that in 2021, 94% of children between the ages of 8 and 18 had at least one smartphone in the home and 74% owned a family tablet. That said, when participants were asked whether they personally owned a handheld device, 57% of children between the ages of 8 and 12 reported owning a tablet (Rideout et al., 2022). In a different study on digital media and Canadian youth, 57% of the participants between ages 9 to 11 reported owning a smartphone mostly for the purpose of being able to call or text their parent(s) or guardian(s) (MediaSmarts, 2022).

Another study exploring children's engagement with digital devices found that 80% of parents in the United States with a child younger than 12 claimed that their child used or interacted with a tablet while 67% reported their child engaging with a smartphone (Pew Research Center, 2020). In the same study, one-third of parents reported their child being

TikTok remains the most popular online activity for children across demographic groups.

Specifically, in Canada's longest-running research study on children's attitudes, behaviors and opinions related to technology and digital media (MediaSmarts, 2022), the participants were asked to list their top five favorite websites and YouTube was first on the list with 50% of participants having the platform in their top five. TikTok came in second with 42% of the votes (MediaSmarts, 2022). Another study tracking the amount of time tweens and teens spend engaging with screen media reported that 64% percent of tweens claim to watch online videos on YouTube "every day". Moreover, when participants were asked to describe how much they enjoyed watching online videos, 61% claimed enjoying it "a lot" (Rideout et al., 2022).

Watching YouTube videos and gaming are online activities preteens enjoy engaging in on their devices, while social media platforms such as Instagram and Snapchat are getting more and more traction from this age group despite the age requirement being 13 years and older.

Preteens and Uses of Handheld Devices

Preteens and YouTube

An increasing number of tweens and teens are choosing to watch online videos on their handheld devices rather than television which means that parents are not always aware of the content their children are watching (Commonsense Media, 2019). Although one must be 13 years and older to create a YouTube account, it is not necessary to have an account to watch videos on the platform. In fact, 81% of U.S. parents with a child aged 11 or younger reported allowing their child to watch YouTube videos, while 34% of parents mentioned their child being on YouTube on a regular basis (Smith et al., 2018). YouTube strongly recommends parents to use YouTube Kids for children 13 and under provided that the content found on YouTube is

oftentimes unregulated and unrated thus not suitable for children. Children can also easily bypass the age requirement to set up an account by inserting a false yet legible day of birth. In fact, more than half of participants (ages of 9 and 11) in a Canadian study on technology and digital media reported having their own YouTube account thus being able to subscribe to channels, comment on videos and upload personal videos (NSPCC, 2022; MediaSmarts, 2022).

Research on media use among U.S. tweens and teens during the global pandemic found that preteens were commonly using their digital devices to learn new skills and create content. Specifically, 33% of preteens reported "often" visiting online platforms such as YouTube to learn a new skill they were interested in such as making jewelry, cooking/baking, building Lego structures and more (Rideout & Robb, 2021). In the same study, 53% of teens and tweens mentioned using their devices to create art and music such as making anime, creating dance videos, and making memes. Out of the participants who enjoyed creating content, 39% said they had shared their creations online using social media platforms such as YouTube. Post-pandemic research, however, shows that content creation and uploading videos are no longer common activities among tweens and teens (Rideout et al., 2021). Specifically, in a U.S. report on media use among tweens and teens, only 11% of tweens reported using their devices to create content such as music and art (Rideout et al., 2021). It is possible that *during* the lockdowns, children were creating more content using their devices because they were spending more time indoors and looking for novel activities to pursue.

Although YouTube does contain a vast amount of child-friendly content, more than half of parents (61%) report their child 11 years and younger encountering content unsuitable for children (Smith et al., 2018). This happens due to several reasons that perhaps parents are not always aware of. For example, although parents might be the ones initially selecting the content,

YouTube automatically suggests other types of videos at the end of the video watched which can include inappropriate, upsetting, or confusing content. Research on social media and teenagers' mental health identified exposure to topics such as suicide, eating disorders, and racist content as negative content that teenagers may encounter when browsing YouTube. Out of a sample of 1,300 U.S. teenage girls, 7% reported encountering such negative experiences while 49% reported the YouTube algorithm exposing them to positive content such as helpful mental health resources (Nesi et al., 2023). In the same study, teenagers reported that they were more likely to perceive YouTube as having a positive impact on their well-being (Nesi et al., 2023). Specifically, when asked to imagine life without YouTube, 41% imagined life being worse compared to 11% being better and 48% remaining the same.

Regarding the types of videos children, tweens, and teens enjoy watching on YouTube, the top videos watched involve monologues of gamers walking their audience through their game play (Commonsense Media, n.d.). Challenges with and without food are also very popular on YouTube amongst the youth population, the Cinnamon Challenge being one of the more popular challenges on YouTube. The challenge consists of people consuming a spoonful of cinnamon and filming their reaction for their audience. The Chubby Bunny Challenge is another popular challenge which requires a person to keep adding marshmallows in their mouth until they can no longer pronounce "Chubby Bunny." We have "Try Not to Laugh" challenges that are also fun videos for children, tweens, and teens to watch and challenge themselves not to laugh (Vlogging Pro, n.d.). Finally, DIY (do it yourself) projects and music videos are also types of videos children enjoy watching when browsing YouTube. Unfortunately, some of the challenges found on YouTube may bring children to behave dangerously and often include some cursing and/or vulgar content (Commonsense Media, n.d.). What is missing from these reviews is

research on children's motives, perceptions, attitudes, and behaviors towards YouTube videos and perhaps whether a gender difference exists in YouTube video preferences among boys and girls.

Preteens and Video Games

Video games are another popular activity preteens, boys especially, tend to enjoy playing on handheld devices and they can be played on smartphones, tablets, computers, and consoles. In 2021, almost half of preteens in the U.S. (45%) claimed to enjoy playing video games on their handheld device and 43% reported playing mobile games every day. Interestingly, preteens are twice as likely to play video games on their smartphone or tablet (43%) than they are to play on a console, computer, or portable player (23%) (Rideout et al., 2022). Moreover, during the global pandemic, video games played a critical role in keeping tweens and teens connected to their friend groups. Specifically, a study including 1,318 U.S. children between the ages of 8 and 18 found that 70% of teens and tweens played video games online with friends and 48% played every week (Rideout & Robb, 2021). When studying gender differences in relation to enjoyment, frequency, and time spent engaging with video games on a smartphone or tablet, boys show more interest than girls, yet the difference is not massive. Specifically, 40% of boys report enjoying video games played on handheld devices while 31% of girls share a similar feeling. Moreover, boys are more likely to report playing video games on a tablet every day (49%) in comparison to girls (34%).

Preteens and Social Media

Social media platforms are attracting children's attention with the onset age of social media use becoming younger every year (Rideout et al., 2022). Even with most social media platforms and messaging apps such as Instagram, Facebook, and Snapchat requiring children to

be 13 years and older, preteens (ages 9-12) are also spending time on these sites (Internet Matters, 2023). YouTube may be considered a social media platform, as users can interact and share information, however young children generally use it to view content. A study conducted during the COVID-19 pandemic found that 86% of Canadian children ages 9 to 11 had a social media account where the age requirement was 13 years and older (MediaSmarts, 2022). A recent demographically representative study looking at the social media use of adolescent girls (age 11 to 15) living in the United States, found that 98% had used at least one of the abovementioned social media platforms (Nesi et al., 2023). Research has also found that the frequency and screen-use habits were likely to increase with age. For example, 72% of 14–17-year-olds engage with a digital device on weeknights compared to 58% of 12- to 13-year-olds and 47% of 9-to -11-year-olds. Similar findings were reported regarding the use of digital devices after bedtime. Among children owning a smartphone, 79% report keeping their device in their bedroom and occasionally checking their messages during the night. That said, this is more common among older teens (MediaSmarts, 2022). Screen media use also seems to increase as children get older. On average, preteens engage in about five and a half hours of screen time per day in comparison to teenagers who use about 8 hours and a half (Rideout et al., 2022). The authors specify that the hours of screen time mentioned above consist of all screen time including television and online videos. It is also important to note that the study took into account tweens' and teens' tendencies of using multiple screens at once. For example, browsing through social media while watching television doubled the amount of screen time reported by the study's participants.

Research on the type of social media used by preteens is quite limited perhaps due to the fact that most platforms require a minimum age of 13 years and older. For such reasons, the majority of the research on the type of social media use and its impact on physical and mental

wellness often focuses on teenagers 13 years and up. When teenagers are asked to pick one platform they would not be able to live without, YouTube, Snapchat, Instagram, TikTok and Facebook are the main platforms listed (Rideout et al., 2022). A study examining teenagers' use of digital devices, social media, and other online platforms found that YouTube was the top site, used by 95% of teens (Vogels et al., 2022). TikTok, Instagram, and Snapchat were also reported to be used by more than half of the sample with only 32% of teens owning a Facebook account. That said, it is important to note that in 2020, Instagram and Facebook were merged under the Meta interface. Therefore, by creating an Instagram account, teenagers are likely to also have a Facebook account.

Provided that children are downloading social media apps at a younger age, bypassing the age requirement using inaccurate birthdays, social media companies such as YouTube, TikTok and Instagram have created kid versions of their apps. For example, Instagram is currently in the process of creating an Instagram for tweens (aged 10-12) which will require parental permission and allow for better parental supervision. The app will also be advertisement-free and contain age-appropriate content and features (Mosseri, 2021). TikTok on the other hand includes parental controls where the parent can enable a time limit and content filter on their child's TikTok app while protecting the settings using a password. The app also includes a Family Pairing feature where parents can manage their child's settings using a syncing process. Moreover, TikTok consists of a Restricted Mode including child-friendly content only (Common Sense Media, 2022). Although such measures are implemented with good intentions, that is to keep our children safe, it is quite easy for children to get around parental controls. For example, children can re-download TikTok and create a new account using a different name and email address to rid themselves of any parental controls (Common Sense Media, 2022). Implementing parental

controls and restrictions may be a way of setting boundaries around social media use and screen time yet I would argue that it is not enough. A proper education targeting children's digital literacy skills and habits is necessary if we want preteens and teens to adopt healthy practices towards social media. This could include meaningful group discussions about the impact of social media on individuals' well-being in addition to providing opportunities for self-reflection and critical thinking around the topic of social media use.

Social Learning

Provided that children are active on social media platforms increasingly younger, it is critical that we be aware of both the challenges and benefits youth face when engaging with social media. Critical developmental changes occur during the preteen years (8 – 12). Children at this age tend to put a lot more focus on their friendships, are more susceptible to peer pressure and are likely to begin seeking independence from adults (Common Sense Media, 2022; Nesi, 2020). Moreover, during this time, preteens are in the midst of exploring their self-identity, self-esteem and general well-being (Nesi & Prinstein, 2015). With an increased importance in popularity and social status, preteens become more preoccupied with their physical appearance and what others, peers especially, think of them (Common Sense Media, 2022). Similar developmental milestones happen among teenagers (13 – 18) with the addition of an increased interest in romantic and sexual relationships. Furthermore, teenagers tend to experience more feelings of sadness and depression (Centers for Disease Control and Prevention, 2021)

Social media platforms such as Instagram, Snapchat and Facebook have been found to facilitate feelings of envy in addition to interpersonal behaviors such as social comparison and feedback-seeking. Specifically, features such as public accounts, online self-representation, followers, filters, "like" buttons, and comment sections allow for upward social comparison, the

act of comparing oneself to others who display success, superiority, and positive characteristics (Vogel et al., 2014). Social media platforms such as Instagram allow for people to create online profiles, strategically and selectively illustrating their ideal self, not always representative of their realistic self. Such features may easily bring individuals to compare their realistic selves to their idealized virtual "friends" (Vogel et al., 2014).

When investigating the relationship between social media and social comparison, research shows how important it is to consider factors such as the intensity of social media use, one's social environment, and social status. For example, Charoensukmongkol (2018) investigated the effect of teenagers' social media intensity on their likelihood to engage in social comparison. The author measured teenagers' social media intensity using a Likert scale which included items regarding the participants' feelings about social media use and daily practices. Teenagers who scored higher on the social media intensity scale reported higher levels of social comparison and feelings of envy. This was especially the case for teenagers who were part of a highly competitive group of friends (e.g., competing for power or attractiveness). Such findings can be explained using the social rank theory which proposes that the more competition there is among members of a group, the more likely they are to seek dominance over others (Charoensukmongkol, 2018). Such theory further derives from humans' general desire to appear attractive to others. Moreover, the correlation between social media use intensity and feelings of envy was the strongest amongst teenagers with parents who often compared their children to other children (Charoensukmongkol, 2018). The authors suggested that such findings could be explained using the social learning theory. Specifically, teenagers who observe their parents constantly making comparisons are more likely to imitate such behaviors when on social media platforms (Charoensukmongkol, 2018). Such findings also demonstrate how social factors such

as levels of attachment to social media, peer-group competition, and parent behaviors can highly influence behaviors and feelings teenagers experience with social media.

When focusing on the quality or type of social media experiences rather than frequency, researchers found that the more teenagers engaged in social comparison and feedback seeking (SCFS), the more likely they were to display depressive symptoms (Nesi & Prinstein, 2015). Popularity levels have also been found to play a role in the correlation between SCFS and depressive symptoms among teenagers. Specifically, less popular individuals who engage in SCFS behaviors are more likely to display depressive symptoms than their popular counterparts. The type of content teenagers are exposed to has also been found to influence social comparison, levels of self-esteem, and body image. For example, Kleemans et al. (2018) found that teenage girls who were exposed to images of young girls that were manipulated and photoshopped in terms of color intensity, brightness, in addition to body and face impurities, had a significant lower body satisfaction compared to girls who were exposed to the original image. This was particularly the case among girls with a higher tendency to make social comparisons when using social media. Unfortunately, knowing that certain images are manipulated and photoshopped does not mitigate social comparison behaviors and body dissatisfaction. Girls are aware that most images they see on social media, television, and magazines are manipulated but still want to look as "flawless and perfect" (MediaSmarts, 2023).

Health Issues

According to the Canadian Institute for Health Information (2022), 1 in 4 youth hospitalizations are due to mental health. Hospital cases of eating disorders among females aged 10 to 17 have also increased over the years and social media is believed to be one of the potential explanations for the increase (Canadian Institute for Health Information, 2022). With the purpose

of better understanding the relationship between social media use and mental health among teenagers, O'Reilly (2020) held focus groups including 11–18-year-olds and mental health practitioners. Participants discussed how images such as "skinny models" found on social media platforms tend to elicit feelings of anxiety and depression, especially among young girls.

The sleep quality of preteens and teenagers has also been found to be greatly affected by social media use. Research on the topic has found significant correlations between sleep and social media. Specifically, O'Reilly (2020) found that teenagers felt constantly pressured to always be readily available and connected on their device, thus sacrificing their night's sleep. In addition, research indicates that social media use, especially before bedtime, is associated with poor sleep quality, lower levels of self-esteem, and higher levels of anxiety and depression (Pirdeghan et al, 2021; West et al, 2021; Woods & Scott, 2016). For such reasons, social media, or any type of engagement with electronic devices should be discouraged around bedtime.

With the rise of social media use among teenagers, there has also been a rise in cyberbullying, defined as "harmful, intentional, repeated, and long-term aggressive behaviors perpetrated through electronic devices" (Zych et al., 2019, p.1). Almost half of teenagers (46%) have been bullied or harassed online, offensive name-calling being the most commonly reported form of cyber-aggression (Vogels, 2022). Time spent on social media has been found to be positively associated to instances of cyberbullying perpetration (Park et al., 2021). According to teenagers, social media can be a "dangerous place" with instances of cyberbullying being part of teenagers' everyday lives (O'Reilly, 2020). Cyberbullying has also been found to be correlated with anxiety, depression, suicidal ideation, low levels of self-esteem, in addition to poor mental and physical health (Zych et al., 2019, Kaloeti et al., 2021). With the rise of social media platforms, more research on cyberbullying is necessary even though research on the topic tends

to be difficult to conduct due to the lack of reporting among teenagers who do not want to ruin their social relationships and preteens who have covert accounts (Park et al., 2021).

Handheld Devices and Maintaining Relationships

Although social media and digital devices come with potential risks, they also come with benefits. According to teenagers, a healthy dose of media use was believed to protect one's mental health (O'Reilly, 2020). Specifically, teenagers and mental health practitioners argue that social media and more broadly the use of handheld devices may be beneficial for maintaining strong peer relationships and staying connected. Teenagers argue that social media can be used to reduce stress as it allows them to connect with friends and further distracts them from everyday struggles and hardships (O'Reilly, 2020). Such perceptions of social media were also reported in Patra et al. (2021) who studied parents' and adolescents' perspectives on social media use. While parents argued that their children were "isolated from the real world" due to social media, adolescents described social media as the perfect medium to communicate with others and stay connected with friends and family (Patra et al., 2021, p.72). When asked to describe their digital and social media experiences, teenage girls mentioned coming across helpful information related to mental health and body satisfaction on platforms such as TikTok and Instagram (Nesi et al., 2023). Moreover, during lockdowns tweens and teens mentioned that social media in addition to YouTube and online gaming played a critical role in keeping them busy and entertained, lifting their mood, and allowing them to stay connected with family and friends (Rideout and Robb, 2021).

Present Study

Provided the increase in digital phones and social media use among preteens and teens, in addition to more than half of preteens owning a tablet, it is necessary that children receive proper

media literacy education prior to their teenage years (Rideout et al., 2022). We find preteens being more and more digitally savvy but often lacking digital literacy regarding the effects of social media in addition to safety and privacy measures (Common Sense Media, 2022). Barnes (2015) argues that children are more likely to be exposed to online predators and violence spending time indoors behind a screen rather than outdoors interacting with nature and peers. Helping children develop healthy digital skills and habits should be given as much attention as teaching teenagers how to drive. In Quebec (Canada), an individual can only obtain their driver's license at the age of 16, after taking the mandatory driving course and successfully passing both a written and road test. Such process ensures that the novice driver has received the proper training to drive with awareness and prudence (Société de l'assurance automobile du Québec, 2023). When it comes to social media, however, children are too often provided with a device with no forewarning of the challenges and "road bumps" they may encounter.

Even with rigid parental regulations, tweens and teens will be exposed to handheld devices and digital media one way or another, most likely earlier than the eligible age. For such reasons, it is critical that we teach children early on about the realities of the online world and further support them in becoming wise, resilient, knowledgeable, and critical users of media. Prior to working towards creating well-developed programs to enhance children's media literacy habits and awareness, it is necessary that we fully understand our modern digital world and its impact on tweens and teens (Kaloeti et al, 2021). For such reasons, the goal of this study is to address three research questions: (1) How do preteens engage with handheld devices? (2) How do preteens perceive handheld devices and their impact on individuals' social, emotional, and physical well-being? (3) How do parents and teachers perceive preteens' use of handheld devices?

Methods

There is no better way to thoroughly understand a phenomenon than to observe and communicate with individuals who are directly affected by the phenomenon. Qualitative research allows for a phenomenon to be authentically examined from all possible angles provided that the focus is placed on the process (how and what) rather than the outcome (Hays & Singh, 2012). For such reasons, I used a qualitative research design to better understand preteens' use of handheld devices and their perceptions around their use. To be precise, I conducted a multiple case study where information was gathered from multiple sources to illustrate two preteens' experiences owning a hand-held device. Multiple case studies are often used to explore a phenomenon through the lens of two or more cases (Lewis-Beck, Bryman & Liao, 2003). Such a design can be used to compare or replicate findings but may also be used to explore emerging themes and provide more compelling evidence (Lewis-Beck, Bryman & Liao, 2003, Yin, 2017). For this study, the purpose of exploring the experience and perspective of two preteens rather than one was to acquire an extensive amount of data and document and report similarities and differences between the two participants' experiences and opinions regarding the use of handheld devices. Single- and multiple- case studies require multiple methods of data collection to acquire an in-depth analysis of the studied phenomenon. Specifically, a descriptive case study describes in detail a phenomenon in its natural setting and further puts emphasis on the quality, process and meaning of the phenomenon (Priya, 2021; Hays & Singh, 2012). If the end goal is to create well-developed programs to support children in implementing healthy habits and lifestyles around technological devices and social media, it is critical that we first understand the role hand-held devices play in our youth's overall wellness. Furthermore, if decisions are to be made

with regards to children becoming wise consumers of media, it is only fair that their voices be heard and valued prior to the decision-making process.

Participants

For the case study, I decided to study preteens, not teenagers, provided that the majority of the research related to social media and electronic devices focuses on teenagers and mental health. Not much attention is paid to preteens although they are spending a good amount of their day using their device(s). As noted, the age requirement for most media platforms is 13 years and older, although children under 12 are still active on most platforms, managing to create personal accounts. Specifically, 86% of children ages 9 to 11 have at least one social media account and more than half of preteens own their personal tablet (Rideout et al., 2022; Common Sense Media, 2022). Moreover, children between the ages 9 and 11 usually begin distancing themselves from the family as they start focusing on their peers. Popularity seeking and social pressure increases as preteens begin to care more and more about their friends' approval and start to experience FOMO (fear of missing out). At this age, preteens are likely to do whatever it takes to fit in, even engage in risky behavior (Commonsense Media, n.d.). Such developmental milestones are components that may very well influence the child participant's perspective and behaviours towards the use of handheld device.

Participants were selected using critical case sampling, a form of purposive sampling which involves choosing a participant who is likely to provide an ample amount of information relevant to the research question. Although purposive sampling is prone to sampling bias, may be limited in generalizability, and can be influenced by the researcher's subjectivity and bias, this sampling method is also efficient, flexible, and ensures that all voices and experiences are heard and valued (Hassan, 2022).

A flyer including the study's objectives and data collection measures was posted on social media platforms, Facebook and Instagram. In addition, I reached out to parents of schoolaged children who would perhaps be willing and interested to participate in this research study. I notified interested parents that they must also be available and willing to express their thoughts and opinions regarding their child's use of handheld devices. I also asked the parents to communicate with their child's teacher to see if they would also be interested in participating in the research study.

A total of four participants volunteered to participate in the present study although only two preteens were selected due to time constraints and convenience. The two preteens selected for this study were: Jon*, a 10-year-old boy (grade 4), who attended a public school in Laval, and Mia*, an 11-year-old girl (grade 5), who also attended a public elementary school but in Montreal-East. Pseudonyms, identified using an asterisk, were used to protect the identities of my participants. It was necessary that the child participants selected were comfortable and willing to talk about their experience using handheld devices, have access to handheld devices (i.e., smartphones, tablets), and have had engaged with at least one social media platform. For the participants to be able to discuss their experience and behaviors using handheld devices, it was required that they had interacted with devices in the past. Jon and Mia each owned and used a tablet and watched YouTube. Although they did not have their personal account on social media, they mentioned engaging with TikTok, Instagram, and Facebook in the presence of their mothers. Furthermore, both the parents and teachers of the child participants were also invited to share their thoughts and attitudes about hand-held devices and preteens. Research indicates that two-thirds of parents believe that parenting is harder today than it was 20 years ago due to rapid changes in technology; thus, I sought parents' opinions on the impact of modern-day devices on

our youth (Pew Research Center, 2020). Jon's mother, Laura*, and Mia's mother, Ali*, both agreed to participate in this study. Laura was divorced, lived in Laval with her two sons (8 and 10) and worked as a hairdresser. Mia's mother Ali*, was married and separated, lived in Montreal with her two daughters (9 and 11) and had an older son in his early 20s studying abroad. Ali reported working as a teacher at her daughter's elementary school. The child participants' current teachers, Mme Ella (Jon's French teacher) and Miss Tammy (Mia's homeroom teacher) were also interviewed regarding their perspectives on preteens' use of handheld devices.

Prior to beginning the data collection process, a consent form was sent with a brief description of the research study to each participant's legal guardian to be signed and returned. Parents were respectfully asked to carefully discuss the goal and expectations of the study with their child to ensure that they were also willing to participate. A consent form was also sent to the child participants' teachers prior to their interview. Finally, age-appropriate assent forms were read aloud to both child participants prior to the first interview.

For this research study, I accepted any child regardless of their gender, religion, race, or ethnicity, as long as they had a parent and teacher also willing to participate. Interview questions were initially written in English and further translated in French for one of the child participant's teachers. Children who were currently being homeschooled were excluded from this study as I wanted to potentially discuss how a child's use of hand-held devices may influence their time in the classroom. Qualitative interviews were conducted both in person and on Zoom depending on the participants' requests.

Data Collection and Procedures

Case studies often include multiple data collection methods such as observations, interviews, questionnaires, narratives, historical data, focus groups, and sometimes forms of quantitative data (Willis et al., 2007). The mixing of methods and procedures can result in high-quality research. For the purpose of this case study, I used *intermethod mixing* where more than two methods of data collection were used in a research study (Johnson & Christensen, 2020, p.181). Specifically, qualitative interviews, journal entries, arts, and digital technology (i.e., content creation) were offered as data collection options to better understand the role handheld devices play in the life of a preteen. Participatory methods such as videos, arts, and writing can be great additions to qualitative interviews especially when researching children. Moreover, they provide children with choice and various mediums to express their thoughts and perceptions (O'Reilly & Dogra, 2017).

Interviews

Conversation and dialogue are central tools used to obtain knowledge about other people's actions, thoughts, feelings, and perspectives (Brinkmann, 2013). When interested in qualitative features of an individual's life experience, interviews are arguably the most effective and adequate method of research. Specifically, they allow the expert (interviewee) to authentically share their knowledge and expertise with the researcher on the studied phenomenon (Brinkmann, 2013). In the case of this study, the experts were two child participants, Jon and Mia, thus a child-centered approach was necessary. The child participants, parents, and teachers participated in separate semi-structured interview(s) in which the goal was to bring each participant to describe their experience and attitudes towards handheld devices.

The child participants participated in two 15-30-minute-long interviews. The first interview included an initial meeting in which I introduced myself and provided the participants with information regarding my objective(s) and the role they would be playing in this research study. I specified that the aim of the study was to better understand how handheld devices impact preteens, both positively and negatively, rather than arguing whether preteens should or should not be using devices. I also used this opportunity to ensure that the child was willing to participate and allowed them time to voice any concerns, thoughts, or expectations about the study. An assent form was read to the child, and they were asked to confirm through a signature that they willingly wanted to move forward with the interview. In this introductory meeting, the participants were encouraged to share what they knew about handheld devices. Interview questions (see Appendices A, B & C) were shared with the participants prior to the interview and were formatted in ways that allowed the participants to describe memories, experiences, and understandings in addition to sharing their opinions, perceptions, and attitudes towards the use of handheld devices and the impact these devices have on their everyday life (Glesne, 2011).

I began with "grand tour" and "warm up" questions prior to jumping into reflective questions about handheld devices with the sole purpose of building trust and a good rapport with my participants at the beginning of the interview process. A "grand tour" question encourages the participant to describe a series of events or activities as they take the researcher on a journey while "warm up" questions get the interviewee comfortable and ready to be more reflective (Glesne, 2011). For example, as a grand tour question I asked my participants to think and describe how and when they engage with their handheld devices daily. As warm up questions, I asked my participants to list the types of handheld devices owned and interacted with the most and to describe activities they enjoyed doing with the devices. Finally, questions regarding when

during the day or week my participants are more likely to use their devices were used as warm up questions to set context.

For the second and concluding interview, the child participant and I discussed the journal entries and drawings in their booklet (see Appendices E and F). Prior to the second interview, I reviewed the child participants' booklet in order to be able to use the interview to clarify any misunderstandings and avoid misinterpretations. The interview was in the form of a conversation about the collected data and allowed for the child to further discuss and describe aspects of their booklet entries. The first interviews were done in person at the child participant's home; however, second interviews were conducted on Zoom to make it easier for the families' schedules. A voice recorder was used to record in-person interviews and the recording feature was applied to record our virtual meetings on Zoom.

Parents and teachers on the other hand separately took part in one 30 to 45-minute-long interview. Both parents were interviewed in-person following their child's interview, whereas teachers preferred being interviewed on Zoom. I began the interview by introducing myself and shared with them the goals and objectives of the study. Grand tour and warm up questions were also used to ease into the interview. An example of a grand tour question that was asked to my parents and teacher participants was to describe their relationship with handheld devices in terms of types of devices and activities they engaged with. Parents and teachers were also asked to share their thoughts and feelings about the general use of handheld devices prior to having them share their perspectives regarding the impact of handheld devices on preteens. Finally, I ended each interview by encouraging them to discuss how they felt about parenting or teaching in our digital world.

"Me in a World of Devices" Booklet

A booklet titled "Me in a World of Devices" (see Appendix D) was offered to the child participants at the end of their first interview. The purpose of this booklet was to provide the participants with another type of medium to communicate their knowledge and experience with handheld devices. Children were able to share their thoughts, feelings, reflections, and attitudes towards handheld devices in the form of journal entries, drawings, and activities. They were able to keep the booklet at home and write in it during their own personal time. This data collection method was meant to be combined with the interview process to compensate for possible disadvantages children tend to face when being interviewed by an adult such as language barriers, distractions, and confidence levels (Buchwald et al., 2009). In the booklet, I included entry titles such as "Devices and Friends", "Devices and Family", "Devices and Sleep", to encourage free writing, but the participants were welcomed to use other means of communication such as art and poetry. Furthermore, activities such as designing word maps, short comic strips, Top 5 lists, fill-in-the-blanks statements, and Would You Rather quizzes were included as optional activities for the participants to complete. Statements included in the Fill-inthe-Blanks, Would You Rather, and True or False quizzes were inspired by questions posed in a study's questionnaire about teenage girls' feeling about social media (Nesi et al., 2023). Furthermore, forced questions were used in the booklet to invite the child participants to explore components of social media that they perhaps might not have considered during the interview. These forced choice questions allow respondents to process components of a question and think about how the question may or may not apply to them (Smyth et al, 2006). Questions included in the booklet were inspired and adapted from two survey questionnaires used by Common Sense Media to study preteens' and teenagers' experiences and perceptions about handheld devices and

social media (Nesi et al., 2023; Rideout et al., 2022). Findings in O'Reilly (2020) regarding the "good, the bad and the ugly" of social media were also used as inspiration for the statements and questions found in the booklet. Providing participants with a variety of optional activities to express their thoughts and perspectives would in hope provide them with a sense of control over the research project (O'Reilly & Dogra, 2017)

Content Creation

Finally, the participating preteens were provided with the option to share any content they had created using their devices such as pictures and videos. Recorded content allows the researcher to access lived experiences in true authentic ways that no other data sources can portray, and further makes repeated viewings available, facilitating the analysis process (Fitzgerald & Lowe, 2020). Finally, recordings enable the researcher and participants to review, analyze, and discuss the findings together (Heath et al., 2010). One participant discussed and shared with me some of her content in our first interview, and further described her creations in her booklet.

Researcher Positionality

As an elementary school teacher and parent, I hold my own assumptions and biases towards the impact of handheld devices on children, preteens and teenagers. I have observed children and preteens engage with their devices in public and during social gatherings and have often reflected on how these devices might influence our younger generations. Moreover, after having many discussions with colleagues, I am often left wondering how much of children's learning difficulties, behaviors, and feelings are influenced by the amount of time they spend engaging with devices. I have also always been concerned with how screens take away rich opportunities to socialize and play with friends and family. Considering the importance of play

for young children's development, I sometimes worry that devices are interfering with children's ability to play and in turn negatively impacting their development. Teenagers on the other hand are more active than ever on social media platforms and are exposed to a variety of content that is not always age appropriate. I sometimes worry about the pressure that filters and photoshop features put on teenagers, especially girls, to aim for nothing less than perfection. I believe that feelings of social comparison, fear of missing out and being left out are also heightened among teenagers due to continuous exposure to what others are doing through their stories and posts, increasing levels of anxiety and depression.

For the present research, I decided to focus on preteens because research suggests that the amount of screen time and engagement with devices and social media increases with age. I was curious to find out specifically where preteens stand regarding their use of devices and how they perceived the use of devices and their impact on children their age. I was also curious to investigate preteens because I personally think that progressive exposure and critical reflection regarding online practices and online content is necessary to build a foundation for their future online experiences. Throughout the interview process, I was mindful of my assumptions and biases towards handheld devices thus tried to remain as neutral as possible in how I worded my questions and responded to my participants' answers. Moreover, given my position on the use of devices and social media, I made sure to not only focus on my participants' responses that included ways devices may impact preteens negatively. For example, when one of my participants mentioned the world would be "very different" without handheld devices, I asked to explain how it would be better and worse. Moreover, when one of my participants argued that there are "more productive things to do" other than being on your device such as "doing something you could do with other people," I asked to share her opinion in regards to playing

online with other friends. When analyzing my data, I also acknowledged my assumptions and biases and did my best to focus on the participants' perspectives. I also foregrounded the participants' voices through in-vivo coding and included their words in the results and discussion sections.

Data analysis

Qualitative studies require careful attention and reflection to patterns in the words and images collected from the participants (Saldana, 2016a). Interviews that were conducted in person (preteens and parents) were recorded using a recording app on my phone and then transcribed into a Word document. For the meetings that were conducted virtually on Zoom, teachers and preteens' second interview, I used the recording feature to transcribe interviews.

As I began the analyzing process of my collected data, I separated my participants' interview transcripts on three separate documents: preteens (including first and second interviews), parents, and teachers. Specifically, I combined all of the preteens' transcripts in one document, the two mothers on a second document, and the two teachers on a third document. Having my research questions at the top of each document facilitated the process of coding, categorizing and development of relevant themes for the study's findings (See Appendices H, I & J). For example, I included research questions: *How do preteens engage with handheld devices*, and *how do preteens perceive handheld devices and their impact on individuals' social, emotional, and physical well-being* at the top of the document including my child participants' interview transcripts. For parents, I included part of the third and final research question: *How do parents perceive preteens' use of handheld devices*? And finally, on the teacher's document, I included the second part of question three: *How do teachers perceive preteens' use of handheld devices*?

During first-cycle coding, I used In Vivo coding because my research questions aimed to explore a specific phenomenon, preteens' use of handheld devices, by delving into the participants' personal experiences. In Vivo coding is appropriate for qualitative research that is meant to honor the participants' voices, especially children and adolescents. As shown in Figure 1, this type of coding method involves taking the participants' actual words as codes to ensure that their ideas and interpretations are not lost in the adult's analysis of the data (Saldana 2016b).

Figure 1:

In Vivo First Cycle-coding: Preteen

- J: Sometimes I am 42 happy when I am playing a game with someone else. Cause um on 43 Roblox you can have different friends playing with you. 44 That's when I am happy. I
- am more happy, 45 mostly happy and excited when I am text messaging. B: That is interesting! Why do you think you are the happiest or most excited when you playing or texting someone else?
- J: Well because 46 I like playing with people because you know they're my friends and I do stuff with them, I don't know how to explain. It's just like 47 fun for me.
- B: Fun playing with your friends. Absolutely!
- J: Yeah! 48 Everyone likes playing with their friends.
- B: Absolutely! And then usually you plan a playdate, so after you meet up and play

- 42. "happy when playing a game with someone else"
- 43. "on Roblox... friends playing with you"
- 44. "That's when I am happy"
- 45. "mostly happy and excited when text messaging"
- 46. "I like playing with people ... my friends
- 47. "fun for me."
- 48. "Everyone likes playing with their friends"

For the analysis process, I focused on the participants' words and phrases that stood out to arrive at the essence of the phenomenon (Saldana, 2016b). This allowed me to remain focused on the study's objective throughout the analysis process.

After carefully reading through each interview transcript and coding all words or phrases that I believed merited a code, I moved on to second-cycle coding. The objective of second-cycle coding was to reorganize and group my first-cycle codes into categories to better highlight reoccurring patterns and emerging themes that stood out during the participants' interviews. Specifically, this process required reorganization including moving things around, discarding one or two first-cycle codes in addition to removing a category, and finally renaming categories to better fit the participants' words and phrases in relation to the research question(s) (Saldana, 2016a). To illustrate, here are two examples:

- When analyzing the teachers' interviews, I had "Teachers' use of devices" as a category and under the category, I only had the following codes: "iPads," "tablettes ne restent pas en classe," and "des laptops pour 4e." After categorizing all my first-cycle codes, I realized that the category did not consist of enough data. Also, I did not think the category "Teachers' use of devices" would have been helpful with answering my research questions therefore I removed the category.
- One category for the preteens' data was originally titled as "Preteens' attitudes and feelings towards handheld device." However, I changed the title to "attitudes, feelings, and experiences towards handheld devices" after noticing that a sub-category would be necessary for codes related to my participants' personal experiences (See Figure 2).

Figure 2

Preteens' Second-cycle Coding: Category 2(c)

2.Preteens' attitudes, feelings & experiences towards handheld devices 2(c) Personal experiences using handheld devices 81. "used to happen to me" 82. "Oh common, can I go on it now?" 83. "since I stopped, I am not like that." 24. "I just want to fall asleep" 23. "don't usually play before bed" 25. "used to play at night" 26. "I would never go to bed" 27. "I was like tired" 90. "trying to get Fortnite" 103. [tablet before bed] ... would make me "awake

Rather than merging repeated codes with the goal of better organizing the data (Saldana, 2016c), I chose to leave all first-cycle codes separate to have a concrete visualization of repeating or similar statements made by my participants. I believe that repeated comments made by my participants added authenticity and value to my findings. For example, the second theme for

preteens was inspired by my participants' repeated comments about devices "making you addicted" (See Appendix K).

Creating different level categories from existing categories is a process that guides researchers towards the development of theories (Saldana, 2016d). While categorizing my firstcycle codes into different categories I found myself creating more specific subcategories for each of my research questions. For example, under the preteens' second category "Preteens' attitudes, feelings & experiences towards handheld devices," I had first-cycle codes related to preteens' attitudes towards games and apps played on their devices combined with feelings towards using or owning a device. Provided the amount of data I had for this category, I felt the need to separate the data into two sub-categories: 2(a) attitudes towards games and apps; and 2(b) feelings about using or owning handheld devices (See Appendix K). A second example consists of the categories: "Parenting in this digital world" and "Teaching in this digital world." Subcategories were added to separate first-cycle codes related to my participants' roles as parents/teachers in ensuring that preteens adopt healthy habits around devices, and data describing their personal stories and experiences related to parenting or teaching in this digital world (See Appendices L & M). The subcategories also added structure to the process, making it easier to see recurring patterns and further allowed me to brainstorm potential themes. Finally, discussing my categories and subcategories with my supervisor allowed me to reflect on a deeper level as I was able to verbalize my findings and make sense of my acquired data. This guided me towards the emergence of appropriate themes and concepts to describe the role that hand-held devices play in the life of preteens.

The booklet "Me in a World of Devices" was provided to the child participants at the end of our first interview. The purpose of the booklet was to provide the children with alternative

ways to communicate their thoughts, feelings, reflections, and attitudes towards handheld devices. I explained each page and activity and provided verbal examples for activities such as the Word Webs and Free Writing. I also mentioned to the participants that they were not obliged to complete the entire booklet. I further suggested to have fun with the booklet and be as creative as they want. Participants had a total of four weeks to complete their booklet. Once Jon had completed his booklet, I went to his house to pick it up while Mia's booklet was sent back to me through a common friend. Once I had both completed booklets, I carefully reviewed and analyzed my participants' answers prior to our second interview. Second interviews were held on Zoom because it was easier for both families' schedules. Reading through the participants' booklets prior to our meeting was necessary because one purpose of the second interview was to clarify any misunderstandings and avoid misinterpretations of their booklet entries. The second interview was also meant to ensure trustworthiness and validity in the data collection and analysis processes. As I read through the children's booklets, I wrote down notes, comments, and questions I wanted to bring up with the participants during our second interview. For example, Jon described devices as "[making] you dum" on several occasions throughout his booklet. This was something I wanted Jon to elaborate on in the second interview thus I put a star next to his comment and wrote, "how does it make you dumb?" and "why would you say that?" to remind myself to address it during the interview. Moreover, Mia wrote about her friends not talking about devices when she is around, so she would not "feel very left out." I underlined "not too often" and "I don't feel very left out" to also remind myself to bring these up during our second interview. I did not want to assume she felt "left out" without her further explaining. Mia also drew a picture in her booklet consisting of negative comments such as "awful" and "eww" and later wrote in her "Would You Rather" chart that "some people write discouraging comments." I

added a star next to her drawing and underlined "discouraging comments" to make sure we addressed the topic during our second interview. The booklet was a useful addition to the interviews for it provided extended data and additional evidence to the study's findings. For example, participants expressed feeling happy and excited in both their interviews and booklets when chatting and playing with other friends. Therefore, both the interviews and booklets were used to discuss how preteens perceive handheld devices and their impact on individuals social and emotional well-being. Another example was Jon's personal experience with sleep. He discussed both in his interview and booklet how using handheld devices before sleep negatively impacted his sleep and academic performance.

Results

For each group of participants (preteens, mothers, and teachers), three themes emerged from the participants' interviews and, in the case of the children, the booklets.

Preteens Part I: Preteens' Engagement with Handheld Devices

My child participants, Jon* and Mia*, each owned their personal tablet which they used to play games, chat with friends on Messenger Kids, listen to music, take pictures and videos, and create stop motion videos. Both participants mentioned engaging with their mother's social media accounts (e.g. TikTok, Facebook) in her presence but not owning any social media account. They both commented on mostly using their tablet on the weekend and scarcely using it during the week. For example, when asked if his devices were accessible at any time during the week, Jon's response was, "Not any time, usually like sometimes, but mostly on the weekend when I am free. But not in the week that much." Both children also expressed using their tablets only after school if they were to use it on a weekday: "On weekdays, I usually only ever use it after school, not in the morning" (Mia) and "I don't use it in the morning because in the morning

I am all tired. In the week, I also have school so I obviously can't play in the middle of the day. I will play mostly at night or maybe 5:00 pm before supper" (Jon). When asked to describe when they were more likely to use their tablets, Jon explained, "Sometimes I play like... I get bored and just go find a game on... you know... maybe I just download one game that is what I am going to stay on if I am bored," while Mia mentioned playing "whenever [she has] free time."

I did not include a specific question regarding the average amount of time my participants spent on their device, however they both addressed the topic in their interviews. For example, Jon mentioned only playing 20-30 minutes if he is to play on a weekday. Mia also described her tablet use: "I usually only do it for like half an hour if I'm playing a game - 30-45 minutes about. I just get bored after a while."

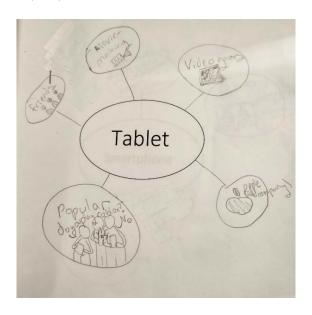
As mentioned above, my participants discussed the activities they were most likely to participate in on their tablet but also referred to popular games and activities that their peers tend to engage in. For example, the app Roblox came up a few times in both interviews. Jon mentioned being excited about playing the game on multiple occasions: "So sometimes I go on like Roblox and there isn't really good [games] that I like, or that I see. So, I usually just get off and wait until there is." Moreover, when asked to describe how he feels when using handheld devices, Jon replied, "Sometimes I am happy because um on Roblox there are different people that I could play with" and "I am happy when I am playing a game with someone ese. Cause on Roblox you can have different friends playing with you. That's when I am happy." When discussing how handheld devices impact preteens in general, both Jon and Mia mentioned that many of their peers play Roblox. Jon shared that "some girls usually [his] age probably go texting or playing on like Roblox" and how "lots of girls in [his] class and school play Roblox." Mia also explained:

A lot of my friends play this game called Roblox. I've never played it before. I know what it is because they talk about it a lot. They tell me that they don't play with random people, they just play with their classmates. And I don't really know much about it. I just know that everyone does it, that I know"

In her "Me in a World of Devices" booklet, Mia even drew a picture of people playing Roblox for her word web on tablets (see Figure 3). When asked in the second interview to elaborate on the drawing, Mia explained how "another way [her peers] communicate outside of school is by playing videogames together. And [Roblox] is one of the most popular."

Figure 3

"Me in a World of Devices" (Mia) – Word Web: Tablet



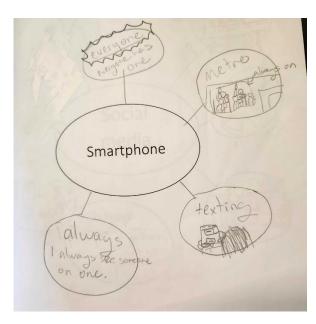
Jon shared his thoughts on how boys in his class tend to engage with handheld devices and electronics, specifically mentioning how most will play the Fortnite videogame: "Some of my friends that are boys, they will play on tablets and stuff but most of them in my class play on like PS5 or PS4 and they will just play Fortnite and stuff. Mostly Fortnite, that's all I hear from

them." When I asked if he played Fortnite, Jon explained how he is trying to get the game but is having issues with his account.

Although our conversation mostly revolved around preteens' engagement with the tablet, Jon did mention using a Smartphone to mostly "text on Messenger kid" and videochat with his cousin who lives in Punta Cana. Jon specifically mentioned that he prefers "looking at [his cousin] from the phone, like on Facetime rather than texting him and waiting to see what he has to say." Mia rarely referred to Smartphones in her interview perhaps because she only owned a tablet, however, in her booklet she created a bubble written "everyone, everyone has one" for her word web on smartphones. When we discussed her word web in the second interview, Mia explained, "It kind of seems that way sometimes because pretty much everyone in sixth grade and up that I know has one" and continued stating that "most of the kids in fifth grade have one except for [her] friends." (see Figure 4).

Figure 4

"Me in a World of Devices" (Mia) – Word Web: Smartphone



Preteens Part II: Perceptions on the Impact of Devices

Socializing with Others

Using handheld devices to socialize and communicate with friends and family was a reoccurring theme in all interviews with my participants. Jon and Mia both discussed how they enjoyed using devices to play and chat with their friends; they both described how they felt about being unable to play the same games as their friends and peers, and discussed difficult social situations or emotions that may arise when using handheld devices.

Mia and Jon both mentioned using Messenger Kids to text or video chat with friends. In her booklet, Mia specifically wrote "friends" as one of her bubbles under the word web, *Tablet* (see Figure 3) and explained that "a lot of [her] friends have a tablet, and they use it to message each other, communicate outside of school." When asked whether she also messaged her friends, Mia responded, "Not a lot, sometimes I video chat with them [on Messenger kids] but only on the weekends. And I only have it with my closest friends." Jon also mentioned using Messenger kids on his phone to send messages to his friends.

In their interviews and booklets, Mia and Jon both mentioned feeling "happy and excited" when chatting or playing with friends. When asked to elaborate, Jon explained:

Sometimes I text my friends saying compliments or I am excited because they ask to play and we form playdates and so that's the time I usually feel excited. Also, sometimes I am happy when I am playing a game with someone else but mostly happy when I am text messaging. I just like playing with people because you know, they're my friends and I do stuff with them. It's just fun for me. Everyone likes playing with their friends.

Feelings of excitement and happiness towards using devices to communicate and play with friends was also noted on multiple occasions in Jon's booklet (See Figures 5, 6 & 7).

Figure 5

"Me in a World of Devices" (Jon) – Devices and Friends

Devices and Friends
Free expression instructions: This is your time to be creative. You can use any form of writing or art to express your thoughts about devices and friends. You can journal your thoughts, draw a picture, write a story, comic strip or a poem etc. With your device lots of kids that play games and interval mostly like playing with there friends or triend.

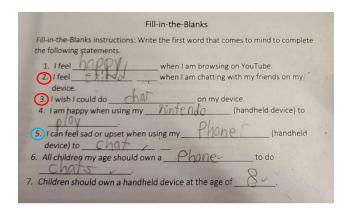
Figure 6

"Me in a World of Devices" (Jon) – Would You Rather

Would you rather		Comm
Watch videos on	Create videos for	
YouTube	your YouTube	
	channel	
Receive 100 likes on	Receive 100	1
a picture you	comments on a	
posted on	picture you posted	my
Instagram	on Instagram	1
Watch television	Watch videos on	
	YouTube	
Play solo games on	Video chat with	
a tablet	your friends	-
Make your own	Look at people's	1
digital art	art on social	1
,	media	
Write something on	Read what other	
your device (story,	people are	
diary, blog, poem)	posting.	
Watch videos on	Scroll on social	
how to learn a new	media platforms	
skill (e.g. baking)	such as Instagram	

Figure 7

"Me in a World of Devices" (Jon) – Fill-in-the-Blanks



When discussing the advantages and disadvantages of using devices, Jon provided the example of talking to his cousin in Punta Cana as an advantage:

The good side is you get to talk to each other from far. Like I call my cousin that's in Punta Cana right now. Um, he left me two years ago. I was really sad because he moved there and so now, we just talk to him on the phone. And usually, it's like every week that we talk to him. Sometimes it's most of the week.

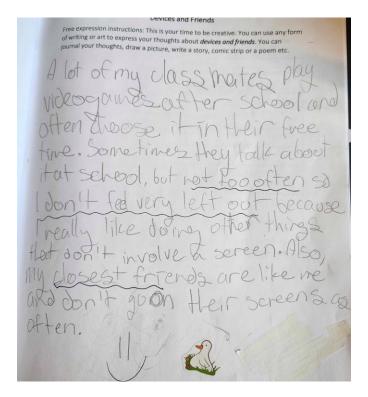
Although Jon perceived long-distance video chatting as a "good side" of handheld devices, both Jon and Mia admitted preferring in-person conversations: "I would prefer face-to-face like rather than going on the phone because I can't like hug him on the phone" (Jon) and "[When gaming online] you are playing with other people but you don't know them so you can't really have an in-person conversation." (Mia)

Mia and Jon both provided examples of their friends engaging with a game that they did not have access to. In Jon's case, he explained that most of his friends played Fortnite, but he could not play due to having "issues with [his] account on his Nintendo Switch." Specifically, Jon explained that when his father tries to create a Fortnite account on his Nintendo Switch it does not seem to work. When asked to describe how he felt about all his friends playing Fortnite

and not being able to play yet, Jon responded, "Uhm... I feel like... well COME ON! I just want to just play for once with my friends." Mia also explained in her booklet that "a lot of [her] classmates play videogames after school and often chooses it in their free time. Sometimes they talk about it at school, but not too often so I don't feel very left out" (see Figure 8).

Figure 8

"Me in a World of Devices" (Mia) – Devices and Friends



When asked to clarify whether she felt "left out" when her friends spoke about devices at school, Mia replied in a nuanced manner:

Sometimes, but I also have friends that don't use it, so I go with them. There are friends that I sit with when like my other friend is absent and they are usually talking about [devices]. I get a bit confused, so I go do something else or I just watch them. I am not often in a situation where it happens.

Finally, Jon and Mia both addressed social situations that may occur when using handheld devices. In his booklet, Jon wrote as a fill-in-the-blank statement that he sometimes felt sad and upset using his "phone" to "chat" (See Figure 7). When asked to explain why chatting also made him feel sad and upset, Jon replied, "Because of something that happened and now we can't have a playdate. Or [something] that happened to that person, and I feel bad for them." When asked for clarification Jon confirmed that he felt sad when chatting about sad topics or events that are happening. In the True or False activity, Jon also answered "True" regarding feeling "upset after using [his] handheld devices." (See Figure 9).

Figure 9

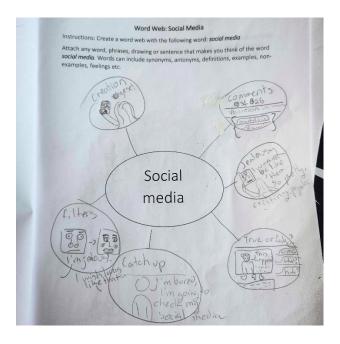
"Me in a World of Devices" (Jon) – True or False

True or False			
True or False instructions: Read the following statements and circle T if you think is true and F if it does not apply to you.			
Using handheld devices before bedtimes sometimes keeps me from sleeping.	Tor F		
I sometimes feel upset after using my handheld devices.	Dor F		
I feel more connected to my friends after using my handheld devices.	Tor F.		
I feel pressure to respond to my friends right away.	T or (F)		
When on my handheld devices, sometimes I feel left out.	T or (F		
I see inappropriate content while I am engaging with my handheld device.	T or E		
I see things that upset me while I am engaging with my handheld device.	Tor F		
I see positive and happy things when engaging with my handheld devices.	O or F		
All children my age should own a smartphone	Tor		
Children my age should own a tablet	TO OT FI		

When asked to elaborate in the interview, Jon explained that he feels this way when "someone says something, but it is not true." Feeling upset or sad as a consequence of other people's comments was also something addressed in Mia's second interview. Specifically, in her word web on social media, Mia included a bubble with a picture of negative comments (e.g. Awful! Eww!) and another bubble including a picture of someone reacting to something that happened but not knowing whether it is true or false (See Figure 10)

Figure 10

"Me in a World of Devices" (Mia) – Word Web: Social Media



When asked to elaborate on her picture with the comments, Mia's response was the following:

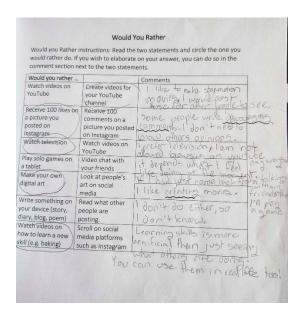
I find it can be a bit negative and make you feel like sad if other people don't like what you're doing or disagree with something that you did. So then if you go back and read the comments from someone you don't like, it kind of makes you upset or sad depending on what it is.

Although Mia claimed not owning any social media accounts, she was still able to share her perspective on the topic due to class discussions she has had on the topic of social media use and online safety. Mia specifically referred to mean comments that are posted on social media platforms additionally to apps such as TikTok being "used to do bad things." When asked to provide examples for "bad things" Mia explained that "people lie about certain things or create things that could be embarrassing for someone else. They could also comment mean things about someone who is doing something they are proud of." Negative comments on social media were also brought up in Mia's True or False chart where she expressed that "sometimes [she will] see

the chat on games and people can be really mean and rude." Moreover, when asked to pick between "Receiving 100 likes on a picture you posted on Instagram" vs "Receiving 100 comments on a picture you posted on Instagram," Mia picked receiving 100 likes and explained that "some people write discouraging comments and that [she doesn't] need to know others' opinions." (See Figure 11)

Figure 11

"Me in a World of Devices" (Mia) – Would You Rather



Overall, Mia and Jon both addressed how handheld devices may impact preteens emotionally and socially by providing ample examples such as staying in contact with people they care for, sometimes feeling left out, and reading upsetting comments on social media or text messages.

Issues: "Waste of Time" and "Addicted"

On several occasions during the interview, Mia and Jon referred to handheld devices and social media apps as being a "waste of time," "not important," and addictive. They did this using personal experiences and thoughtful observations. Mia's thoughts on social media apps such as TikTok were as follows:

I don't really think they're that bad, but they could be used to do bad things. Well not bad things just like things that aren't important, or they could be a waste of time. You could be doing other things.

Jon also mentioned devices being a waste of time mostly when he is waiting for his friends to respond to his text messages. This was one of his explanations for preferring video chats like Facetime over text: "If [my friends] leave my text message to go text someone else, I am just wasting my time waiting [for their response]." Jon then elaborated: "What I mean by 'wasting time' is that I want to play with my brother or maybe like make food with my mom." He then mentioned that he couldn't do any of this if he was texting his friends and waiting for them to reply.

Jon also shared his perspective regarding what type of devices or activities he deemed "important" and "not important." For example, his game console the Nintendo Switch, games, videos, apps, and social media were referred to as "not really important." The only exception where social media was considered as perhaps important was when it included posts that were "important for your life," such as his father seeing on Facebook that Goldfish crackers "contained wheat killers" and "caused cancer" thereby throwing everything in the garbage. Finally, Jon perceived phones as "very important, because that's how people text and call. Maybe call 911 in the case of a problem."

The topic of devices making people addicted and lazy was also brought up on multiple occasions by both Jon and Mia. Specifically, Jon explained that he used to play on his tablet a lot during the week and stopped when he realized that there was "no point". He further explained that playing would just make him feel "less comfortable," "tired," and "really lazy" so he decided to stop. Moreover, Jon referred to "this technology" as "good but also bad for [him]" and

when asked to elaborate, he responded, "I think it's bad because it makes you lazy and then you never want to stop playing because you get addicted." He provided the example of watching videos on TikTok: "...stuff like TikTok and just watching videos and then you watch more and want to watch more than you just don't want to get off. Also, Facebook and stuff like that. You just look at it and get addicted to it." When asked whether this was something he had ever experienced, Jon referred to his father's aimless scrolling on his phone. Mia also mentioned seeing people "always scrolling or doing something on their phone" when using public transit or walking to school. She further explained that rather than scrolling on social media, people could be doing more "productive" things like "reading a book, learning a new skill or sport, or doing something that you could actually do with other people." Finally, Jon referred to his friends as being addicted to the game Fortnite. When asked to clarify this aspect of addiction to ensure I was not misinterpreting what he was saying, Jon answered:

They are! I hear them every single day. EVERY single day. EVERY single day. I hear them talk about, "Oh... you know... about this thing and we'll play tonight together." They want to play together. That's all they want to do. At recess, they just talk to each other, "This thing is cool, it's legendary!" And stuff like that. That's what I hear every single day. Before we go to recess, they just talk about [Fortnite].

Sleep and School

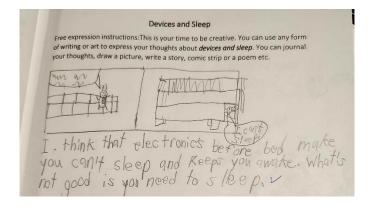
Throughout the interview and in his booklet, Jon referred to how the use of handheld devices before bed negatively impacted his sleep. He explained:

I don't usually play before bed because I just want to fall asleep. I used to play at night and then I would never go to bed. I would count the sheeps. I couldn't go to bed, I couldn't sleep. So, I stopped.

Under his free writing activity on *Devices and Sleep*, Jon also referred to electronics keeping people awake thus making it difficult to sleep (See Figure 12).

Figure 12

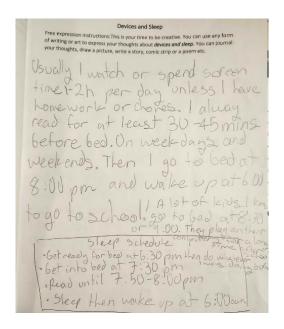
"Me in a World of Devices" (Jon) – Devices and Sleep



Sleep being affected by the usage of devices was not something that came up in Mia's interview or booklet. On the contrary, Mia did not mention any use of devices before bed but rather stated that she will "read for at least 30-45 minutes before bed" (See Figure 13). Although this was not the case for Mia, she mentioned in the booklet how some of her friends go to bed later and "play on their computers for a long time after school."

Figure 13

"Me in a World of Devices" (Mia) – Devices and Sleep



Jon further explained that his lack of sleep, due to handheld devices, began to affect his grades at school:

I used to not sleep and the next day for school I would make silly mistakes because I was like tired. And now I am fine. I don't have as many mistakes as I used to have. So now I also stopped a lot cause I used to play a lot in the week but then I am like, you know what, there is no point.

Due to this experience using devices, Jon explained that if he was to begin to play Fortnite with his friends he would make sure not to play right before bed. He specifically noted that his "plan" would be not to play later than 8:30-8:40 pm because 9:30 pm is his bedtime and he prefers to "not even looking at [devices]" before bed. Jon also explained:

So, like if [my friends] ask me to play at 7:30 pm I would say, "Okay, okay, we can play for an hour maybe." I would end up staying up until 8:30 pm and so like then 8:35 pm I'm like, "Okay dude! I have to stop playing because it is past my max."

Moreover, in his booklet, Jon referred to tablets and Smartphones as "[making] you dumb" (See Figures 14 & 15).

Figure 14

"Me in a World of Devices" (Jon) - Word Web: Tablet

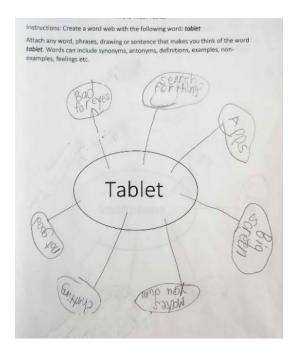
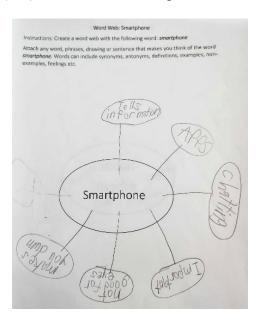


Figure 15

"Me in a World of Devices" (Jon) – Word Web: Smartphone



When asked to expand on why he believed devices made people "dumb," Jon explained, "It makes you have a hard time with school because you are always on it. My dad told me that and I am pretty sure it's true because I did have a hard time in school."

Parents

The parents I interviewed for this study, Laura* (Jon's mother) and Ali* (Mia's mother), believed that the use of handheld devices had a great impact on preteens' social skills and self-regulation and both mothers believed that parents played a critical role in preteens' use of handheld devices.

Social Skills

The topic of children's social skills came up quite often in both mothers' interview. Laura and Ali voiced concerns about handheld devices limiting social interactions amongst people: "No one is socializing anymore... a lot less communication between family members and friends ... losing human touch, the human connections. It's now all through devices" (Laura). Such belief was reinforced by Ali as she explained: "If you are unaware, you can get sucked into this rabbit hole, [devices] can impact your socialization, they can almost like take the place of what other social interactions would be" and later mentioned that "nobody speaks to each other in public anymore." Moreover, when asked to describe how she believed handheld devices impacted preteens specifically, Ali mentioned how "it removes completely the ability to develop basic foundational skills that we develop, like social and life skills." She also noted how it impacts our "ability to just have a conversation that is not awkward and that's not centered around only devices." Both parents also verbalized their desire to have their child communicate and engage effectively in social interactions with others. Specifically, Ali explained how she thinks it is important that her children "learn how to exist without having to stare at anything" and "be

around and act appropriately or contribute to the conversation." Laura had similar feelings: "I want [my kids] to interact with people when we have guests over. I think it is important to sit down and have conversations."

Self-regulation Skills

Parents also brought up self-regulation and delayed gratification being affected by preteens' use of handheld devices. Ali, who is also a teacher, shared her own personal observations in the school setting:

I have been teacher for 15 years and I saw this shift happen about eight years ago. The kids coming into kindergarten are lacking significantly in their self-regulation. Self-regulation I find is massively triggered by instant access to everything. I also feel like with technology, you are never experiencing anything other than your first choice, so again instant gratification.

Ali also mentioned her concern for preteens always being stimulated and "continuously bombarded with noise": "And it's like you don't know how to be without [devices], you don't know how to be bored, look around, or be observant because you're always zoned out." Laura shared a personal experience reinforcing Ali's statement about "always being stimulated." She explained how Jon is now "calmer without the devices," and that he used to rush through his homework and pretend he understood to go back to the tablet, but after taking away the tablet, she believes he became calmer as a consequence of having "not as much stimulation".

Parents' Role

Both mothers discussed their role as a parent in ensuring a healthy balance for their children's use of handheld devices. They specifically believed that it was the parents'

responsibility to limit their children's use of handheld devices, apply rules and restrictions, and model appropriate behaviours around devices.

When conversing about regulating their children's use of devices, Laura explained that "during the week she is more strict and tries to limit it a lot." She believes that as a parent, she needs to set limits and guide her children towards adopting a healthy balance when it comes to using devices: "Time restriction. I feel like if you don't give [children] a time frame, they will just go on it and then you get into your stuff and you kind of forget to balance it out." Ali also mentioned having a "regulated amount of screen time" and further elaborated on making decisions regarding the use of devices in the home: "I think you can choose to let it have a positive or negative impact by how you decide to allow the usage in the home."

The importance of modeling and active parenting to help children navigate online safely was brought up in my interview with Ali. Specifically, she believed in slowly exposing her children to social media before they reach the eligible age to have their own account: "Starting to expose your kids to what [social media] is and modeling the good and bad will help them have routines that are healthy." Ali also believes that exposure should be done with a parent present and referred to using "active parenting" to prevent unhealthy practices and behaviors.

Parents were asked to share their thoughts and feelings about parenting in this digital world and both mothers voiced some of the challenges they face. Ali brought up her experience parenting her first son, Mia's older brother, when the iPad came out: "With my first son, there was so much interference in our parenting because we had to manage devices such as the iPad becoming so popular, and access to devices." Although this is not the first-time raising children surrounded by devices and social media, Ali mentioned still feeling like she was "free falling." She further explained: "What I think I know; I don't know, and I am always second guessing. I

also think the advice available is overwhelming." She also stated sometimes having to go online for advice or opinions regarding parenting and devices.

Laura also admitted parenting in this digital world being "very challenging" mostly for constantly being torn between having her boys use the devices but also ensuring they are not overusing:

[Parenting in this digital world] is very challenging because you don't want them not to have it because their friends have it and their friends are all on these games and whatnot. But you definitely need to put rules and restrictions because it does affect their grades.

Ali stated feeling like she is in the minority for not letting her children go on social media and limiting their screen time. She also mentioned being called "mean and extreme" on multiple occasions for the same reasons. That said, she then referred to Bill Gates and his rules and regulations regarding using handheld devices in the household:

One thing I find super interesting about parents and social media is that... Is it Bill Gates who doesn't allow his kids to have electronics? Isn't it wild? And that tells me that I am on the right path, I am not crazy.

Teachers

When interviewing teachers, Tammy* (Mia's teacher) and Ella* (Jon's teacher), believed that preteens now lived in a different world due to handheld devices; they believed that they as teachers played a critical role in preteens' use of handheld devices; and finally, they expressed conflicting feelings towards preteens' use of handheld devices in the classroom and their impact on their learning.

A Different World

The teachers were interviewed on how they believe handheld devices impact preteens inside and outside of the classroom. Both teachers described preteens as living in a different world due to the fact that they were raised around devices and forced to use them during the Coronavirus pandemic in 2020: "It's been part of their lives since they were in school because when the pandemic hit, my students were in grade one so they were forced on digital technology whether they were ready or not" (Tammy). Ella also mentioned that the boys in her grades three and four classrooms constantly talk about the games they are playing on their devices and social media sites like TikTok: "Ils parlent de ça souvent aussi, c'est leur monde."

The conversations and conflicts related to online games and social media often take place during class time: "Ce qu'ils font à la maison, les jeux comme Fortnite, cette conversation continue en class" (Ella) and "sometimes things come into the classroom that wouldn't normally be in the classroom" (Tammy). Tammy shared a situation that occurred in her grade five class of a student feeling "ostracized" because she did not have access to technology:

For example, there were some children or friend group, and at home some of the friends were on TikTok doing TikTok dances and whatever and another girl, that would've been the leader of the group normally, felt like ostracized by the group because she did not have this technology at home. Sometimes there are stuff like that that happens outside on social media and then they are upset when they enter the classroom, and they are physically discussing it.

Ella also mentioned observing "cliques" being created amongst her students from online games and social media platforms such as TikTok: "Il y a une clique de Fortnite ... les joueurs de soccer sur TikTok." She further explained that students who do not play Fortnite seem to

struggle with being part of most conversations and are often excluded from the cliques: "[Les garçons qui ne jouent pas à Fortnite] ... sont complètement à part dans cette conversation, ils peuvent jouer un peu dehors mais ça ne fait pas partie de la clique." Ella supported this observation with a similar situation she experienced with her teenage son. She explained that her son has a friend who does not have access to any electronics (e.g., tablet, cellphone, video consoles) and she once suggested inviting this friend over, but her son showed resistance because of his lack of skills and knowledge about the video game, Fortnite. Specifically, his response was: "Mais maman, il ne joue pas aussi bien que moi à Fortnite, on n'a pas les mêmes conversations." Ella's experience as a mother of two teenage sons led her to believe that children without access to handheld devices may become held back in their social interactions: "Si je n'avais pas donner cette option là à mais enfants à partir du secondaire, ils seraient limités dans leur conversation."

Both teachers also reported online games such as Fortnite resulting in interpersonal conflicts mostly among boys, perhaps due to the competitive nature of the game. Tammy observed this with her students whereas Ella noticed similar behaviors with her two teenage sons: "Dès qu'ils arrêtent de jouer ils sont super excités, et agités ça se chicane à cause de la competition" (Ella). Tammy also shared her personal observations in the classroom:

Sometimes I notice it with male students. Whenever they are playing an online game together, like Fortnite. If they are competing against each other, they will come in first thing in the morning as you are lining them up to walk into the building angry at each other because of what happened on Fortnite. So yeah, there is this aspect that sometimes the digital causes um ... conflicts in the school.

Although conflicts among preteens seem to arise due to devices and gaming, children also appear to have developed ways of connecting and communicating as a result of devices and social media. Specifically, Tammy explained:

Everyone will be taking a test or something and then you look over and somebody is doing this weird dance move thing and then someone is doing it back but like a mirror image from it. It may be from TikTok. That's a weird thing that happens during tests sometimes. It's kind of like they can have a conversation without words, with movement.

Like they connect with each other with difference dances. So, it's interesting to see that.

Based on Tammy and Ella's shared observations and experiences, handheld devices and social media seem to have a great impact on preteens' lives, especially in the social realm, influencing how they communicate and engage with one another.

Teachers' Role

Both teachers discussed their role and responsibilities as teachers to guide their preteen students in adopting healthy habits and practices with handheld devices. Control over the students' use of tablets and having conversations about devices and social media were the two prominent sub-themes that came up when discussing teachers' roles and responsibilities.

Tammy discussed the need to supervise and control what students are doing on their tablets using various strategies since students tend to become easily distracted and off-task.

Tammy specifically mentioned that she uses special features to avoid distractions when using devices and ensure students stay on-task: "I am able to lock them onto exactly what I want them to focus on. Because... if I am not right beside them, I always catch them looking at something else..." Tammy further mentioned:

Even when its' like direct instruction ... they get distracted very quickly and try to go on other things. But with my iPads, I can lock them on exactly the website that I want, and they can't get off. I can even cover up the URL [by drawing a shape over it] so they can't touch it and go anywhere else. I have complete control over it, I love it!

Tammy also explained that the students are unable to get off the webpage the iPad was set on until she personally takes it off using a passcode. She also mentioned that "[her students] admire the fact that [she] has control over it. [Students] don't know a lot of people who can do this."

Ella shared how she will have conversations with her thirteen and sixteen-year-old sons about knowing when to stop playing videogames and feeling frustrated after playing: "C'est les éduquer à savoir arrêter." She further explained how she will ask her sons questions to make them aware of how they feel post-gaming:

Bon, Oscar*, t'as joué, qu'elle est la conséquence de ça? Tu es super frustré. Est-ce que ça vaut la peine? On a cette conversation, Est-ce que tu peux faire quelque chose d'autre? Jouer moins? Chercher un jeu qui provoque moins de stress? Un jeu que tu peux jouer seul, pas en group ou en compétition. Toutes ses questions là je pose et j'essaye de les faire prendre conscience.

Both teachers agreed with the importance of having discussions with students: "Il faut parler aux élèves" (Ella) and "the digital causes um conflicts in the school. Which I guess is good because we are then able to address and discuss it..." (Tammy). The importance of being prepared as a school to address conflicts that occur online was also vocalized by Tammy:

At first, we were not ready for [online conflicts] because it just happened you know, but now as a school we are very prepared, and I think it helps with having discussions about what is acceptable behavior. And [preteens] understand that what they are doing online affects them in actual life, not just online.

Tammy further explained that it is part of the school's curriculum to discuss any conflicts that happen online with the students and the school's behavior technicians. She also mentioned that she will have conversations about being online users and online safety with the students when the opportunities present. Ella supported this and also stated who it was important to talk and educate preteens about the use of handheld devices, social media, and online gaming.

Conflicting Feelings

Tammy and Ella both voiced their appreciation and concerns with students' use of handheld devices in the upper-elementary classroom. They described the use of devices in the classroom as helpful and advantageous for the students, especially those with difficulty, but also limiting students in terms of communication skills and sustained attention.

Tammy shared that she believes handheld devices in the classroom help students focus and review the material at home:

I am taking screenshots; I am saving it and I convert it to PDFs and uploading it on Google classroom so when [students] are at home they can see what I was doing in class ... if absent or unsure they can follow along and ask questions on Google classroom.

Tammy described Google Classroom to be very helpful and advantageous for herself as well as the children. Both teachers discussed the plethora of websites, activities, and features available to students to enhance their learning experience in the classroom. Tammy mentioned using sites like "BBC or Canadian Encyclopedia" for words or concepts students are unsure of in addition to using Google classroom to allow students to collaborate and work on projects virtually. Ella also

shared her appreciation for the use of devices in the classroom for learning French as a second language: "Quand on a commencé avec l'informatique, j'étais très enthousiaste. Je trouve que pour l'apprentissage des langues, ça été phénoménale. Tout ce qu'il est auditif. Maintenant il y a une panoplie [d'activités]." Ella also mentioned how handheld devices in the classroom are extremely helpful for children with learning difficulties: "Ça va aider beaucoup les élèves en difficultés, surtout en français langue seconde. On a accès à une panoplie d'activités." As illustration, Ella explained how devices provide children with learning difficulties the opportunity to have a text read to them which can be extremely beneficial for their learning.

The disadvantages of students using devices in the classroom were mostly brought up regarding reading and writing stamina and communication skills. Specifically, Ella voiced her concern with children lacking the necessary patience and endurance to read longer texts in addition to completing tasks and tests on paper, such as end-of-year ministry exams:

Mais il y a d'autre élèves que cette habilité d'avoir un papier, de faire un teste, de lire un texte plus long sur papier, ils n'ont plus la patience. Ça élimine cette patience, cette endurance. Avec l'ordinateur, toute est très vite, ils veulent être en action, cliquer ici, cliquer là, aller chercher telle information. À la fin de l'année on a des examens du ministère, à la fin de l'étape on a des compréhensions écrites. Ça fait que les élèves refusent parfois. Ils sont vraiment déçus de travailler sur papier.

Ella also stated that her students are reluctant to complete activities on the devices that ask for too much effort and attention. She explained how she believes that children associate handheld devices to games and fun, thus this is what they expect when completing academic tasks on their device: "Ils pensent qu'ont va faire juste des activités amusantes, des sites qui permet l'interaction mais ce n'est pas toutes les activités qu'ils veulent faire." She described her students

not being so enthusiastic about using devices as a traditional learning tool such as an online dictionary or using it to do research.

Finally, Ella communicated her worry with handheld devices having a negative impact on preteens' abilities to hold face-to-face conversations, in addition to affecting the development of well thought-out opinions and theories during class discussions: "C'est des discours coupés, moins articulés... Ils prennent l'opinion de quelqu'un d'autre sans contester." She noted that she feels like children now lack the endurance to read, analyze, and critique a text. That being said, Ella ended our discussion by mentioning how important it is to talk to preteens about finding balance with using handheld devices.

Discussion

The goal of this study was to better understand how preteens engage with handheld devices and their perceptions regarding the impact of devices on their social, physical and emotional well-being. I believe that acquiring a better understanding of preteens' engagement and feelings towards handheld devices is foundational for developing meaningful programs meant to guide elementary school students in adopting healthy habits and practices using devices and social media. I interviewed two preteens and their parents and teachers to answer the following questions: (1) How do preteens engage with handheld devices? (2) How do preteens perceive handheld devices and their impact on individuals' social, emotional, and physical well-being? (3) how do parents and teachers perceive preteens' use of handheld devices?

Preteens' Engagement with Handheld Devices

My participants Jon (9 years old) and Mia (11 years old) both mentioned owning a tablet while Jon also owned a Smartphone. Considering that 57% of Canadian children ages 8 and 12 report owning their personal tablet and 57% of Canadian youth also report owning a cell phone,

it was not surprising that my participants each claimed owning their personal tablet (Rideout et al., 2022). Both participants in this study also reported barely using their devices during weekdays and not using their devices before bedtime. However, it is important to note that Jon mentioned having engaged with his devices before bedtime in the past, and needing to stop because it was interfering with his academic performance. Findings regarding my participants' use of devices were not surprising considering previous research indicating that preteens between the ages of 9 and 11 are less likely to use their devices on weeknights and before bedtime in comparison to older teenager. Specifically, 47% of 9–11-year-olds report using their device on weeknights in comparison to older teenagers: 72% of 14–17-year-olds and 58% of 12- to 13-year-olds. Preteens also report being less likely to use their devices before bedtime (47%) compared to 64% of 12–13-year-olds and 75% 14–17-year-olds (MediaSmarts, 2022).

Most children who use handheld devices primarily use it to connect with family and friends, play online games, watch videos and listen to music (MediaSmarts, 2022). This was also the case in the present study as both participants emphasized the use of both the tablet and smartphone to communicate with friends and family. Although Mia didn't participate frequently, she mentioned her peers and classmates using online games and messaging apps to communicate outside of school. Jon, on the other hand, viewed the use of smartphones and tablets as a valuable device to connect with friends and family in addition to organizing playdates. Such findings coincide with previous research on preteen and teenagers' everyday digital activities indicating that 90% of 9–17-year-olds will use their devices to connect with family and friends either to make plans to meet offline or simply to chat (MediaSmarts, 2022). Jon and Mia both expressed playing or downloading games on their tablet either when bored or in their free time, corroborating with studies that demonstrate how boredom can result in the use of devices among

children. Specifically, West et al. (2021) explored the relationship between screen time among adolescents and levels of social anxiety and found that 90.3% of teens report boredom as the primary reason for using screens. This is something that is also noticed in schools where children have access to their personal devices. High school teachers have reported their students using their devices to browse social media mainly when bored or when they are uninterested in the assignment at hand (Anderson et al., 2014).

Preteens' Perceptions on the Impact of Handheld Devices

When discussing the use of devices with preteens and teenagers, it is common for them to mention how devices allow them to stay connected to their friends and family. The preteen phase (9 -12) is a critical stage for developing and maintaining friendships as popularity and social status becomes increasingly important (Common Sense Media, 2022; Nesi, 2020). Digital play has been found to be an integral part of children's lives as it is often perceived as an "enjoyable pastime" and a "key part of their social lives" (Carter et al., 2020, p.142). Jon and Mia expressed feelings of happiness and excitement when using their devices to chat and play with their friends and family. They both mentioned using their devices to communicate with their friends after school hours and to plan playdates. Jon even explained how devices made it possible to communicate and stay connected with his cousin who moved to Punta Cana a few years ago. Such findings are consistent with results from previous studies investigating teenagers' perspectives on the impact of devices and social media (O'Reilly, 2020; Patra et al., 2021). Teenagers value devices for their ability to maintain friendships, especially when physical distance makes it difficult to be in-person (O'Reilly, 2020). Moreover, teenagers have voiced their appreciation for devices in previous studies for their beneficial mechanism to reduce

isolation, improve social skills, and to allow for continued communication outside of school (O'Reilly, 2020; Patra et al., 2021)

With feelings of staying connected also comes feelings of "missing out." Feelings of being "left out" and "confused" were expressed by my participants as a consequence of not having access to the same games and apps as their friends. These findings are consistent with previous studies in which teenagers described access to social media as important for their social status, and to ensure they do not miss out on anything or stand out as being "different" (O'Reilly, 2020). Both teachers in the present study verbalized their concerns regarding children feeling ostracized or excluded for not having the technology at home. Ella also explained how children create social media and online gaming cliques at school and how children who do not have access to these games or apps are often excluded or face integration issues. Such findings are not surprising considering that research has shown how critical it is for teenagers to be part of a social community (O'Reilly, 2020).

Online platforms have also been perceived as having a negative impact on preteens and teenagers due to negative or age-inappropriate content in addition to hurtful comments. For example, teenage girls describe people being "mean, negative, and even cruel in the comments [they post]" making others "feel bad about [themselves]" (Nesi et al., 2023, p. 28). Both Jon and Mia admitted the possibility of feeling sad or upset due to other people's mean comments and lies via text and messenger or on social media platforms. Referring to discussions she has had in the classroom, Mia noted that social media platforms such as TikTok are often used to do "bad things" such as embarrassing other people and writing "discouraging and negative" comments that make you feel bad about yourself.

Handheld devices were mostly perceived as being a "waste of time" and "unimportant" by my participants. Specifically, they argued that people could be doing other things other than scrolling or engaging with their devices. The children may have heard this refrain around them, as popular media and studies frequently report apps such as Snapchat, TikTok as a "waste of time" and handheld devices getting in the way of accomplishing more important things (e.g., Nesi et al., 2023).

Carter et al. (2020) note that it is common for teenagers to refer to online games and social media as "addictive" without implying a formal medical diagnosis. The authors found that the word "addiction" was often used by children to describe their favorite game; when referring to the amount of time spent playing; to describe play as compulsory or the "need" to play; and that children tend to misconstrue fun and excitement for "addiction." The term "addiction" was often overused or "abused" when talking about games such as Fortnite (Carter et al., 2020). In the present study, Jon used the term "addicted" on a few occasions when referring to excessive use and when describing his friends' desire to play the game. For example, Jon described people being "addicted" to their devices for "never wanting to stop playing" and "not wanting to get off". In this case, Jon used the term "addicted" to describe a desire to play or use a device perhaps beyond what was originally planned without implications for what adults would deem unhealthy or pathological. Jon also referred to his friends being "addicted" for continuously talking about features of the game or being excited about playing after school. The usage of the term "addicted" to describe feelings of having difficulty getting off an app is also common among TikTok users. Specifically, 45% of teenage girls who use TikTok report feeling "addicted" to the app for using it more than desired (Nesi, et al., 2023).

Jon voiced having difficulty falling asleep and struggling in school when he used to play on his devices right before his bedtime. Previous studies have illustrated simar findings of teenagers claiming that their use of devices would interfere with their quality of sleep (Nesi et al., 2023). Such findings were not surprising considering previous research investigating sleep quality and social media use (Woods & Scott, 2016; Pirdehghan et al., 2021). Pirdehghan et al. (2021) specifically found that higher amounts of social media were significantly correlated to sleep disorders and depression. This was also the case in Woods and Scott (2016) who found that teenagers' quality of sleep was significantly correlated with overall and nighttime-specific social media use additionally to teenagers' emotional investment in social media. In the present study, Jon expressed a significant change in his sleep patterns and academic performance once he reduced the amount of time he spent on his devices during the day and when he completely stopped using them before bedtime.

Parents' and Teachers' Perceptions on Preteens' Use of Handheld Devices

Children's social development and academic performance were what parents and teachers focused on most when sharing their perceptions on preteens' use of handheld devices. Such findings are consistent with previous studies which explored parents' perspectives on their children's screen time and use of social media. Academic performance and socialization were the two areas of development that were addressed in Patra et al. (2021) when discussing the impact of social media on teenagers. Other areas of development such as emotional and physical well-being were not addressed in the present study and Patra et al., (2021) argue that parents are less likely to discuss such areas simply due to lack of awareness.

When discussing the influence devices have on preteens with parents, their children's social skills and interactions are often at the core of the discussion (Patra et al., 2021). This was

the case in this study as both participating mothers voiced their desire for their children to communicate with family members and friends as well as the importance of being actively engaged during social gatherings, that is, in conversations and in-person interactions. Jon's mother, Laura, mentioned the loss of the "human touch" and Ali commented on "nobody speaking to each other in public anymore." Although previous studies have shown that parents acknowledge the benefits of devices and social media when it comes to their children connecting with friends and family via messaging and video chats, parents have also voiced their concerns about the limits of virtual connectivity in maintaining solid relationships. For such reasons, parents in previous studies have shared similar feelings to the mothers in this study with regards to wanting their children to engage and connect with their "real" friends in person whether through play dates, social gatherings, sports, or extracurricular activities (Patra et al., 2021).

Both parents and teachers interviewed in the present study argued that the use of handheld devices had an impact on preteens' levels of self-regulation and their ability to focus on tasks. Ali voiced her concern about preteens "not knowing how to be bored" and always being "zoned out" while Laura, Jon's mother, shared with me that with the tablet around during homework time, Jon had too much stimulation; when the tablet was removed during homework time, Jon's grades went up. Teachers noticed similar behaviors amongst preteens in the classroom. Consistent with previous studies which have investigated teenagers' digital distraction and the use of devices during homework (Mrazek et al., 2021), Tammy discussed how her students become easily distracted and off-task if left with devices. She explained that she must remove as many distractions as possible by locking the iPads on the task at hand and covering up the search engines so students are unable to leave the assigned activity. While teenagers reported using their phones during homework either to look up information, overcome

boredom, make homework more enjoyable, and to stay connected with friends, Mrazek et al. (2021) found that more than half of these teenagers admitted that smartphones also interfered with homework, making it difficult to concentrate and stay on task. Such beliefs coincide with parents' perspectives regarding children's use of devices during homework time, that when children have their devices during homework, they are more likely to chat with friends than concentrate on their homework (Patra et al., 2021). It is worth noting that parents and teachers have also reported acknowledging the benefits of social media and online platforms to collaborate with peers in addition to sharing class assignments and notes (Patra et al., 2021). This is corroborated by Tammy's discussion regarding the advantages of online platforms such as Google Classroom. Precisely, Tammy noted that she will post PDFs and screenshots of work completed in class to make it accessible to students at home. Moreover, she mentioned how Google classroom facilitates group work and allows for her students to collaborate and work on projects virtually.

Research has shown that adults' conceptualizations about childhood greatly influence how they will perceive children's use of handheld devices (Chang-Kredl & Kozak, 2018). Four common constructions of children are often discussed in sociological studies: the child as innocent, weak or passive; the child as evil or a threat; the child as a future adult; and finally, the child as agent, actively interacting with the world (Chang-Kredl & Kozak, 2018). In Chang-Kredl and Kozak's (2018) research, teachers who perceived the child as a future adult believed that the child needed to be "taught" empathy and that social media was a great resource for initiating class discussions regarding positive and negative behaviors. The need to be "taught" was also discussed by both parents and teachers in the present study as they believed it was their responsibility to "educate" preteens on the use of handheld devices through modeling and

meaningful discussions. Adults who perceive the child as agent believe that social media and other online platforms offer rich opportunities for children to work collaboratively and access global information (Chang-Kredl & Kozak, 2018). In the present study, Tammy mentioned children collaboratively working together on school projects using Google classroom. Moreover, she mentioned how some children will use the online platform to review work or catch up on work that was completed in the classroom. In this example, the child shows agency for his or her own learning. Finally, both parents and teachers mentioned how they believed it was their responsibility to "control," "regulate," and "educate" children's use of devices. Parents assumed the responsibility of limiting their children's use of handheld devices while teachers mostly discussed controlling students' use of devices using special features in addition to having discussions about digital media. When discussing children and teenagers' use of devices, it is not uncommon for adults to use a protectionist approach and feel responsible for the child's safety and learning (Chang-Kredl & Kozak, 2018).

Conclusion

Limitations

The present study had limitations. For one, given the small sample size and sampling method, findings cannot be generalized to all preteens. In my study, I included both genders (9 and 11 years old) and they both owned and engaged with a tablet; however, they did not have their own social media account. Although both participants were able to discuss some of the effects of social media perhaps due to conversations they have had with adults or peers, they were unable to refer to personal experiences when sharing their opinions on the matter. The sample also consisted of mothers only. Obtaining fathers' perspectives on preteens' use of devices would have also resulted in interesting and potentially differing findings. Finally, a

larger sample size may have included teachers with various years of experiences. Preservice teachers who are at the beginning of their teaching career, for example, were born in the same digital era as the students they are teaching thus may have a similar experience with devices and social media.

Future Directions for Research

My study's findings illustrate how preteens and teens seem to be able to recognize both the positive and negative components of handheld devices and how these devices may impact people in general. Future research might explore the extent to which children develop such thoughts and feelings about the impact of handheld devices on their own compared to how much they are influenced by the opinions of significant adults or peers.

Neither of the participants in the present study had their own social media accounts but mentioned using TikTok, Instagram, and Facebook through their mothers' accounts. Therefore, their thoughts and feelings about social media were entirely based on co-viewing in addition to class discussions about media use. It would be interesting to replicate this study with preteens who have their own social media account and use it independently. Comparing children's social media experiences in light of differing levels of parental supervision could also provide insights on approaches to parenting teens and preteens in this digital world.

Finally, feeling "left out" for not having access to devices or popular apps and games was brought up in each set of interviews: preteens, parents, teachers. Parents and teachers worried about children without the technology feeling "ostracized" or being excluded from conversations and "cliques". Parents in this study also admitted parenting being "challenging" and second-guessing themselves for wanting to regulate screen time in the home while being aware that their

children's friends were on their devices. For such reasons, further research on teens and preteens who have limited or no access to devices and popular apps in this digital world is needed.

Implications

It is important that we develop rich and authentic media literacy programs to enhance children's media habits and awareness in addition to supporting them in becoming critical and resilient users of media. I believe that media literacy should be at the forefront of the education system considering that today's children are born and raised while surrounded by devices and media. Media literacy education, including conversations about the use of devices and social media platforms is slowly seeping into Quebec classrooms but is often done informally by teachers. Both my child participant, Mia, and her teacher, Tammy, explained how it was part of the school's curriculum to discuss how to navigate online safely. Although Tammy claimed that was "part of the curriculum," she also mentioned "[discussing] as [conflicts] came up" thus bringing myself to wonder if teachers solely discuss media use when conflicts arise or if teachers have structured lessons to teach students about the digital world in the same way they treat other subjects. This type of instruction would likely benefit children; research demonstrates that the amount of time children spend on media does not predict children's critical understanding of media (Fernandes et al. 2022). However, Fernandes et al, (2022) found a significant correlation between media literacy education in the classroom and children's global media literacy competence. Such competences included the ability to analyze and interact with media in addition to their expression and production skills. Teachers and educators play an important role in the development of media literacy in children. School-wide training for teachers on how to properly incorporate media literacy in the classroom is essential.

In this present study, parents and teachers discussed how handheld devices impacted preteens socially and academically but did not address children's physical and emotional well-being. As noted, this is consistent with previous research studying parents' perspectives on their children's use of social media (Patra et al., 2021). It is surprising that children's emotional health is not given more attention considering that social media is suspected to be a possible explanation for the rise in youth hospitalization due to mental health (Canadian Institute for Health Information, 2022). Previous research has also found a correlation between social media use and feelings of anxiety and depression amongst teenagers (Woods & Scott, 2016).

Specifically, children and teenagers who spend increased amounts of screen time and social media use are significantly more likely to experience feelings of anxiety and depression (West et al, 2021; Woods & Scott, 2016; Twenge & Campbell, 2018).

Although discussed by one of my child participants, parents and teachers did not voice any concerns regarding how the use of devices may also impact children's sleep. Previous studies have also found that excessive use of devices and social media, especially before bedtime, impacts adolescents' quality and duration of sleep (West et al., 2021; Woods & Scott, 2016). Research on the impact of devices and social media use on children and adolescents' emotional and physical health illustrates the necessity for parents to be made aware so they can in turn keep a keen eye on their children's use of devices, sleep patterns and general behaviors and perhaps raise the topic of devices and emotional and physical health in discussion.

Finally, including older students in media literacy education has been shown to be an effective way to transmit information to the younger population (Charmaraman et al., 2022). While adults are more likely to discuss online privacy and fake news, teenagers, girls especially, are significantly more likely to discuss hate speech, and how to manage drama, self-comparison

and self-esteem issues with their peers. Such findings illustrate how adults are not the only source of support and guidance for promoting children with healthy and positive online experiences.

In conclusion, the goal of this study was to better understand ways preteens engage with handheld devices and social media in addition to how preteens, parents, and teachers perceive the impact of devices and social media on preteens' social, emotional, and physical well-being. The following study allowed for thorough and close exploration of two preteens' perspectives provided that they were encouraged to share their thoughts and experiences through various mediums (interviews and booklet). Moreover, the use of case studies allowed for me to capture the perspective of preteens, parents and teachers all at once, contributing to previous research on the role devices and social media play on preteens' well-being. Participants in my study described their use of devices as being limited during the week and a bit more laxed during the weekend. Both participants expressed using their devices mostly to play games and as a way to stay connected with friends and family. When sharing their perceptions on the impact of devices, preteens focused on the influence of devices on their social, emotional, and physical well-being. Devices were especially important for Jon to socialize with his friends and stay in contact with family out of the country. Chatting and playing games seemed to evoke both positive and negative feelings depending on the topic of discussion and the game at hand for both participants. Moreover, findings demonstrated how preteens can feel "left out" if they do not have access to the games or apps played by the majority of their friends or classmates and can also experience feeling hurt by other people's negative comments on social media platforms. The present study also demonstrated how preteens can recognize when they are "wasting their time" on their devices and could be doing something "more productive." Preteens also tend to refer to

people being "addicted" to their devices for watching videos and aimlessly scrolling on social media in addition to continuously talking about the games they are playing. Finally, the present study supported previous research on how excessive use of handheld devices and social media may interfere with sleep and academic performance.

Both parents and teachers in the present study expressed how they felt it was their responsibility to support preteens in adopting healthy habits and practices using handheld devices. They believed this could be done through modeling, progressive exposure, and discussions. Methods such as limiting their children's use or students' access to websites were explained further during the interviews. Moreover, both parents and teachers addressed the role of devices on preteens' social and self-regulation skills. Concerns regarding the use of devices negatively impacting preteens' socialization were communicated during the interviews. Parents voiced the desire for their preteens to communicate and interact with other people without devices being the centre of conversation. Both parents also expressed their concern regarding devices resulting in preteens being overstimulated, distracted and not knowing how to be bored. Finally, teachers shared their observations of cliques being created due to social media and online games resulting to children being put apart or ostracized.

I am hopeful that such research will raise awareness and entice parents and teachers to engage in meaningful conversations with the children under their care regarding the use of devices and its impact on their overall well-being. Furthermore, I hope that school-wide initiatives will be put in place to support our future generation in becoming wise and critical users of media.

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Appendix A

Interview Protocol: Child Participant

Interviewer : Bianca Doheney	Interviewee : child (ages 9-12)	
Date: TBD	Time: 30-45 minutes	

Introduction: Hello, my name is Bianca and I am interested in better understanding how preteens engage with handheld devices and how they perceive handheld devices and the social, emotional, and physical impact they might have. In this interview, I encourage you to voice your experience, perspectives, thoughts, and feelings about handheld devices. Perhaps with a better understanding of handheld devices and the impact they have on preteens, we can be better equipped in creating well-developed and appropriate programs to enhance children's media literacy habits and awareness.

The following interview will last between 30 and 45 minutes. We will go over the interview questions that I have prepared for this interview; except the questions are meant to be used as a guide. If there is anything you wish to share on the topic of handheld devices and youth, feel free to share at any time.

Do you have any questions, comments, or concerns before we begin?

If you have any questions or concerns at any point during the interview, you can always stop me.

Let's get started with a few warmup questions:

- 1. Do you own any handheld devices? If yes, what type of devices do you own personally and what type of devices do you have in your home?
- 2. Describe the type of activities you enjoy doing on your handheld devices. (Probe: can you think of an (other) example?
- 3. Describe activities you enjoy doing less on your handheld devices. (Probe: can you think of an (other) example?
- 4. On a typical day, how often do you use your handheld devices. When during the day are you more likely to use them? Why that time?
- 5. Describe how you feel when you are using handheld devices.
- 6. How do you think handheld devices impact children your age? (Probe: why do you think that?)
- 7. Describe how the world would be different without handheld devices.

More probes:

- 1. Can you think of an (other) example?
- 2. What do you like/dislike about it?
- 3. Tell me more about...
- 4. Can you think of an (other) example?
- 5. What do you like/dislike about it?
- 6. Tell me more about...
- 7. Can you explain that?
- 8. How does that make you feel?
- 9. Why did/would you do that?
- 10. Why would you choose that?
- 11. I would like to hear more about...

Appendix B

Interview Protocol: Parent

Interviewer : Bianca Doheney	Interviewee: child participant's parent
Date : TBD	Time: 30-45 minutes

Introduction: Hello, my name is Bianca and I am interested in better understanding how preteens engage with handheld devices and how they perceive handheld devices and the social, emotional, and physical impact they might have. In this interview, I encourage you to voice your experience, perspectives, thoughts, and feelings about handheld devices. Perhaps with a better understanding of handheld devices and the impact they have on preteens, we can be better equipped in creating well-developed and appropriate programs to enhance children's media literacy habits and awareness.

The following interview will last approximately 30-45 minutes. We will go over the interview questions that I have prepared for this interview; except the questions are meant to be used as a guide. If there is anything you wish to share on the topic of handheld devices and youth, feel free to share at any time.

Do you have any questions, comments, or concerns before we begin?

If you have any questions or concerns at any point during the interview, you can always stop me.

Let's get started with a few warmup questions:

- 1. Do you own any handheld devices. If yes, what type of devices do you own personally and what type of devices do you have in your home?
- 2. Describe the type of activities you enjoy doing on your handheld devices.
- 3. Describe how you feel about the use of handheld devices in general.
- 4. How do you think handheld devices impact your child and other preteens? (Probe: why do you think that?)
- 5. How do you think handheld devices impact the family?
- 6. How does it feel to parent in this digital world? (Probe: why do you feel this way?)

More probes:

- 12. Can you think of an (other) example?
- 13. What do you like/dislike about it?
- 14. Tell me more about...
- 15. Can you think of an (other) example?
- 16. What do you like/dislike about it?
- 17. Tell me more about...
- 18. Can you explain that?
- 19. How does that make you feel?
- 20. Why did/would you do that?
- 21. Why would you choose that?
- 22. I would like to hear more about...

Appendix C

Interview Protocol: Teacher

Interviewer : Bianca Doheney	Interviewee: child participant's teacher	
Date : TBD	Time: 30-45 minutes	

Introduction: Hello, my name is Bianca and I am interested better understanding how preteens engage with handheld devices and how they perceive handheld devices and the social, emotional, and physical impact they might have In this interview, I encourage you to voice your experience, perspectives, thoughts, and feelings about handheld devices. Perhaps with a better understanding of handheld devices and the impact they have on preteens, we can be better equipped in creating well-developed and appropriate programs to enhance children's media literacy habits and awareness.

The following interview will last approximately 30-45 minutes. We will go over the interview questions that I have prepared for this interview; except the questions are meant to be used as a guide. If there is anything you wish to share on the topic of handheld devices and youth, feel free to share at any time.

Do you have any questions, comments, or concerns before we begin?

If you have any questions or concerns at any point during the interview, you can always stop me.

- 1. Do you have any handheld devices in the classroom. If yes, what type of devices are students allowed to engage with?
- 2. Describe how you feel about the use of handheld devices in general.
- 3. Describe how you feel about your students using handheld devices.
- 4. How do you think handheld devices impact your students and other preteens in general? (Probe: why do you think that?)
- 5. How do you think handheld devices impact your students' experience in the classroom?
- 6. How does it feel to teach in this digital world? (Probe: why do you feel this way?)

More probes:

- 23. Can you think of an (other) example?
- 24. What do you like/dislike about it?
- 25. Tell me more about...
- 26. Can you think of an (other) example?
- 27. What do you like/dislike about it?
- 28. Tell me more about...
- 29. Can you explain that?
- 30. How does that make you feel?
- 31. Why did/would you do that?
- 32. Why would you choose that?
- 33. I would like to hear more about...

Appendix D

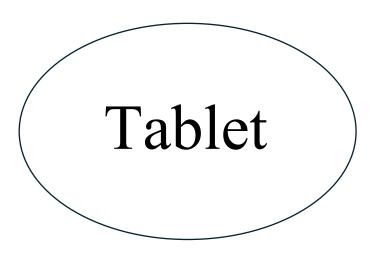
"Me in a World of Device" Booklet

Me in a World of Devices

Word Web: Tablet

Guidelines: Create a word web with the following word: tablet

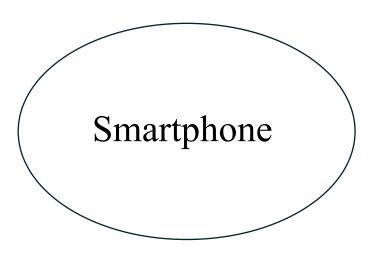
Attach any word, phrases, drawing or sentence that makes you think of the word *tablet*. Words can include synonyms, antonyms, definitions, examples, non-examples, feelings etc.



Word Web: Smartphone

Guidelines: Create a word web with the following word: *smartphone*

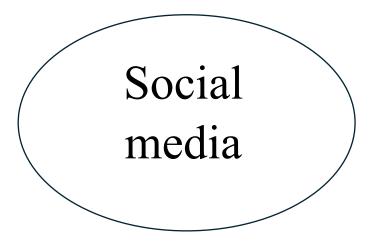
Attach any word, phrases, drawing or sentence that makes you think of the word *smartphone*. Words can include synonyms, antonyms, definitions, examples, non-examples, feelings etc.



Word Web: Social Media

Guidelines: Create a word web with the following word: social media

Attach any word, phrases, drawing or sentence that makes you think of the word *social media*. Words can include synonyms, antonyms, definitions, examples, non-examples, feelings etc.



Devices and the Family

Free writing guidelines: This is your time to be creative. You can use any form of writing or art to express your thoughts about *devices and the family*. You can journal your thoughts, draw a picture, write a story, comic strip, or a poem etc.

Devices and Sleep

Free writing guidelines: This is your time to be creative. You can use any form of writing or art to express your thoughts about *devices and sleep*. You can journal your thoughts, draw a picture, write a story, comic strip, or a poem etc.

Devices and School

Free writing guidelines: This is your time to be creative. You can use any form of writing or art to express your thoughts about *devices and school*. You can journal your thoughts, draw a picture, write a story, comic strip, or a poem etc.

Devices and Friends

Free writing guidelines: This is your time to be creative. You can use any form of writing or art to express your thoughts about *devices and friends*. You can journal your thoughts, draw a picture, write a story, comic strip, or a poem etc.

Would You Rather

Would you Rather instructions: Read the two statements and circle the one you would rather do. If you wish to elaborate on your answer, you can do so in the comment section next to the two statements.

Would you rather		Comments
Watch videos on	Create videos for	
YouTube	your YouTube	
	channel	
Receive 100 likes on a	Receive 100	
picture you posted on	comments on a	
Instagram	picture you	
	posted on	
	Instagram	
Watch television	Watch videos on	
	YouTube	
Play solo games on a	Video chat with	
tablet	your friends	
Make your own digital	Look at people's	
art	art on social	
	media	
Write something on	Read what other	
your device (story,	people are	
diary, blog, poem)	posting.	
Watch videos on how	Scroll on social	
to learn a new skill	media platforms	
(e.g., baking)	such as Instagram	

1

¹ Would You Rather statements were inspired from the questionnaire of the following report: *Teens and mental health: How girls really feel about social media.* Nesi et al. (2023). Common Sense Media.

Fill-in-the-Blanks

Fill-in-the-Blanks instructions: Write the first word that comes to mind to complete the following statements.

1.	I feel	when I am browsing on	YouTube.
2.	I feel	when I am chatting with	my friends on my
	device.		
3.	I wish I could do	on my devic	e.
4.	I am happy when using my	(h	andheld device) to
	·		
5.	I can feel sad or upset when usi	ng my	(handheld
	device) to	•	
6.	All children my age should own	1 a	to do
	<u> </u>		
7.	Children should own a handhele	d device at the age of	•

True or False

True or False instructions: Read the following statements and circle T if you think it is true and F if it does not apply to you.

Using handheld devices before bedtimes sometimes keeps me from	
sleeping.	
I sometimes feel upset after using my handheld devices.	T or F
I feel more connected to my friends after using my handheld devices.	T or F
I feel pressure to respond to my friends right away.	T or F
When on my handheld devices, sometimes I feel left out.	T or F
I see inappropriate content while I am engaging with my handheld	
device.	
I see things that upset me while I am engaging with my handheld	
device.	
I see positive and happy things when engaging with my handheld	T or F
devices.	
All children my age should own a smartphone	T or F
Children my age should own a tablet	
2	

² The following Fill-in-the-Blanks and True or False statements were inspired from findings of the following studies: *Teens and mental health: How girls really feel about social media.* Nesi et al. (2023). Common Sense Media. *Social media and adolescent mental health: the good, the bad and the ugly.* O'Reilly, M. (2020). Journal of Mental Health

My Top 5s

Top 5 instructions: List your top five, #1 being what you like doing best.

Top 5 things to do on my tablet...

- 1.
- 2.
- 3.
- 4.
- 5.

Top 5 things to do on my smartphone...

- 1.
- 2.
- 3.
- 4.
- 5.

Content Creation

Final Project: If you have any content you have created and/or uploaded on social media and you are willing to share, I would love to see your creations. If you are not willing to share, you also have the option to describe what you have created or uploaded on your social media account(s)

Appendix E

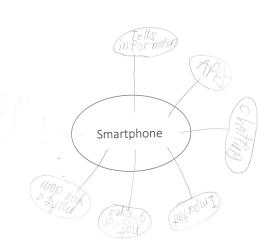
"Me in a World of Device" Booklet Answers: Jon

Me in a World of Devices

Word Web: Smartphone

Instructions: Create a word web with the following word: smartphone

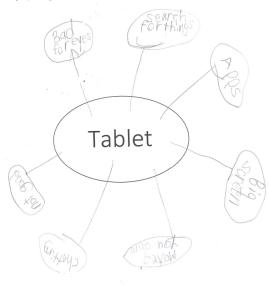
Attach any word, phrases, drawing or sentence that makes you think of the word smartphone. Words can include synonyms, antonyms, definitions, examples, nonexamples, feelings etc.



Word Web: Tablet

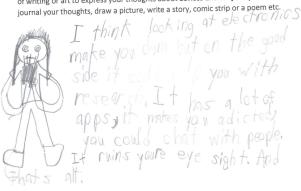
Instructions: Create a word web with the following word: tablet

Attach any word, phrases, drawing or sentence that makes you think of the word tablet. Words can include synonyms, antonyms, definitions, examples, nonexamples, feelings etc.



Devices and the Family

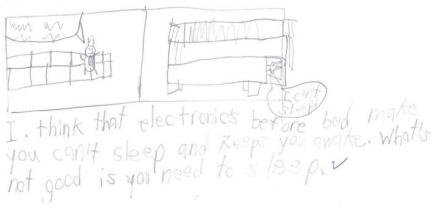
Free expression instructions: This is your time to be creative. You can use any form of writing or art to express your thoughts about devices and the family. You can



how does it make you dum? Why would you think that?

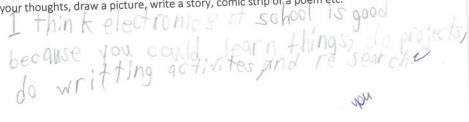
Devices and Sleep

Free expression instructions: This is your time to be creative. You can use any form of writing or art to express your thoughts about *devices and sleep*. You can journal your thoughts, draw a picture, write a story, comic strip or a poem etc.



Devices and School

Free expression instructions: This is your time to be creative. You can use any form of writing or art to express your thoughts about *devices and school*. You can journal your thoughts, draw a picture, write a story, comic strip or a poem etc.



Devices and Friends

Free expression instructions: This is your time to be creative. You can use any form of writing or art to express your thoughts about *devices and friends*. You can journal your thoughts, draw a picture, write a story, comic strip or a poem etc.

With your device lots of kids that play games online would mostly like playing with there friends or triend.

Would You Rather

Would you Rather instructions: Read the two statements and circle the one you would rather do. If you wish to elaborate on your answer, you can do so in the comment section next to the two statements.

Would you rather		Comments
Watch videos on	Create videos for	
YouTube	your YouTube	
	channel	
Receive 100 likes on	Receive 100	So people like
a picture you	comments on a	alatina V
posted on	picture you posted	my picture.
Instagram	on Instagram	, ,
Watch television	Watch videos on	
	YouTube	
Play solo games on	Video chat with	
a tablet	your friends	
Make your own	Look at people's	
digital art	art on social	
	media	
Write something on	Read what other	
your device (story,	people are	
diary, blog, poem)	posting.	
Watch videos on	Scroll on social	
how to learn a new	media platforms	
skill (e.g. baking)	such as Instagram	

My Top 5s

Top 5 instructions: List your top five, #1 being what you like doing best.

Top 5 things to do on my tablet...

1. playing game	S
-----------------	---

- 2. Picture
- 3. Song 5

Top 5 things to do on my smartphone...

- 1. Chat

Fill-in-the-Blanks

Fill-in-the-Blanks instructions: Write the first word that comes to mind to complete the following statements.

1. I feel 2. I feel 2. I feel 3. I f	when I am browsing on YouTube. when I am chatting with my friends on my
device. 3. I wish I could do	on my device. (handheld device) to
4. I am happy when using my	(nandreid device) to
5. I can feel sad or upset whe	Olas a t
device) to	/

6. All children my age should own a _

7. Children should own a handheld device at the age of _

True or False

True or False instructions: Read the following statements and circle T if you think it is true and F if it does not apply to you.

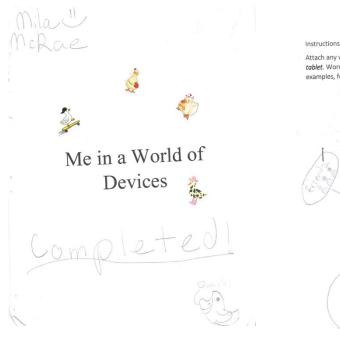
Using handheld devices before bedtimes sometimes keeps me from	T or F
sleeping.	T or F
I sometimes feel upset after using my handheld devices.	
I feel more connected to my friends after using my handheld devices.	T or (F)
I feel pressure to respond to my friends right away.	T or F
When on my handheld devices, sometimes I feel left out.	T or F
l see inappropriate content while I am engaging with my handheid	
I see things that upset me while I am engaging with my handheld device.	T or F
I see positive and happy things when engaging with my handheld devices.	T or F
All children my age should own a smartphone	T or
Children my age should own a tablet	T or F

Content Creation

Final Project: If you have any content you have created and/or uploaded on social media and you are willing to share, I would love to see your creations. If you are not willing to share, you also have the option to describe what you have created or uploaded on your social media account(s).

Appendix F

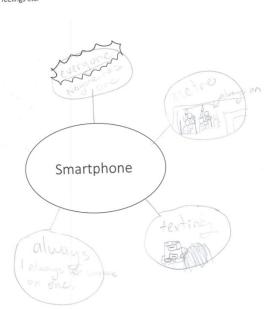
"Me in a World of Device" Booklet Answers: Mia



Word Web: Smartphone

Instructions: Create a word web with the following word: smartphone

Attach any word, phrases, drawing or sentence that makes you think of the word smartphone. Words can include synonyms, antonyms, definitions, examples, nonexamples, feelings etc.

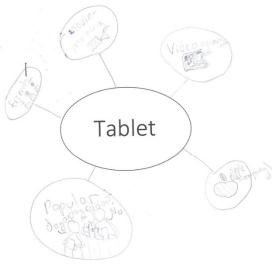


Word Web: Tablet

Instructions: Create a word web with the following word: tablet

0

Attach any word, phrases, drawing or sentence that makes you think of the word *tablet*. Words can include synonyms, antonyms, definitions, examples, non-examples, feelings etc.



Word Web: Social Media

Instructions: Create a word web with the following word: social media

Attach any word, phrases, drawing or sentence that makes you think of the word social media. Words can include synonyms, antonyms, definitions, examples, non-examples, feelings etc.



Devices and the Family

Free expression instructions: This is your time to be creative. You can use any form of writing or art to express your thoughts about *devices and the family*. You can journal your thoughts, draw a picture, write a story, comic strip or a poem etc.



Devices and Sleep

Free expression instructions: This is your time to be creative. You can use any form of writing or art to express your thoughts about *devices and sleep*. You can journal your thoughts, draw a picture, write a story, comic strip or a poem etc.

Vsually I watch or spend screen
time 1-2h per day unless I have
homework or chores. I alway
read for at least 30-45 mins
before bed. On week days and
weekends. Then I go to bed at
Weekends. Then I go to bed at
8:00 pm and wake up at 6:00
to go to bed at 8:30
for go to bed at 8:30
Sleep then wake up at 6:00 pm
Pead until 7:50-8:00 pm
Pead until 7:50-8:00 pm
Pead until 7:50-8:00 pm

Devices and Friends

Free expression instructions: This is your time to be creative. You can use any form of writing or art to express your thoughts about *devices and friends*. You can journal your thoughts, draw a picture, write a story, comic strip or a poem etc.

Would You Rather

Would you Rather instructions: Read the two statements and circle the one you would rather do. If you wish to elaborate on your answer, you can do so in the comment section next to the two statements.

Would you rather		Comments
Watch videos on	Create videos for	I like to make stop-motion
YouTube	your YouTube	moviesal would post
	channel	those for other people to see.
Receive 100 likes on	Receive 100	some people write obraviosing
a picture you	comments on a	company 1 1 - n 1 + n Ped To
posted on	picture you posted	Commune 1 don
Instagram	on Instagram	know others opinions.
Watch television	Watch videos on	I prefer television, I am not
	YouTube	allowed browsing an inou our ways
Play solo games on	Video chat with	it depends what I seel is a
a tablet	your friends	like Joing of the mandet taking
Make your own	Look at people's	If had jost come oucle trois with any
digital art	art on social	I like reating movies. Friends +
	media	I'M plag
Write something on	Read what other	1 don't do either, 50 agame
your device (story,	people are	1) - 1 know.
diary, blog, poem)	posting.	1001
Watch videos on	Scroll on social	Learning skills is more
how to learn a new	media platforms	venificial them just seems
skill (e.g. baking)	such as Instagram	what others are doing.
	V	Jan Jan Jan

Fill-in-the-Blanks

ill-in-the-Blanks instructions: Write the first word that comes to mind to complete he following statements. 1. I feel when I am browsing on YouTube. when I am chatting with my friends on my Cree.
1. I feel when I am browsing on YouTube. musel ecause it
2. I feel when I am chatting with my friends on my
device.
3 Lwish Louild do on my device.
4. Lam happy when using my 400t (handheld device) to
make worked or paring video against.
5. I can feel sad or upset when using my (handheld
device) to to do
school was flagged and lavided a la Cre
6. All children my age should own a to do Children should own a handheld device at the age of
True or False (google trouble)
True or False (google the onl
- Lite of Heaving attendants and circle T if you think it

for educations raise se (google cosmon) True or False instructions: Read the following statements and circle T if you think it is true and F if it does not apply to you. Using handheld devices before bedtimes sometimes keeps me from T or F sleeping. I sometimes feel upset after using my handheld devices. T or E I feel more connected to my friends after using my handheld devices. T or (E) T or ® I feel pressure to respond to my friends right away. When on my handheld devices, sometimes I feel left out. T or E I see inappropriate content while I am engaging with my handheld T or F I see things that upset me while I am engaging with my handheld T or(F) device. Some times I see the count on gamed bever use I see positive and happy things when engaging with my handheld T) or F devices. All children my age should own a smartphone loon to but I have gut Children my age should own a tablet everyone of ready does, but now only really need it for school

My Top 5s

Top 5 instructions: List your top five, #1 being what you like doing best.

Top 5 things to do on my tablet...

1. Stopmotion films

2. Listen to music

3. May video games () get bored after a while though...)

4. Message my friends on Messenger Lids

5. Google things I'm our ious about (Tike aqueston or definition of a word loon to know)

Top 5 things to do on my smartphone... I don't have one

Content Creation

Final Project: If you have any content you have created and/or uploaded on social media and you are willing to share, I would love to see your creations. If you are not willing to share, you also have the option to describe what you have created or uploaded on your social media account(s).

have made about 20 stop-motion films legal stuffed animals / friends. · Randon trinlects don't post any thing recause, I am not able and I don't want to. I like making it for myself.

Appendix G

Interview Transcripts

Interview transcript 1

Interviewer: B Child 1: Jon * *Pseudonyms

PART I

B: Our first question is: Do you own any handheld devices?

J: I do...a tablet and a phone.

B: Do you have both devices in your home, accessible at any time?

J: No anything, usually like sometimes but mostly on the weekends I am free but not on the week that much.

B: Number 2: Describe the type of activities you enjoy doing on your handheld devices.

J: Sometimes on my tablet I usually play games, or sometimes I take photos of me. And on my phone, I will text message on Messenger kids, or I would do um...usually that's all.

B: Okay perfect! Can you explain the games you play? What types of games do you like to play?

J: Well sometimes I play Roblox, sometimes I play um those word games, sometimes I play chess because I am not sure where my chess board went. Um, and sometimes I play like... I get bored and just go find a game on ...you know... maybe I just download one game and that is what I am going to stay on if I'm bored.

B: Perfect, awesome! And you mentioned taking pictures of yourself. Is it on special occasions?

J: Sometimes I take videos of people, that um like friends. I took a video not long ago with my tablet hiding under a blanket uh pillow and the camera looking, and I would just check what my brother and his friends because they were not letting me see what they were doing. So, when they opened the door, I just looked at the footage and I saw everything.

B: Mmmm, interesting – perfect. So, these are the activities you enjoy doing on your devices – awesome.

B: Number 3: Describe activities you enjoy doing less on your handheld devices. Are there there things you are not a fan of doing.

J: I am not a fan of doing like. I am not sure what I have been seeing that much but like sometimes I don't like wanna like do this kind of game. Sometimes I just don't like, I just take photos or look at my text messages. Sometimes I get like ... wait what is the question?

B: Number two is what you enjoy doing and now the question is what you don't enjoy doing on your devices.

J: Oh, so sometimes I would go on like Roblox and there are not really good things that I like, that I see. So, usually I would just get off and wait until there was.

B: What do you mean by there are not good things that I see? Can you explain that.

J: Like sorry... because you probably don't know the game.

B: No

J: So, it is like an app that there is a bunch of games on it that people create and so then you play it and then some of them are not that good cause their rate that is maybe a 63% that not a lot of like it, 83, 90, stuff like that. Do you understand?

B: Yeah! So if it is a low percentage, do you still try it?

J: Usually, I basically know because when I was younger I used to just look at every game and I would be like, "Aww, this is taking forever, none of them are working!" So I would just get off and do something else. So that's what sometimes... it's like 50/50 Roblox.

B: So if there are no games on Roblox that are interesting to you, you will go do something else? And go back later if something new came up?

J: Yes, the next day.

B: Okay, perfect! Interesting! Moving on to questions four: On a typical day, how often do you use your handheld devices.

J: Sometimes in the week it's normally 20-30 minutes max in the week. Um, on the weekend usually I would do with my dad sometimes and have some fun sometimes I just do game and then my brother says, "Do you want to play video games?" And I just go play with him and it's usually more free with video games or handheld devices on the weekend.

B: Ok, so you can play longer during the weekend?

J: ye!

B: When during the day are you more likely to use them? What time?

J: Well, I don't use it in the morning because in the morning I am all tired, depends the kind of game. Some games for me are like solving some of the games are ... I am just gonna tell you one game that I have on my Nintendo Switch. You know what Zelda is?

B: Yes!

J: You do?

B: I used to play Zelda

J: Umm... the new one uh I just, there is a lot of solving so I don't play in the morning. I usually play close to like maybe 11 on the weekend, 12. In the week, I have school so I obviously can't play in the middle of the day. I will play mostly at night. Or maybe 5 before supper and then for the rest of the night we watch a movie or something.

B: So you are going to play after school? What about before bed?

J: No... I don't usually play before bed because I just want to fall asleep. I used to play at night and then I would never go to bed. I count the sheeps. I couldn't go to bed, I couldn't sleep. So I stopped and I just play now, stuff like that.

B: Can you tell me more about that? You used to play before bed and ...

J: Yeah, but then I used to not sleep and the next day for school I would get silly mistakes because I was like tired. And now I am fine. I just look at my mistakes again. I don't have as many mistakes as I used to have. So now I also stopped a lot cause I used to play a lot in the week but then I am like, you know what there is no point. I just feel less comfortable. I just get tired, I feel lazy so I just stopped.

B: So you chose to stop because you realized that you were tired the next day at school?

J: And I would get really lazy, that's what I find. And I wouldn't want to play games. But now you know, my brother says, "Want to play this with me?" And I am like, "Sure. Why not!"

B: But before you wouldn't play games with your brother?

J: No... I would play like on my tablet. But now I am fine. I just chill and different stuff.

B: Interesting! Now Describe how you feel when you are using handheld devices.

- J: Okay! Now that you said it, cause when someone says it I just feel more comfortable and now yeah. But now since I talked, I forgot what you said.
- B: It's fine. How do you feel... describe how you feel when you're using a device. So, when you are playing games, taking pictures, texting your friends, how do you feel?
- J: I feel happy sometimes excited.
- B: You said sometimes. So, what are you doing on your device that makes you feel excited?
- J: Sometimes I text my friends saying compliments or I am excited because they ask to play and we form playdates and so that's the times I usually feel excited. Sometimes I am happy because um on Roblox there are different people that I could with on it. It's pretty weird but I figured it out when I was maybe 7 or 8 because... when I was younger, I use to never play on the tablet. I didn't even have a tablet or a phone. I used to just watch TV or play what my stuff and usually I would play on my dad's ... I would ask my dad, "Can I go play downstairs with your old Nintendo. Old old old from when he was a kid." We used to play Mario Kart on that thing. And that's all I would do when I was younger but now, I just do this stuff and I am happy with the stuff like some games. But mostly text messages.
- B: That is interesting, so you are mostly happy and excited when you are texting or messaging.
- J: Sometimes I am happy when I am playing a game with someone else. Cause um on Roblox you can have different friends playing with you. That's when I am happy. I am more happy, mostly happy and excited when I am text messaging.
- B: That is interesting! Why do you think you are the happiest or most excited when you playing or texting someone else?
- J: Well because I like playing with people because you know they're my friends and I do stuff with them, I don't know how to explain. It's just like fun for me.
- B: Fun playing with your friends. Absolutely!
- J: Yeah! Everyone likes playing with their friends.
- B: Absolutely! And then usually you plan a playdate, so after you meet up and play together or is it a playdate to play on Roblox or online game?
- J: No, a playdate to play together.
- B: So, you use your device to also plan playdates.
- J: Yeah, or else I would have to go to his house and tell him and come back. It's like costing more money for the gas and so with this technology it is good but also bad for me.
- B: Would you like to elaborate on that? Why do you think it is good and what do you think it is bad?
- J: I think it's bad because it makes you lazy and then you never want to stop playing because you get addicted and then the good side is you get to talk to each other from far. Like I call my cousin that's in Punta Cana right now. Um, he left me two years ago. I was really sad because he moved there and so now, we just talk to him on the phone. And usually, it's like every week that we talk to him. Sometimes it's most of the week. And every summer he comes for the summer so he comes and I can't wait for him to come this summer. He's coming for a month this summer.
- B: That's awesome. You get to see him. Do you se Facetime, Zoom...
- J: Usually, it's on the apps. I forgot what it's called.
- B: WhatsApp?
- J: Yeah, WhatsApp.

- B: Okay, so that is interesting. You like the connection and conversation...
- J: I like talking. Sometimes I don't really feel like talking cause some of my friend just non-stop talking so I just use text messages and say, "Uh, gotta go for supper."
- B: Oh, are you saying you prefer text messaging than calling?
- J: I am talking about sometimes I don't feel like calling but I mostly prefer calling. You know, I would prefer facing each other but like now you're talking about devices so with devices I prefer seeing their faces and seeing what they are doing instead of taking forever and well, what's he gonna say? On devices you wonder, "When is he going to say this and that." But on the thing, you are not pressing buttons you are just talking.
- B: That is interesting. I do not remember your exact words but you said something like preferring person-to-person?
- J: Yeah, like face-to-face like rather than going on the phone because I can't like hug him on the phone. It's just gonna touch the phone.
- B: So you prefer being physically with the person.
- J: Yeah, but right now we're talking about THIS so this I would rather instead of on um electronic. I would prefer looking at him like from the phone, like Facetime rather than texting him and waiting to see what he has to say.
- B: I get it! So the waiting that is argggg.
- J: Yeah, cause if they leave the text message to go text someone else or is he still there? So I am just wasting my time waiting here for this. Or am I just going to wait until he texts me?
- B: I see! So, when you want a quick answer, you would want to call. But texting if you are not in the mood to talk?
- J: So, if I'm waiting like 5 minutes even 2 minutes and you're not even answering anything I would just call and say, "aren't you texting me anymore?" and he would say, "Oh! I'm sorry. I forgot about you."
- J: What I mean by wasting time is that I want to play with my brother or maybe like make food with my mom, make some dinner or something like that. Sometimes I will make breakfast, just like when mom was sick. And stuff like that.
- B: So, if you are waiting for a text, you can't do all these things?
- J: Yeah
- B: And you mentioned something before. You said that you don't like that it makes you feel "addicted".
- J: Yeah, with the electronics, it makes you like addicted to it when you are like too much on it and that was the bad side. The good side is that you can do research and know some stuff and you can talk to each other.
- B: Is that a feeling that you have felt? Feeling like you "can't get off".
- J: Yeah, that's the good side, to talk to each other on like text messages or calling doing research and that's the two things I do and the other stuff like TikTok and just watching videos and then you watch more and want to watch more than you just don't want to get off.
- B: Has this ever happened to you?
- J: Yeah, um... because... it happened to my dad lots of times. He will go and do his number 2 and I am just waiting. And after that I will need to go to the bathroom and I was like, "Are you

done daddy?" And he's like, "Oh, sorry I am not done!" And he is still swiping. And so that's why I say that. Also, Facebook and stuff like that. You just look at it and get addicted to do.

B: So, are these things that happen to you, or you see it happen to other people?

J: I see it happening to sometimes my family. Sometimes it happens to me or like it used to happen to me. Just like I said, now I calmed down, so I don't do it as much.

B: So, this is how you felt when you use to use it? Feeling like you "couldn't stop".

J: Yeah

B: And now that you've stopped using, now you feel like...

J: I don't want to like, "Oh common, can I go on it now?" Or can I go right after lunch or 2 minutes after playing a game, "Can I go on it now?" But since I stopped, I am not like that. So yeah!

B: Interesting! Now how do you think handheld devices impact children your age?

J: Uh...[pause] how the game... not really the games. Really, I am not sure but if the games were for younger kids I would say the game obviously but for now um some girls usually my age probably go texting or playing on like Roblox. Lot of girls in my class play Roblox. Even lots of girls at my school play that game. So, I am assuming lots of girls play that game and text. Well, that's what I think for girls and for boy's um some boys text but most of the boys I know play like Fortnite and stuff like that. That's another thing, I am not talking about a phone. Some of my friends that are boy, they will play on tablets and stuff but most of them in my class play on like a PS5 or PS4 and they will just play Fortnite and um and stuff. Mostly Fortnite, that's all I hear from them. Well, I'm trying to get Fortnite on my Nintendo Switch, but I have an issue with my account so I'm still waiting. Honestly, my friends really like that game, and I am not gonna be like that. If I was like addicted to it, I probably wouldn't play it as much. But now I don't play as much.

B: Are you saying that you think your friends are addicted?

J: No! They are. I hear them every single day. EVERY single day. EVERY single day. I hear them talk about, "Ohhh... you know... about this thing and we'll play tonight together." Cause you know, it's an online game. You know about Fortnite?

B: Yes [laugh]

J: [laugh] They just want to play together. That's all they want to do. At recess they just talk to each other, "This thing is cool, it's legendary." And stuff like that. That's what I would hear, every single day. Before we go to recess, they just talk about it. While they're getting ready, they're talking about it.

B: How does that make you feel? Do you play?

J: I will start playing soon. Just like my dad said, he can't make an account. He said that to me. So, he'll probably take it to Zio Chris, he's an expert with computers. You said you are good at it too if I remember?

B: [laugh] My husband is better. If it's for creating an account.

J: If Zio Chris doesn't know, I will probably tell you if your husband is available for that.

B: Perfect.

J: And so, once we go to Zia Fella's and Zio Chris' house, we're going to probably tell Zio Chris to try and fix I or make an account.

B: Okay. And how do you feel about all your friends playing and you not being able to play yet? J: Uhm... I feel like ... well common I want to just play for once with my friends. Cause usually not most of them play Roblox so I'm not a lot with my friends. My best friend if cause he knows I have issues with Fortnite cause he asked me to play Fortnite once already but I said there is an issue so he said, "Ok, we can play Roblox." And so we play Roblox. And until I get Fortnite, I'm gonna call him and see if we can play together for once cause I never play with a friend on Fortnite. I have tried the game at a friend's house, but I've never played with my friends at the game.

B: On your account?

J: On my OWN account.

B: I get it. Okay, interesting!

J: I'm just really wanting to do it.

B: You said earlier that you used to play on your tablet before bed and it would make you tired

J: No, it would make me "awake"

B: Sorry, I meant make you tired the next day because the tablet would keep you awake. If you played Fortnite, when would you play?

J: Usually, I go to bed at 9:30 max, so I would play uhm ... 8:30 that would be the time I would stop, maximum that I would totally, like no more is 8:30 - 8:40 so that's he time that "no, no no, I'm not."

B: No tablets, no video games, no Smartphones...

J: Nothing! Not even looking at them.

B: Okay, to give your brain a break. Is that it?

J: So like if they ask me to play at 7:30 I would say, "okay, okay, we can play for an hour maybe." But usually Fortnite, I don't have like, they're rounds that could be very long, rounds that could be really short because you die fast. And so, depends on like, depends on what like how long it would take. If I would die a lot of times, I would tell my friends, "Okay dude, I'm dying lots of times let me try practicing another time and maybe see you later." Sometimes I would play at like 8 o'clock and he called me and said, "Wanna play?" Yeah, I can play for maybe like 25 minutes to half an hour so that's what I said. I would end up staying up until 8:30 and so like then 8:35 I'm like, "Okay dude! I have to stop playing because it is past my max." I was close to my max.

B: Are you the one who decided that at 8:30-8:35, you would be done.

J: Yeah, and I might've said I did that but that is what I am planning to do. I would say I they would say that. This is what I would do.

B: So, when you will have an account, this is what you plan to do?

J: Yeah!

B: Interesting! I like that you have a plan. Planning is always good.

B: This is actually the last question before we open it us to any other comments. Describe how the world would be different without handheld devices.

J: Oh my God! That would be crazy! Actually, not that crazy because Nintendo Switch is not really important, obviously. Depends what you can get on there. But usually stud like that is not that important because it's just games. Sometimes YouTube and I'm not sure what else there

could be but I know for me, it's just games so that's not very important but what I think is very important is the phones and sometimes the tablets but mostly the phones because that's how you text, call. Um, usually maybe call 911 in case a problem is happening. Um, and stuff like, you know. But there are lots of apps and social media that's not really important stuff. You know sometimes it depends like on social media like on Facebook there could be like, "Oh! Don't eat this. It contains wheat killer." Have you seen that?

B: I haven't see the Gold Fish one but I do know on social media they will tell you not to eat specific onions because of salmonella, for example.

J: My dad had a big bx of Goldfish and then he saw this video and said, "You se this big box Jax and Mason, GARBAGE!" and he threw it all out because it contains wheat killers. Something they put on the wheat to stop I don't know. They said that it causes cancer. I don't want anyone to be scared about this, this is what the video said, but um I don't think like, I don't care but I don't think it's good to give to your child.

B: So you said that if there would be no social media, it would be ok but text messaging...

J: It's like social media is 50/50 and text messaging is more. Text messaging is not as bad but is like a 60 and calling is close to a 90-100.

B: So, what if we had no Smartphones and the tablet and it would be house lines.

J: Oh, those are important. My grandparents have those things.

B: So, if we had screenless phones and nothing else, ho would that look like?

J: I think it would be really good but you're missing a couple of things that are important. Because remember I told you social media is 50/50. That could be important for your life. I say 50/50 because sometimes the videos cold be a scam or fake. I also said 50/50 because some of it are just videos for fun.

B: How do you feel about these videos?

J: Those videos are on the bad side for me. That would not be important.

B: Why do you say "videos are on the bad side"?

J: Because that's what makes you addicted. Depends on the video. If it's a video in the woods, that's not that bad. But if it's something for fun that they're doing, that's on the bad side.

B: I am curious to know why you see it as "addicting."

J: Because you want to see other videos or another of their videos.

B: I see, because they suggest other videos.

J: And then your like, "Okay! Let's check another one."

B: Well, this wraps up the interview. Do you have any last comments or questions?

J: No, honestly, I don't have anything else.

B: If you think of anything, you can always include it in your booklet

PART II

B: For the section on tablets, you wrote as one of the webs "not good", why did you write "not good"

J: I meant not very good. In the sense of for eyes or brain or memory.

B: Why do you think it is bad for your eyes?

J: I think it will damage your eyes, or sight. It will be hard to see.

B: And what about the brain?

J: In the sense of memory.

- B: That is interesting. So why do you think using the tablet is bad for your memory?
- J: Because then you can forget fun things and fun times that you had.
- B: Alright, thank you! You also wrote that "it makes you dumb."
- J: It is harder to do math, school, harder with history and things like that.
- B: How does the tablet make it harder?
- J: Because it makes you have a hard time with school because you are always on it. I don't how to explain. My dad told me that and I am pretty sure it's true because I did have a hard time in school.
- B: You think that you would have a hard time in school if you would always be on the tablet?
- J: I used to always be on it, yeah.
- B: I see, thank you! You mentioned that electronics before bed ...
- J: Keep you awake
- B: Yes, keep you awake. This happened to you right? And how do you sleep now that you do not use it anymore?
- J: I sleep like a baby. I am still tired because I play soccer all day at school. Always playing sports at school so I'm tired. At night I just want to go to bed but I used to never go to bed, I would freak out, count sheep and nothing worked.
- B: This is when you used to use tablets before bed.
- J: Because right right before bed.
- B: Okay, happy you get to sleep better now. For Devices and School, I was curious, what devices do you use in the classroom?
- J: Computers and iPads
- B: And do you like it?
- J: Yeah, but we don't really play games. We just do research about like an animal or things like that.
- B: Do you enjoy doing research on the tablet?
- J: It's actually pretty interesting.
- B: For Devices and Friends, you wrote that lots of kids play games online, mostly playing with their friends.
- B: Do you have a lot of your friends who play online?
- J: Most of my friends. Actually, all of them.
- B: Do you also play online?
- J: I play sometimes with them. But now I don't like to play a lot with them anymore because same reason. I haven't been focusing a lot.
- B: When you are using your tablet...
- J: I don't focus.
- B: Do you know why?
- J: I don't focus, I am always in the clouds.
- B: Do you see a difference when you are not using it?
- J: a BIG difference. I talk more actually.
- B: Talk more with who?
- J: With my family.
- B: Perfect, thank you! You wrote that you feel excited when chatting with friends on the device. What about it makes you excited?
- J: It's like your playing with your friends. So it's fun right?
- B: So chatting is the same as playing with your friends?

- J: Yeah! So your playing and chatting with your friends and that gets me excited cause I don't play with them often.
- B: You also said you sometimes feel sad or upset when using my device to chat. Why is that?
- J: Yeah, because of somethings that happened so now we can't have a playdate. Or that happened to that person and I feel bad for them. Or I will feel upset because this happened.
- B: So if you are chatting about something sad that happened, then that will make you sad?
- J: Mhm, yeah! I am not always sad when chatting. Sometimes I am happy.
- B: Depending on what you are chatting about?
- J: Exactly!
- B: You answered True for the statement, I sometimes feel upset after using my handheld device.
- J: Yeah, because I used to lose at a really hard game when I was almost finish.
- B: Oh, I get it. Alright! I see things that upset me when I am engaging with my handheld devices.
- J: Yeah, because sometimes there are things that go wrong, like before and I really don't like it.
- B: Like losing a game?
- J: No, someone said something, but it is not true.
- B: When you are chatting?
- J: Mhm
- B: For I see positive and happy things, you also wrote true.
- J: Same thing
- B: For children my age should own a tablet you wrote true but all children my age should own a smartphone, you wrote false. Why should they own one but not the other?
- J: Because you are too young to own a real phone and handle with real messages. It's more for chatting or something, it's not to play games. A tablet you can have fun or something. Do whatever you want.
- B: So, you think children are too young to own a phone?
- J: Yea
- B: And you are saying that tablets are ok because you can use it to play games?
- J: Yea
- B: I see, perfect! Finally, for content creation, you wrote you have uploaded pictures and videos. I was curious about the type of pictures and videos and what platform.
- J: It's not really me. It's actually my mom. But I will tell my mom if she could put this picture or something. And um, she posted a nice picture of me and my brother. Pictures on Facebook actually. And then my friends see it. Me and my brother sometimes, at places like La Ronde. Or when we are wearing fancy things, she might post me on Facebook.
- B: And your friends get to see it?
- J: Yeah, and all people. All my family and everybody.
- B: And do you like that?
- J: Yeeeeah, it's ok. Sometimes I feel embarrassed.
- B: How come?
- J: Because sometimes I don't even know she is posting these things. Like my mom took a picture of me at the Salon with Mark* and there was a picture where Mark was about to hit me. And then she posted that one on Facebook and my friend was like "Oh! Weren't you at the Salon cutting your hair? Your mom cuts your hair right?" I'm like, "Yeah!" "Well I saw a picture of your brother almost smaking you." I was like, "Oh no!" I don't want to see that. I was actually pretty surprised cause my friend said, "I saw it on Facebook with my mom this morning." B: And you didn't want your friends to see that?

- J: No not that one. Like a picture where I am smiling but not that kind of picture.
- B: Well these were all my questions! Any other comments or questions that you have to say?
- J: Honestly, sometimes it can be fun and sometimes not fun. Its 50/50

Interview transcript 2

Interviewer: B Child 2: Mia * *Pseudonyms

PART I

B: So, the first question is: Do you own any handheld devices. If yes, what type of devices do you own personally and what type of devices do you have in your home?

M: I have a tablet that I use and that's all.

B: Is it your personal tablet or a family tablet?

M: Well, it's my tablet but I don't really have any accounts on it. It's only the one that I use.

B: Perfect, thank you! Question number two: Describe the type of activities you enjoy doing the most on your handheld devices.

M: I usually like to listen to music or um I don't really do much but sometimes I play like games like video games but not a lot though. I don't have any apps, it's just more websites.

B: What platform do you use to listen to your music?

M: YouTube

B: What type of games do you like to play?

M: Like um jump things. And I have like this game where you like get to build a city, so I have blocks and ... it's kind of like Minecraft but it's free.

B: What is the name of the game?

M: It's called Bloxd. I have an account, but I always sign in and when I log in into my thing and I start building stuff.

B: Is it an online game? Can you play with other people?

M: Yes, but I don't chat. I just do it by myself. Sometimes I do it with my sister.

B: You and your sister can each have your own tablet and play?

M: Yeah!

B: Fun, perfect! Next questions: Describe any activities that you enjoy doing less on your device.

M: I have um like learning apps that I don't really use because I prefer just doing it on paper most of the time.

B: What type of learning apps?

M: There is one called IXL um I use it sometimes but there are other programs that I do that's just on paper. Like sometimes my mom will give me a workbook that I complete, and I usually prefer doing that than the online one.

B: Interesting, thank you. Number 4: On a typical day, how often do you use your handheld devices and when during the day are you more likely to use them?

M: On week days, and weekends it's different. On week days I usually only only ever use it after school not in the mornings. And usually I do it maybe 3 out of the 5 week days. And um... usually it's only for like Google classroom and stuff like that. And sometimes instead of

watching TV I like to play a game with my family. And then on the weekends I um like to listen to music on it. For example, if I'm cleaning or taking a shower or something, I put it on and I just listen to it and sometimes I play games on it.

B: Is there a specific time you are more likely to play during the day?

M: Whenever I have free time.

B: Whenever you have free time. Perfect! So, you use your tablet mostly during down time or free time.

M: Not all the time. I usually only do it for like half an hour if I'm playing a game. 30-45 minutes about.

B: After 30 minutes you are done? Is that a time fame that you have given yourself?

M: Yeah... I just get bored after a while. I like to read a lot.

B: Ok, perfect! So, after thirty minutes you do something else. Thank you! Number 5: Describe how you feel when using handheld devices.

M: Depends on what I am doing. If I'm playing a game, it's easier so I enjoy doing it more. But like if I'm doing something else, it might be a little boring. Depends on what it is really.

B: What is the "something else" that might be more boring? Can you think of an example.

M: It's not that don't like doing IXL, but I find it less enjoyable than playing.

B: Are you referring to the learning app?

M: Yeah

B: So, the games are more interactive.

M: Well, it's kind of obvious because games are more fun

B: Absolutely! I agree. Okay, now question 6: how do you think handheld devices impact children your age? So, friends or classmates.

M: A lot of kids in my class they have social media accounts or like they play games that I'm usually not allowed to play. So, um, sometimes they go on like when they get home, they don't really read or stuff like that so they're always doing that instead of like I don't know, playing soccer outside or something.

B: So, they use their devices

M: ... in their free time

B: instead of going outdoors and reading a book. How do you feel about that?

M: I don't ... I never really thought about it, I guess. I mean, I don't think it's really good to be on your devices all the time because I mean it's more productive to do stuff outside because if you're playing soccer or reading a book you are like learning a skill or doing something that you could actually do with other people, I guess.

B: You mentioned, "doing with other people". Now let me play devil's advocate. What about playing online games? You are playing with other people.

M: I don't really do that much so I don't really know what it's like but you are playing with other people but you don't know them so you can't really have an in-person conversation.

B: So, you value the in-person connection?

M: Yeah, but also you can't ask... like if you know them personally, it's easier to share information too, you tend to trust them more. But online, it can be anyone.

B: What about playing online games that you can play with other people you know. How do you feel about that?

M: Um, a lot of my friends play this game called Roblox. I've never played it before. I know what it is because they talk about it a lot and they're always asking each other, "Oh, can I know your username." But like usually they tell me that they don't play with random people, they just play with their classmates. And I don't really know much about it. I just know that everyone does it, that I know.

B: You don't want to play?

M: Not really, I rather just do like reading or play outside.

B: You mentioned that they are always talking about the games they play. How do you feel when they do?

M: Sometimes I feel left out because I don't know anything about it but also, I don't really care too too much because I mean its just a game. I don't need to know tat game to be their friends. We can still talk about other things. And my closest friends don't really do that so like we talk about I don't know like the music or uh like our favorite books or something like that and my friends who do I usually play ... like at recess they don't really talk about it that much really usually when we are together, we joke around, or we play tag or something.

B: So, you seem to have other ways to connect other than games like Roblox. Did you have any other comments on how children are impacted? Do your classmates talk about other games they play on their devices or social media platforms?

M: I know what they are and like I've heard people talk about them and stuff and I've seen people on them, but I don't actually own or have any accounts. I don't have the app so I can't use it

B: But you have seen how it is?

M: Sometimes my mom makes TikTok videos for adds.

B: How do you feel about those apps?

M: I don't really think their that bad, but they could be used to do bad things. Well not bad things just like things that aren't important, or they could be a waste of time. You could be doing other things.

B: You mentioned "used to do bad things" do you have examples of what you mean by that?

M: People cold lie about certain things or create things that could be embarrassing for someone else. They could comment mean things about someone who is doing something that they are proud of.

B: Have you seen this happened?

M: Not really but I've heard.

B: You heard about it at school?

M: I heard about it on the news and sometimes people come to our class and ask us about stuff like that.

B: Ask about what?

M: Kind of like what you are doing right now. They don't interview us, but they ask about if we know social media or like how to be safe on it. A lot of kids in my school do use social media.

B: So, people come in the classroom to teach about social media and what's online...

M: I've heard about it more there and to find out what's real and what's fake.

B: How do you feel about these courses?

M: I do learn from them, but I can't use it yet maybe one day probably I'll get a social media

account, but I don't really plan on having one anytime soon so, I won't really use it anytime now.

B: Why wait for it? What's keeping you from having a social media account?

M: I think I am too young for it. Cause like usually older people use social media but it's a lot of younger kids using it. I think I should be learning other things other than just being on my device all day.

B: Very interesting! Do you think these courses at school will help you for when you will have your own social media account?

M: Probably

B: Anything that comes up to mind?

M: If I'm scrolling and I come across something surprising and I can't tell whether it's real or fake I might use a way to interpret it. Or if I see something that is... that looks real but is also kind of suspicious, I might like check if it is real or not.

B: Check your sources, very good, thank you! Moving on to the last question: Describe how the world would be different without these devices.

M: Well sometimes ... usually when I am on the metro or walking to school a lot of people have it and instead of just reading a book or waiting or like I don't know taking a nap or something, they're always scrolling or doing something on their phone instead of doing something else. That's like their way to occupy their free time. So if there wasn't that, people would probably have more conversations in person and learn more skills and stuff like that.

B: So do you think the world would be ...

M: Very different.

B: Very different for better or for worse.

M: It depends.

B: How would it be better?

M: Better because people would be learning new things so like they might decide to read a book during their free time rather than scrolling onto social media. Or decide that they want to learn a new sport. So instead of when they're at home and don't have anything to do they can go to the park and play with the first person they see playing.

B: Can you think ways where you think people would be missing out without their devices.

M: They might now know that something... A lot of people look on the news too so they might not know what's going on that is important on the other side of the world. Or if they want to know than ... or like maybe their friend wants to talk to them but the only way to talk to them is like to see them but they don't know where they are. So, they would have to look for them or just wait until the next time they see them.

B: Are you referring to Facetime or Messenger.

M: Yes!

B: Perfect! You answered all questions. Anything else you would like to add or comment on? I (mom) mentioned stop motion and reviewing items on social media.

M: Stop motion is like filming movies. You have like an object and instead of you holding it, it moves on its own. You take a picture, move it, and take a picture and when you play it all together in looks like a movie.

B: You have made movies?

M: Yeah

B: Oh great! This can be added to our next interview under content creation if you wish to talk about your videos. You use a handheld device for this?

M: Yes, tablet. But I don't share, I just send it to my friends.

B: You can totally send it to me if you prefer.

PART II

B: You wrote "friends" in the Tablet word web. Why?

M: A lot of my friends have a tablet and they use it to message each other, communicate outside of school.

B: Do you also do that?

M: Not a lot, sometimes I video chat with them but only on the weekends.

B: Using the tablet?

M: Yeah, on Messenger kids. And I only have it with my closest friends and I don't have any group chats.

B: Perfect! You also wrote "Popular Roblox" What did you mean by that?

M: A lot of kids... Another way they communicate outside of school is by playing videogames together. And the one that I drew is one of the most popular.

B: Do you also play?

M: No, I don't have it.

B: Your friends play?

M: Not my best friends but people in my class.

B: For Smartphone, you wrote "everyone has one" Who are you referring to?

M: I mean not everyone but like it kind of seems that way sometimes because pretty much everyone in sixth grade and up that I know has one. Most of the kids in fifth grade have one except for my friends.

B: What do you think about that?

M: Umm... well I mean I feel like they don't really need it because you don't really do anything useful on it. It's more useful to make phones calls and stuff like that. But I mean, you don't really do that that much.

B: So do you think everyone in general don't need a phone?

M: Some people just use it for like fun, entertainment. But they could be doing other things. It's also better to not have one all the time so you could be doing other stuff.

B: Okay, so when it is being used for only entertainment, that's when your opinion is that you do not need it.

M: Yeah, or social stuff.

B: Or social stuff. Are there any examples where you might need a phone?

M: I just feel like you don't really need it when you're young because you're always with your parents or at school. Or like hanging out with your friends or with someone else. But when you are an adult, you need it more because you are more alone.

B: Perfect! I understand. So, adults might need it but kids don't need it because they are with their parents who most likely have one.

B: For social media, you wrote "comments 34-36, vacation, awful, ew" What did you mean by this bubble?

M: I find it can be a bit negative and make you feel like sad if other people don't like what you're doing or disagree with something that you did. So then if you go back and read the comments from someone you don't like it, it kind of makes you upset or sad depending on what it is.

B: Ah perfect! Thank you.

B: Under Devices and Friends, you mentioned that your friends talk about devices at school, "not too often so I don't really feel left out." When they do talk about it, is that a feeling that you feel "left out"?

M: Sometimes, but I also have friends that don't use it so I go... some of my friends are not best friends or close friends. They are friends that I sit with or like if my other friend is absent and they are usually talking about something like that. So, I get a bit confused, so I go do something else or I just watch them because usually my closest friends don't usually do stuff like that. I don't really feel like that because I am not often in a situation where it happens.

B: I see. Perfect, thank you!

Interview transcript 3

Interviewer: B
Parent 1: Laura *
*Pseudonyms

B: So, the first question is: Do you own any handheld device. If yes, what type of devices do you own personally and what type of devices do you have in your home?

L: Okay, so basically just my cellphone and TV

B: Tablet?

L: No, I don't have a tablet

B: So, phone only. Okay, perfect! Second question: Describe the type of activities you enjoy doing on your handheld devices.

L: Um... mostly for work. For appointments, chatting with family and friends. I don't really play games. Also, emails.

B: Perfect! Describe how you feel about the use of handheld devices in general.

L: I find we're overusing them. Sometimes I even catch myself thinking... because it is work-related, I am always on it. I tend to always want to check if clients texted me. So, I am constantly on it and sometimes like at the end of the day I just want to take it and chug it. Even as adults, as much as children, adults we have to time ourselves to in some ways.

B: Perfect! How do you think handheld devices impact your child and other preteens?

L: I think definitely socially. So that's why I try to keep them off as much as possible. They will go on it for sure. But I find I want them to interact with people when we have guests over, family. I think it is important to sit down and have conversations. If everyone is looking at their devices or their phones, no one is socializing anymore. So, I find that this aspect from my generation to my kids' generation, it changed a lot. And it's our role as parents to limit them with time you know.

B: Do you see a difference between your children and other preteens. You think this is a common thing among preteens?

L: Yeah, yeah! A lot of parents talk about it at school. Clients at work. A lot of families are impacted by this. And a lot of young kids like one-year-olds, two-year-olds are on iPad and you take it away and they have a crisis. I find that absurd because they shouldn't even be on it at this age. Watching TV like when we were young that's one thing but parents now bring their iPads everywhere. They can't have their kids not be on it either. So it's not the kids' fault. The kids, if you don't introduce it to them, they don't know what it is. Especially at such a young age. At my house it's just their tablets, at their fathers' house they have their Nintendo but for here, I will never buy a Nintendo.

B: Next question: How do you think handheld devices impact the family in general?

L: I find that there is a lot less communication between family members and friends. A lot more of texting. We are losing the human touch, the human connection. It's now all through devices. All so robotic.

B: And finally, how does it feel to parent in this digital world?

L: It is very challenging because you don't want them not to have it because their friends have it and their friends are all on these games or what not. But you definitely need to put rules and restrictions because it does affect their grades. We were having an issue with J a few months ago, we took it away and it make a huge difference. So, for sure it impacts children.

B: You mentioned rules and restrictions. What does that look like here in this family?

L: Basically, during the week I try to limit it a lot. Like before, when he came home he really wanted it so I said, "Okay! Only 20 minutes." And then when B and R come over, you get off. B: I noticed that haven't been on a tablet this whole time.

L: Time restriction. I feel like if you don't give a time frame, they will just go on it and then you get into your stuff and you kind of forget to balance it out. But for sure during the week were more strict.

B: Perfect, thank you! I asked all six questions for this interview. Are there any last comments you would like to make regarding preteens' use of devices?

L: The first session of his school this year, he has the same teachers he had last year. And they wanted to meet with us for the report card so I went in and she said, "I don't know what's happening with J but you might have to get him evaluated." So, I said, "Excuse me?" She says, "Yeah, yeah! I think he has something, a TDAH." So, I said, "Oh my God! But what's going on? We had you guyslast year." So then I said, "I think he is getting used to you guys or he is taking advantage of the fact that you're the same teachers and he's comfortable. And you guys have to make him uncomfortable again. Or it's the devices." Cause back then I would not pay attention to the time so I spoke to J's father and I'm like, "Let's try it out for a few months." And not he's been getting 100 percents. He was getting 40s. He was failing! He was failing! And then the teachers after a month asked us, "What did you guys do?" and we said, "We took away the tablet." So his homework he was rushing everything and pretending he understood but he just wanted to go back to the tablet. So it's overstimulation.

B: What made you think it was the due to the devices?

L: Because of the way he was acting. His behavior changed, he would never want to do homework. It was always a challenge to do homework. So now we have a routine also. Today is Monday so we are taking it easy because we did lots of exams last week and we can catch up during the week. But I find we are also calmer without the devices.

B: Why do you think you feel calmer now without the devices?

L: Because there isn't as much stimulation. It's like a drug right? The more you are on it, the more you want to be on it. When you get off of it, you don't need it. I feel like it's the same thing. That's why when my kids say, "I'm bored! Theres nothing to do mommy!" And that's been said a lot less lately cause M colors a lot more now. And J too. I told them, "If you don't play with your toys, mommy will donate them to a daycare." So, they play more. They play with each other; they draw a lot. So, it's doing different things. You need to get off these things, it's not good for the brain. My kids now say to other kids, "Why are you on your tablet so much, it's not good for your brain."

B: Do you have a lot of conversations with them about screen time and devices?

L: Yeah!

B: Any last comments about the impact of devices?

L: No, pretty much it!

B: You covered it all! So, thank you!

Interview transcript 4

Interviewer: B Parent 2: Ali * *Pseudonyms

B: So, the first question is: Do you own any handheld device. If yes, what type of devices do you own personally and what type of devices do you have in your home?

A: I have a phone; we have I have my on iPad and we have a laptop. And then we have and iPad that each of the girls can use which we bought during covid when they were doing online classes. We also got a Chromebook um because it was the same thing, at the beginning of covid the iPad wasn't enough to do some of the work and since they were doing a lot on the Google platforms, so we just had it on that, also much more affordable. So we have the Mac book, 3 iPads, because I was teaching as well, sometimes I had to use my phone because my work laptop died.

B: Second question: Describe the type of activities you enjoy doing on your handheld devices.

A: Sometimes I look up silly things I want to know. Random information, I look up schedules, maps. When I have little down time, I will go on social media once in a while. Watching videos, I do a lot of gardening, so I always look up things I think I want to do. I do a lot of DIY projects, so painting, how to do things, repair things, build things so that's really helped a lot. Online shopping, we don't have a car anymore so it's one of those things that we do. Walk to the store every day or every couple day, um but, other times I'll order stuff in and it's very similar in price. So that's something we do as well.

B: Perfect, question number three: Describe how you feel about the use of handheld devices in general.

A: Um, I really have mixed feelings. So I find they can enhance and help you in so many ways but I find that if they are not monitored or like self-regulate your us or what you use it for um or maybe if you are unaware you can get sucked into this rabbit hole they can impact your socialization, they can almost like take the place of what other social interactions would be. I think I feel really strongly about a good balance because I am kind of in the crossed generation that I grew up with a completely analogue life because I am 40 and so I didn't have handheld devices until I was in my mid-teens and that was the beginning of beepers giant phones. Didn't

have a computer in my house until high school and still didn't use it that much because you could still hand-write your work. So, I have a foundation in the analogue, do-it-yourself, talk to people, have conversations with people, talk to your neighbors, keep in touch with friends and family, go outside with your kids, take walks. But then all of these other things that normally, I would go to the library, like I still remember using Encyclopedias and dictionaries and looking things up like if you didn't know how to do something you had to go to the bookstore and by a how-to book or there wasn't YouTube. It was oh, I'm stuck on this project. I was having an issue with an Ikea dresser, and I wondered, is this a common issue. So, I looked up on Reddit if it was normal and found out that there was a defect with the certain dresser. I was thinking normally this doesn't happen but Reddit said it was so I didn't have to call Ikea, and then I went on YouTube and I watched how it was supposed to be done to make sure that I did it properly and I did so it was likely just a defect with the holes.

B: So, this is an instance where you were thankful for the internet.

A: Yeah, but if it would've happened 20 years ago you would've had to pack it up and bring it back to the store, talk to the sales associate, get a new one and then you bring it home and you don't know if it will be the same problem. I try to maintain that balance so there are little checks and balances that we do in our family, but we talked about too before we had kids about cell phone use and exposure and have the exposure be with us first and respect the ages that are recommend. So, its not recommended to have social media before the age of 13. You are not supposed to have an account before then. So, starting to expose your kids to what it is the good and the bad and showing them, modeling the good and the bad will help them have routines that are healthy. And we don't have data on our phones. So, if I choose to sit down and watch TikToK for 10 minutes, I'm at home during my downtime. So, my transition time if I'm taking the metro, if we're going somewhere whether I am alone or with my kids I am never on social media, or anything. Not using apps like Google maps allows you to develop your sense of direction. You have to pay attention instead of zoning out. We have an old GPS, the one you plug into a car, but we don't have a car. When we use Commune auto, we that but it's really if we are going somewhere I really don't know. But back in the day you had to know where you were going ahead of time, and you had to know how to read a map and follow directions. And when I went to University, I went to Peterborough, I had to get a map of Ontario, or Peterborough, the map was huge.

B: You are absolutely right!

A: It creates unnecessary anxiety that didn't exist before because we now rely on it. My anxiety kinda kicks in with the parking in Montreal, but if I'm going somewhere also because we don't ask or directions anymore and nobody speaks to each other in public anymore like we used to. Like I used to take the bus and if I was on my local bus, I would see most of my neighbors or people my age wherever and she would just start talking, "Hello! Hey! Oh you go to this school? Oh! you live here?" But now if someone speaks to you in public, you think their creepy? I'm like, "Are you gonna stalk me? Why are you talking to me?" And that did not exist before. Before you would think, "Oh! That's nice." Same thing if someone asks you for directions. I think, "Are you going o kidnap me?" And you know, human trafficking that now we are more aware of it, not that it did not exit before, we are just more aware now and internet has facilitated

the movement of bad reign. But those things come to mind if someone asks for something I am just like, where's my bat, how fast can I run and I am looking for, "Is there a van?"

B: I agree, when people stop to ask you for directions, we tend to take a step back a wonder why they are asking you, yet that is how people used to get around. And same thing if someone speaks to you on public transit. Like Mia said, in the bus, everyone is looking down at their screens.

A: And the headphones... in public, everyone almost have headphones or ear buds. So you are always bombarded with something. Continuously bombarded with noise. And its like you don't know how to be without, you don't know how to be bored, to look around, or be observant. Cause you're always zoned out.

B: Sometimes I keep my phone in my purse just to force myself to be bored and I end up peoplewatching.

A: But then doesn't that feel a little uncomfortable? Because it is not as common. And you wonder, "Why am I feeling this?"

B: Absolutely! Let's move on to question number 4: How do you think handheld devices impact your child and other preteens?

A: I really think that all of the abovementioned are for me as an adult, but it removes completely the ability to develop basic foundational skills that we developed so like social and life skills, directions, being able to observe. I you are always on a device and always listening to something and even like walking with music, will you be paying attention to traffic while navigating through your neighborhood? It is so important to be constantly aware and such conversations are so important to have. The ability to just have a conversation that is not awkward and that's not centered around only devices. I think it impacts greatly being aware of the world. So when I was their age, even if I didn't sit and watch the 6 o'clock news... even how news was shared there was a lot more research and to understand what is true and not true and to get news that's accurate. And when you talk about things that are researched, you had people that that's their profession. So, what you read in the newspaper and watched on the 6 o'clock news, you could rely on. But there are so many the conspiracies on social media. When you see a popup after popup, after popup you can start questioning or believing. But that's social media and it's all the algorithm.

B: That's why I think courses at school on the topic of social media is so important. I find that lots of teenage girls see perfection on social media due to all the available filters. And if you are not aware as a user that this is not reality, it can play a toll on your self-esteem.

A: Now they call it the Sephora pandemic where eight-year-olds are invading Sephora and destroying everything in there and being crazy. And I'm like, "That's wild!" And I think this would be completely preventable by more active parenting.

B: You mentioned earlier that you respect the age requirement. I am curious, will you only let your children go on social media when they turn 13 because that is the age requirement? A: I don't think it really matters to me what they say because they don't really seem to enforce it. If the companies cared, they would go about deleting a ton of the accounts. It's not difficult to see whether an account is featuring a child. There's even other accounts like TikTok or other accounts but especially TikTok that moms will make accounts about their baby doing all sorts of things. This opens up a whole other network of predators, creepy people. But I think I am open

to having any discussions that is reasonable. With my first son, there was so much interference in our parenting because we had to manage devices such as the iPad becoming so popular and access to devices. If we had left him without guidance, I think he would be a very different person now a day.

B: You mentioned that there are lots of rules that you have established prior to being a parent.. But because iPads became popular while you were already parents, so there were decisions you had to do on the spot.

A: Yes, with my son. For the girls, like I think if I had a partner that was really into gaming or even the amount of time you spend on Facebook. When I was in university, you could only open up an account if you had a university email. Facebook was used almost as a scrapbook of your partying time as a university student. I think it was never intended to be what it became. And now you have so much access to information where originally you were only sharing with friends. And now it's public domain. So, I feel like that is a hard lesson too and there are things that we have seen happen to us or people we know that now we know better. I enjoy my time on social media, but I am not dependent on it. If it went away tomorrow, I would just be like, "Oh, that was pretty fun!"

B: You mentioned "if I had a partner who worked in the gaming industry..." How do you think parenting would be different?

A: I don't think it in necessarily working in the gaming industry but rather somebody who doesn't see, whose values are not aligned in having a regulated amount of screen time. And screen time is not just scrolling on social media. To me, screen time is television, movies, video games, where you are staring at a screen and not doing other things. But doing other things also contributes in running a household um... on top of leisure. So, I mean, if that's your work but then after your work day you are then contributing to other things like the house, that's one thing. But then I think if you are doing that for work but then you're playing, playing, playing, watching, watching, watching, then it's impossible to contribute to your household in a way that you need to to be present, especially if you have kids. And then what are you showing. I have been teacher for 15 years and I saw this shift happen about eight years ago, and the kids coming in to kindergarten are lacking significantly in their self-regulation. Self-regulation I find is massively triggered to instant access to everything. Kids are two years old and watch YouTube videos and know how to open a tablet and touch things. When we go to the restaurant, my kids bring a book, but they will never never look at a screen. You will never see my kids on a screen while we are eating a meal at the restaurant. And when we are done, we can sit for another hour and have a glass of wine or dessert and they will sit and either enjoy social time or draw a picture, read a book. I want them to learn how to exist without having to stare at anything. I think it's really important. My kids can be around and act appropriately or contribute to the conversation. And if it is something private, I can say, "Okay, go play for a little bit, and come later" And they do!

B: I want to be conscious of your time so we will move on to the next question: How do you think handheld devices impact the family in general?

A: I find in all the same ways, I think it impacts your quality time together, um... but then in today's world, this is something that is now, almost part of our culture, use it as a form of entertainment, use it as way to learn and teach yourself something, or look up something. I think

you can choose to let it have a positive or negative impact by how you decide to allow the usage in your home. With a lot of the evolution, social media is a part of it, you are able to see gender roles, I think I am more aware of having had both boys and girls, and then being in relationships and having families and how I was raised. My mom is a boomer and I was raised over half the time by my grandparents who are from the silent generation. And just their views on everything kind of seeped into me. A little bit from them, a little bit from my mom. You know, just by being out in the world. I lived the majority of my life in the pre-social media, pre-technology so I guess I see the value in it when you use it properly and even if you look at it as entertainment. We used to watch silly shows, go to comedy shows, watched soap operas like is all clearly entertainment. So is social media, or videos just replaces that in a certain way. I do think that it should replace and not be an addition. One of the most disappointing thing that social media has taken away from people with all that and not knowing what's true or not true sometimes that creates this, "Well, I just won't look at anything because all of it is too much in my mind." But knowing what is happening in the world and being able to have conversations on a variety of topics impacts your social skills, even just talking back-and-forth.

B: Last question: how does it feel to parent in this digital world?

A: It feels like I'm free falling because what I think I know, I don't know and I'm always second guessing. I also think the advice available is overwhelming. You still look online for advice. And even just opinions. I like Reddit for that, I see it as a poll. If somebody puts something that I can relate to and 80 percent are like, "That's silly, look at this perspective." I would be like, "Oh yeah, that's true! I was so convinced I was right, and this made me look at it from a different viewpoint." It's really like you made a poll for your group of friends. One thing I find super interesting about parenting and social media is that "Is it Bill Gates who doesn't allow his kids to have electronics. Isn't that wild!" And that tells me that I am on the right path, I am not crazy. So yes, sometimes I have been called, mean, extreme, or a lot. I feel like I'm in the minority. Technology is addictive. Even us, if I think now, if it was even just five years ago. If I forgot my phone at home, I could've gone to work and go about my day. And the other day I actually forgot my phone at home and I came back and got it. I think that speaks for itself. It's go ingrained in us to have it. The other thing that makes a big difference is that most people eliminated their home phones and replaced with their cellphones. So, your cellphone is now your houseline. Feels like they are forcing us to have it somehow in our life. I also feel like with technology, you are never experiencing anything other than your first choice, so again instant gratification. And I think we are impacted like that as adults. But when we walk together to school, we are walking outside so we are getting our dose of vitamin D in the morning but the exposure that's one thing that I don't think it's disputed anymore. That its really really healthy for your body, everything. When you wake up in the morning it's important to get sunlight, to be outside. Um... so that's one thing, walking is another thing that is very healthy. If you are someone who is always on technology, and that's your life, it will be a big part of your kids' life. You will be in your car and all your kids are going to have iPads, they won't know how to travel without staring at something.

B: I watch my daughter Haley stare out the window while I am driving and I think it's beautiful how children notice everything because they live in the moment and are so observant if we give them the opportunity to just observe. It's beautiful.

Interview transcript 5

Interviewer: B
Teacher 1: Tammy*
*Pseudonyms

B: Do you have any handheld devices in the classroom. If yes, what type of devices are students allowed to engage with?

T: Yes, I have iPads in the classroom.

B: Perfect! And describe how you feel about the use of handheld devices in general.

T: I am obsessed with them. I use them all the time. I have two iPad pros, an Apple watch, an iPhone pro.

B: Perfect, thank you! Describe how you feel about your students using handheld devices.

T: With the iPad in the classroom, I really enjoy it. I find it extremely helpful because of the accessibility feature I am able to lock them onto exactly what I want them to focus on. Because I also use the laptops with my students and when I use the laptops if I am not right beside them I always catch them looking at something else like a picture or going on some other site and then they minimize it very fast as I come closer to them. Even when its like direct instruction, or entering data in a Spreadsheet, they get distracted very quickly and try to go on other things. But with my iPads I can lock them on exactly the website I want, and they can't get off. I can even cover up the URL so they can't touch it and go anywhere else. I have complete control over it, I love it! Whenever the kids ask to use an iPad, I ask them, "What do you want to use it for?" And then they tell you so you make it go where they want, and then you start the guided access, and they can't get out of it until I take it off because I have to enter my passcode.

B: So interesting!

T: Also lets you draw a shape over the URL so they can't type a different website.

B: This must keep them on task.

T: Yes, they are only able to be on task. They cannot do something else with it. But they are using the technology. And they admire the fact that I have control over it. They don't know a lot of people who can do that.

B: This is a setting I would totally use in the classroom. Thank you so much. Next question: How do you think handheld devices impact your students and other preteens in general?

T: It depends, outside when I see children like on the bus and everywhere in the community there are obsessed with it so that's disturbing. So even if I am sitting on the bus, public transportation, it's annoying because I am sitting next to children, actually it's all age groups, everybody is like on their device and the screen is annoying, I don't want to see their screen. Everybody is either looking at social media or playing games. A lot of people are using it so I find it's too bad that they can't disconnect from it. I enjoy just sitting on the bus and look out the window but they are not able to enjoy just being present because they are looking at their device rather than just being in the moment. I have a daughter who is also a teenager and it's like she is part robot. She always has the iPad and she doesn't want to let go of it, like ever. She has her headset on and she is watching it but she is 17 so I don't control what she does on there. She walks around with the headset on and the iPad on so to me its like she is part robot. Like if she is preparing food, working on homework, she feels like she needs to have a little video in the bottom corner, and she is doing all this work which is great but she feels like she must have this going on in the bottom corner and then also, I don't know if it's related but she won't sleep with the light off. That's my kid, my seventeen-year-old. She is older than these kids so maybe it won't happen to them because whenever she was growing up, I have been using technology my whole life so when she was growing up, iPads existed, but it was kinda new, we didn't know that she would get to the point where she would look like a robot walking around. So I think parents now have a better understanding and a better control over it but it's really weird that they must have it on all the time. If you want them to do something sometimes

you have to tell them you will turn off the internet from their device or else they refuse, that's my kid. She doesn't want to get off of it. But not in the classroom, it's outside that I see it.

B: You think it is different in the classroom because o the structure?

T: Yes, because I keep it locked up until they need to use it. But I am constantly using it because I use it for teaching. I use my iPad to teach, and I have two Apple TVs, and iPad pro so I can get information on the two screens at the same time.

B: And this is a great segway to question number five, how do you think handheld devices impact your students' experience in the classroom?

T: I think it helps them to focus and they like that I am able to... what I like about it is that everything that I am doing on these devices, I am taking screenshots, I am saving it and I convert it to PDFs and uploading it on Google classroom so when they are at home or even their parents they can see what I was doing in class so if they were absent or unsure of things they can follow along and ask questions on Google classroom. So I think that for teaching it is very helpful and advantageous. I can show videos when there are words that are not in the dictionary or things they don't understand, I a able to pull it up very quickly using good sites like BBC or Canadian Encyclopedia and I can show them right away. So it is very advantageous. When I was in school, if the information was not there, it was not there. You had to go to the library and try to find it.

B: How are your students' feelings towards Google classroom?

T: They enjoy using it, they don't even think about it. It's been part of their lives since they were in school because when the pandemic hit, my students were in grade 1 so they were forced on digital technology at home whether they were ready for it or not. At my school we use Google classroom, that's what we adopted as a school. We use Google classroom as a communication tool with parents. The children also enjoy collaborating through it because they can each work on it. And once I even had a child who had early dismissal and we were working on a class project and he had a dentist appointment and then the children were like, "Oh it's Gian!" Well Gian was working on the project at his dentist appointment. That was amazing.

B: It gives children various opportunities. That's great! You kind of answered answer number 6 throughout the interview but I will ask anyway. How does it feel to teach in this digital world? T: Well, I love teaching in this digital world. I have always been in the digital world since I was the age of my students when I had a commodore 64 and a commodore 128 and I was writing programs with my dad. We were running commodore basic to make the computer make what we wanted. So, I have always used it and have seen the evolution and I have been teaching since 1998 so I've been part of the whole process of moving forward. So, it's been really fun, and I have enjoyed it, and I can't imagine not having it. Like if there is not internet, I am still able to use it. I guess I am addicted to it too as well because it is addictive, but I guess it's because you can keep working without internet and when internet comes back you just reconnect and refresh. I enjoy it but there is one thing that I have noticed I wanted to add which is sometimes things come into the classroom that wouldn't normally be in the classroom. For example, there were some children or friend group, and at home some of the friends were on TikTok and doing TikTok dances and whatever and another girl that would've been the leader of the group normally, she felt like ostracized by the group because she did not have this technology at home. Sometimes there are stuff like that that happens outside on social media and then they are upset when they enter the classroom and they are physically discussing it. Sometimes I noticed with male students. Whenever they are playing an online game together like Fortnite, if they are competing against each other, they will come in first thing in the morning, as you are lining them up to walk into the building, they are angry at each other because of what happened on Fortnite. So yeah, there is this aspect that sometimes the digital causes um conflicts in the school. Which I guess is good because we are then able to address it and discuss it with all members and since we have behavior techs, I guess that's good that it kind of does happen. At first, we were not ready for that because it just happened you know, but now as a school we are very prepared and I think it helps with having discussions about what is acceptable behavior on these things. And they understand that what they are doing online affects them in actual life, not just online.

B: So in your class or classroom, are there lots of discussions about being online users, online safety, solving conflicts?

T: Yeah, well it's part of our curriculum so we do discuss it and as it comes up we do discuss it. But what is new I find is that everyone will be taking a test or something and then you look over and somebody is doing this weird dance move thing and then someone is doing it back but like a mirror image from it. It may be from TikTok. That's a weird thing that happens during test sometimes. It's kind of like they can have a conversation without words, with movement. Like they connect with each other with difference dances. So, it's interesting to see that,

B: How do you respond?

T: I tell them to stop and focus on their test. You can't look at anyone during a test so I tell them to focus on their test.

B: Oh so they are also bringing things they see on TikTok in the classroom. That's why it is so important as parents and teachers to stay up to date with the new trends. Thank you so much for your answers. Any other comments, questions, examples.

T: No but if you think of any other questions just send them to me.

Interview transcript 6

Interviewer: B
Teacher 2: *Ella
*Pseudonyms

B: Avez-vous des appareils portables (Tablet, Smartphone, etc.) dans la classe ? Si oui, quels types d'appareils les élèves peuvent-ils utiliser ?

E : Les tablettes ne restent pas en classe. C'est dans un labo de science qu'on va cherche les tablettes pour les 3^e année et j'ai des laptops pour les 4^e qu'on se partage entre Anglais et Français. Dans la classe j'ai un tableau numérique Smartboard.

B: Parfait, et quel est votre opinion sur l'utilisation des appareils portables en général.

E : Ça va aider beaucoup les élèves en difficultés, surtout en français langue seconde. On a accès à une panoplie d'activités. En même temp, je vois de plus en plus que l'accès de l'utilisation des électroniques nous empêche de travailler certaines compétences chez l'enfant.

B : Quel compétence exactement? Et aussi, pouvez vous élaborer sur les avantages et désavantage dans votre opinion.

E : Je vois deux mondes. Un, on fait des exercices sur l'ordinateur, ont se pratiquent, on fait des activités. Mais il reste qu'on a des examens en papier. Il reste qu'il y a de la production qu'il reste à faire en papier donc pour certain élève, ceux en difficultés qui ont besoin d'un texte auditif, quand quelqu'un ou l'ordinateur lit le texte, ça l'aide beaucoup. Mais il y a d'autre élèves que cette habilité d'avoir en papier, de faire un teste, de lire un texte plus long sur papier, ils n'ont plus la patience. Ça élimine cette patience, cette endurance. Avec l'ordinateur, toute est très vite, ils veulent être en action, cliquer ici, cliquer là, aller chercher t'elle information, faite un Google slide. À la fin de l'année on a des examens du ministère, à la fin de l'étape on a des compréhensions écrites. Ça fait que les élèves ils refusent parfois. Ils sont vraiment déçus de travailler sur papier. Vous comprenez?

B : Oui, très intéressant. C'est parfait, vous avez même répondu question numéro trois.

E : Aussi, de ce qu'y est compliqué de l'utilisation que j'ai noté, c'est le coup de ses appareils. J'ai une classe de 22 élèves et une classe de 16. Il faut que ses ordinateurs soient complétement fonctionnels parce que dès qu'il y a deux ordinateurs qui ne marchent pas bien, comment je fait avec ses deux enfants que leur ordinateur ne marche pas bien? Donc là ça créer de la frustration pour l'enfant, le prof est dans une situation difficile aussi et les appareils qui ont été acheté là dix

ans, il commence à avoir des problèmes et là ont vie ça présentement dans l'école. Il faut renouveler. Moi, quand je dois utiliser des ordinateurs, si l'activité me permet de travailler à deux, je suis tranquille. Mais s'ils doivent être individuels, c'est un stresse. Aussi il y a le rooter qui ne marche pas toujours bien dans certain coin dans la classe. Donc ce sont des choses qui apparaissent. Quand je mets dans mon menu du jour qu'il aura des ordinateurs ou tablettes, ils sont vraiment happy. Ils adorent ça, c'est un moment de joie. Ça dépend parfois de l'activité. Quand c'est une activité de recherche, ou utiliser un dictionnaire électronique, ça ils aiment moins parce qu'ils veulent encore continuer dans l'idée du jeu. Pas des travailles trop linéaire qui faut une concentration trop soutenue. Ça ils vont chialer. Ils pensent qu'on va faire juste des activités amusantes, site qui permet l'interaction mais ce n'est pas toutes les activités qui veulent le faire.

B : Semble que les élèves associent la tablette au jeu.

E: Oui parce que j'ai l'impression qu'ils veulent garder la même sensation qu'ils ont chez eux quand ils jouent. Si l'activité est en format de jeu, ils vont s'intéresser, mais j'envoie un doc ou ils doivent écrire un texte en français, c'est beaucoup moins intéressant. Moi, ça fait 13 ans que j'ai mon blog. Je mets plein d'activités dans mon blog si je demande aux élèves de faire tel-tel activités, c'est déjà placé sur le blog. Je crois que l'informatique aide beaucoup mais je dirai que je n'utiliserais pas les tablettes et ordinateur plus que 2 fois par semaine. Ça me cause un stress. Pour les petits, je vois que les profs se découragent parfois. Aussi, l'école ne fournis pas des écouteurs donc si 15% des élèves n'ont pas apporté cette journée-là, je ne peux pas les obligés non plus, bon l'activité ne marche pas. Je ne peux pas imaginer le professeur qui utilise les laptops or tablette avec les troisièmes et quatrième année pour une période de 60 minutes de temps. Le temp de tout déplacer, ramassé. Et l'organisation avant – je dois réserver, voir si ça marche, si quelqu'un d'autre n'a pas pris, la planification. Je trouve un moyen de les utiliser, de les stimuler, mais pas à chaque jour parce que sinon j'ai une charge, une pression, et à la fin je ne suis pas encore convaincue que l'apprentissage c'est plus avec l'ordinateur. Les élèves essaient toujours de négocier pour rester plus longtemps.

B : Selon vous, quel est l'impact des appareils portables sur vos élèves et sur les autres préadolescents en général ?

E : J'ai un adolescent de 13 et 16 à la maison et j'observe ca en classe. Ce qu'ils font à la maison, les jeux comme Fortnite, cette conversation continue en classe. À mon avis, ça aide à l'intégration d'un côté. Ceux qui n'ont pas accès à ça n'arrivent pas à s'intégrer à ce sujet. Mes enfants n'ont pas eu le droit de jouer à Fortnite jusqu'au secondaire. Mais là j'ai des élèves en 3^e et 4^e année qui utilise fréquemment. Donc ça devient un monde – il parlent de ça. Leurs amies sont autour de ça. Et là j'ai une situation à la maison. Mon fils il a un ami qui n'a pas accès aux tablettes, cellulaires, jeux vidéo. Les parents ont décidé comme ça. Là je dit à mon fils, invite Noah parce que quand on l'invite le garçon peut utiliser la technologie chez nous, nos bébelles. Mais la mon fils dit, « Mais maman, il ne joue pas aussi bien que moi à Fortnite, on n'a pas les mêmes conversations. » Donc ça gère un problème d'intégration parce que mon fils qui a des habilités sociales assez bien, lui veut être avec des amis qui jouent la même chose que lui. Donc si je n'avais pas donner cette option là à mais enfants à partir du secondaire, ils seraient limités dans leur conversation. Je leur demande de quoi il parle quand ils sont avec des amis et ils disent qu'ils parlent des choses qu'ils ont vu su TikTo, Fortnite, des stratégies de tel jeu. 45% de mes garçons jouent à Fortnite à l'âge de 10 ans. Ils parlent de ça souvent aussi, c'est leur monde. B : Est-ce que vous voyez la différence entre les garçons qui jouent à Fortnite et ceux qui ne jouent pas?

E : Oui, ils sont complétement à part dans cette conversation, ils peuvent jouer un peu dehors mais ça ne fait pas partie de la clique. Il a comme une clique de Fortnite. C'est comme si ces garçons développent des intérêt en commun, les joueurs de soccer sur TikTok, c'est le même groupe.

B: Donc on le voit au secondaire ainsi qu'au primaire.

E: Moi je trouve ça affreux de le voir au primaire. Mais parce que ce ne sont pas des jeux appropriés pour les enfants. Et je vois qu'à la maison, il y a une irritabilité avec mes enfants. Dès qu'ils arrêtent de jouer ils sont super excités, et agiter, ça se chicane à cause de la compétition. C'est très facile de laisser l'enfant deux heures, on a la paix parce qu'ils sont en traîne de joué, mais après ces deux heures, ça déclenche. Je ne veux pas dire non complétement, maintenant c'est les éduqué à savoir arrêter. Bon, Oscar*, t'as joué, qu'elle est la conséquence de ça? Tu es super frustré. Est-ce que ça vaut la peine? On a cette conversation, Est-ce que tu peux faire quelque chose d'autre? Jouer moins? Chercher un jeu qui provoque moins de stress? Un jeu que tu peux jouer seul, pas en group ou en compétition. Toutes ses questions là je me pose et j'essaye et j'essaye de les faire prendre conscience.

B: Les conversations sont très importantes.

E : Je ne crois pas que en fermant le Wifi ou en empêchant ça va régler. Les moments qu'on a fermer le Wifi, c'était très difficile. Peut-être de valoriser les moments positives. Je crois que des fois en tant qu'enseignantes, nous devons aller contre le courant, de ne pas faire des choses qui se font toujours à la maison pour qu'ils puissent toucher à d'autre aspect de l'apprentissage, par exemple, aller à un musé. Aller à un musé c'est rendu plate pour les enfants. Je trouve que l'école doit faire le contraire. Moi je vais t'offrir ce que à la maison tu ne peux pas avoir ou que tes parents ne sont pas capables d'offrir. Ouvrir un livre, il en a plein qui veulent lire sur internet. B: Vous avez répondu à ma question: Comment pensez-vous que les appareils portables

influencent l'expérience de vos élèves dans la classe ? Donc parfait!

E : Je trouve que les gros problèmes que sa crée, c'est de problèmes d'interaction sociale – face-

B: Nous avons souligné l'impact au niveau social mais trouvez-vous qu'il y a un impact au niveau physique, langagier...?

E : Je trouve dans les discours, ca va être des discours coupés, moins articulés, parce que le discours, je pense beaucoup au Français parce qu'eux ils vont articuler des théories, vont faire une conversation, d'avoir des idées, des contre-points. Cette interaction là il y a moins de discussion. L'élève, pour développer leur esprit critique je pense que c'est compromis. Ils prennent l'opinion de quelque d'autre sans conteste ou seulement leur opinion.

B: Et vous croyez cela est un impact des appareils?

E : Si je prends un texte de la presse. Avant t'allais lire jusqu'à la fin et t'allais décortiquer le point de vue de la presse à comparé de la dictature en France. Maintenant ont lit peu, juste le titre ou début du texte donc on travail moins ses idées là. Il y a moins d'endurance pour lire un livre, pour tous ce qui est long et demande une concentration soutenue. C'est comme si le cerveau à changer.

E: La position aussi, je vois que la manière que mon garçon tien son cellulaire, il est toute courbé. Plus de personne qui utilise des lunettes.

B : Je veux respecter votre temp donc dernière question : Quels sont vos sentiments envers enseigner dans ce monde digital?

E : Quand on a commencé avec l'informatique, j'étais très enthousiasme. Je travaillais dans l'école, et je trouve que pour l'apprentissage des langues, ça l'a été phénoménale. Tout ce qu'il est auditif. Avant on avait des casettes ou une personne qui parle cette langue. Maintenant il y a une panoplie. Mais je pense qu'il ne faut pas exagérer. Il faut trouver un juste milieu. Il faut parler aux élèves.

B: Merci, c'était parfait! On a eu une belle conversation.

Appendix H

First-cycle Codes: Children

- (1) How does a preteen engage with handheld devices?
- (2) How might a preteen perceive handheld devices and their impact on individuals' social, emotional, and physical well-being?

Interview transcript 1

Interviewer: B Child 1: Jon * *Pseudonyms

PART I

B: Our first question is: Do you own any handheld devices?

J: I do...a tablet and a phone.

B: Do you have both devices in your home, accessible at any time?

- J: Not any time, usually like sometimes but 1 mostly on the weekends when I am free but not in the week that much.
- B: Number 2: Describe the type of activities you enjoy doing on your handheld devices.
- J: Sometimes on my tablet I usually 2 play games, or sometimes I 3 take photos of me. And on my phone, I will 4 text message on Messenger kids, or I would do um...usually that's all.
- B: Okay perfect! Can you explain the games you play? What types of games do you like to play?
- J: Well sometimes 5 I play Roblox, sometimes I play um those 6 word games, sometimes
- 7 I play chess because I am not sure where my chess board went. Um, and sometimes I play like... 8 I get bored and just go find a game on ...you know... maybe I just download one game and that is what I am going to stay on if I'm bored.
- B: Perfect, awesome! And you mentioned taking pictures of yourself. Is it on special occasions?
- J: Sometimes I take 9 videos of people, that um like friends. I took a video not long ago with my tablet hiding under a blanket uh pillow and the camera looking, and I would just check what my brother and his friends because they were not letting me see what they were doing. So, when they opened the door, I just looked at the footage and I saw everything.
- B: Mmmm, interesting perfect. So, these are the activities you enjoy doing on your devices awesome.
- B: Number 3: Describe activities you enjoy doing less on your handheld devices. Are there things you are not a fan of doing.
- J: I am not a fan of doing like. I am not sure what I have been seeing that much but like sometimes I don't like wanna like do this kind of game. Sometimes I just don't like, I just 10 take photos or look at my 11 text messages. Sometimes I get like ... wait what is the question?

- 1. "mostly on the weekends" 1*. a tablet and a phone.
- 2. "play games"
- 3. "take photos of me"
- 4. "Messenger Kids"
- 5. "I play Roblox"
- 6. "word games"
- 7. "I play chess"
- 8. "I get bored, find a game"
- 9. "videos of people like friends"

- 10. "take photos"
- 11. "look at my text messages"

- B: Number two is what you enjoy doing and now the question is what you don't enjoy doing on your devices.
- J: Oh, so sometimes I would go on like Roblox and there are 12 not really good things that I like, that I see. So, usually I would just get off and wait until there was.
- B: What do you mean by there are not good things that I see? Can you explain that.
- J: Like sorry... because you probably don't know the game.
- B: No
- J: So, it is like 13 an app that there is a bunch of games on it that people create and so then you play it and then 14 some of them are not that good cause their rate that is maybe a 63% that not a lot of like it, 83, 90, stuff like that. Do you understand?
- B: Yeah! So if it is a low percentage, do you still try it?
- J: Usually, I basically know because when I was younger I used to just look at every game and I would be like, "Aww, this is taking forever, none of them are working!" So I would just get off and do something else. So that's what sometimes... it's like 15 50/50 Roblox.
- B: So if there are no games on Roblox that are interesting to you, you will go do something else? And go back later if something new came up?
- J: Yes, the next day.
- B: Okay, perfect! Interesting! Moving on to questions four: On a typical day, how often do you use your handheld devices.
- J: Sometimes in the 16 week it's normally 20-30 minutes max in the week. Um, on the weekend usually I would do with my dad sometimes and have some fun sometimes I just do game and then my brother says, "Do you want to play video games?" And I just go play with him and it's usually 17 more free with video games or handheld devices on the weekend.
- B: Ok, so you can play longer during the weekend?
- J: ye!
- B: When during the day are you more likely to use them? What time?
- J: Well, I 18 don't use it in the morning because in the 19 morning I am all tired, depends the kind of game. Some games for me are like solving some of the games are ... I am just gonna tell you one game that I have on my Nintendo Switch. You know what Zelda is? B: Yes!
- J: You do?
- B: I used to play Zelda
- J: Umm... the new one uh I just, there is 20 a lot of solving so 21 I don't play in the morning. I usually play close to like maybe 11 on the weekend, 12. In the week, I have school so I obviously can't play in the middle of the day. I will play mostly at night. Or maybe 22 5 before supper and then for the rest of the night we watch a movie or something.
- B: So you are going to play after school? What about before bed?
- J: No... I 23 don't usually play before bed because 24 I just want to fall asleep. I 25 used to play at night and then 26 I would never go to bed. I count the sheeps. I couldn't go to bed, I couldn't sleep. So I stopped and I just play now, stuff like that.
- B: Can you tell me more about that? You used to play before bed and ...
- J: Yeah, but then I used to not sleep and the next day for school I would get silly mistakes because 27 I was like tired. And now I am fine. I just look at my mistakes

- 12. "not really good things that I like"
- 13. "an app ... a bunch of games"
- 14. "some of them are not that good"
- 15. "50/50 Roblox"

- 16. "week normally 20-30 minutes"
- 17. "more free ...on the weekend"
- 18. "don't use it in the morning"
- 19. "morning I am all tired"
- 20. "a lot of solving"
- 21. "I don't play in the morning"
- 22. "play mostly.... before supper"
- 23. "don't usually play before bed"
- 24. "I just want to fall asleep"
- 25. "used to play at night" 26. "I would never go to bed"
- 27. "I was like tired"

again. I don't have as many mistakes as I used to have. So now I also stopped a lot cause I 28 used to play a lot in the week but then I am like, you know what there is 29 no point. I just 30 feel less comfortable. I just 31 get tired, 32 I feel lazy so I just stopped.

B: So you chose to stop because you realized that you were tired the next day at school?

- J: And 33 I would get really lazy, that's what I find. And I wouldn't want to play games. But now you know, my brother says, "Want to play this with me?" And I am like, "Sure. Why not!"
- B: But before you wouldn't play games with your brother?
- J: No... I 34 would play like on my tablet. But now I am fine. I just chill and different stuff.
- B: Interesting! Now Describe how you feel when you are using handheld devices.
- J: Okay! Now that you said it, cause when someone says it I just feel more comfortable and now yeah. But now since I talked, I forgot what you said.
- B: It's fine. How do you feel... describe how you feel when you're using a device. So, when you are playing games, taking pictures, texting your friends, how do you feel? J: 35 I feel happy sometimes excited.
- B: You said sometimes. So, what are you doing on your device that makes you feel excited?
- J: Sometimes I 36 text my friends saying compliments or I am 37 excited because they ask to play and 38 we form playdates and so that's the times I usually feel excited. Sometimes I am 39 happy because um on Roblox there are different people that I could with on it. It's pretty weird but I figured it out when I was maybe 7 or 8 because... when I was younger, I use to never play on the tablet. I didn't even have a tablet or a phone. I used to just watch TV or play what my stuff and usually I would play on my dad's ... I would ask my dad, "Can I go play downstairs with your old Nintendo. Old old old from when he was a kid." We used to play Mario Kart on that thing. And that's all I would do when I was younger but now, I just do this stuff and I am 40 happy with the stuff like some games. But 41 mostly text messages.
- B: That is interesting, so you are mostly happy and excited when you are texting or messaging.
- J: Sometimes I am 42 happy when I am playing a game with someone else. Cause um on 43 Roblox you can have different friends playing with you. 44 That's when I am happy. I am more happy, 45 mostly happy and excited when I am text messaging.
- B: That is interesting! Why do you think you are the happiest or most excited when you playing or texting someone else?
- J: Well because 46 I like playing with people because you know they're my friends and I do stuff with them, I don't know how to explain. It's just like 47 fun for me.
- B: Fun playing with your friends. Absolutely!
- J: Yeah! 48 Everyone likes playing with their friends.
- B: Absolutely! And then usually you plan a playdate, so after you meet up and play together or is it a playdate to play on Roblox or online game?
- J: No, a playdate to play together.
- B: So, you use your device to also plan playdates.
- J: Yeah, or else I would have to go to his house and tell him and come back. It's like costing more money for the gas and so with 49 this technology it is good but also bad for me.

- 28. "used to play a lot in the week"
- 29. "no point"
- 30. "feel less comfortable"
- 31. "tired"
- 32. "I feel lazy"
- 33. "I would get really lazy"
- 34. "play like on my tablet"
- 35. "I feel happy sometimes excited"
- 36. "text my friends saying compliments"
- 37. "excited because they ask to play"
- 38. "we form playdates"
- 39. "happy because... on Roblox there are different people"
- 40. "happy with ... some games"
- 41. "mostly text messages"
- 42. "happy when playing a game with someone else"
- 43. "on Roblox... friends playing with you"
- 44. "That's when I am happy"
- 45. "mostly happy and excited when text messaging"
- 46. "I like playing with people ... my friends"
- 47. "fun for me."
- 48. "Everyone likes playing with their friends"
- 49. "this technology it is good but also bad for me"

- B: Would you like to elaborate on that? Why do you think it is good and what do you think it is bad?
- J: I think it's bad because 50 it makes you lazy and then you 51 never want to stop playing because 52 you get addicted and then the good side is you get to 53 talk to each other from far. Like I 54 call my cousin that's in Punta Cana right now. Um, he left me two years ago. I was really sad because he moved there and so now, we just talk to him on the phone. And usually, it's like 55 every week that we talk to him. Sometimes it's most of the week. And every summer he comes for the summer so he comes and I can't wait for him to come this summer. He's coming for a month this summer.
- B: That's awesome. You get to see him. Do you se Facetime, Zoom...
- J: Usually, it's 56 on the apps. I forgot what it's called.
- B: WhatsApp?
- J: Yeah, WhatsApp.
- B: Okay, so that is interesting. You like the connection and conversation...
- J: 57 I like talking. Sometimes I 58 don't really feel like talking cause some of my friend just non-stop talking so I just 59 use text messages and say, "Uh, gotta go for supper." B: Oh, are you saying you prefer text messaging than calling?
- J: I am talking about 60 sometimes I don't feel like calling but 61 I mostly prefer calling. You know, I would 62 prefer facing each other but like now you're talking about devices so with devices I 63 prefer seeing their faces and seeing what they are doing instead of taking forever and well, what's he gonna say? On devices 64 you wonder, "When is he going to say this and that." But on the thing, you are not pressing buttons you are just talking.
- B: That is interesting. I do not remember your exact words but you said something like preferring person-to-person?
- J: Yeah, 65 like face-to-face like rather than going on the phone because 66 I can't like hug him on the phone. It's just gonna touch the phone.
- B: So you prefer being physically with the person.
- J: Yeah, but right now we're talking about THIS so this I would rather instead of on um electronic. I would 67 prefer looking at him like from the phone, like Facetime rather than texting him and waiting to see what he has to say.
- B: I get it! So the waiting that is arggg.
- J: Yeah, cause if they leave the text message to go text someone else or is he still there? So I am 68 just wasting my time waiting here for this. Or am I just going to wait until he texts me?
- B: I see! So, when you want a quick answer, you would want to call. But texting if you are not in the mood to talk?
- J: So, if I'm 69 waiting like 5 minutes even 2 minutes and you're not even answering anything I would just call and say, 70 "aren't you texting me anymore?" and he would say, "Oh! I'm sorry. I forgot about you."
- J: What I mean by 71 wasting time is that I want to play with my brother or maybe like make food with my mom, make some dinner or something like that. Sometimes I will make breakfast, just like when mom was sick. And stuff like that.
- B: So, if you are waiting for a text, you can't do all these things?
- J: Yeah

- 50. "it makes you lazy"
- 51. "never want to stop"
- 52. "you get addicted"
- 53. "talk to each other from far"
- 54. "call my cousin that's in Punta Cana"
- 55. "every week that we talk to him"
- 56. "on the apps"
- 57. "I like talking"
- 58. "don't really feel like talking"
- 59. "use text messages"
- 60. "sometimes I don't feel like calling"
- 61. "I mostly prefer calling"
- 62. "prefer facing each other"
- 63. "prefer seeing their faces"
- 64. "you wonder..."
- 65. "like face-to-face like rather than going on the phone"
- 66. "I can't like hug him on the phone"
- 67. "prefer looking at him... rather than texting"
- 68. "just wasting my time"
- 69. "waiting 5-2 minutes and you're not even answering"
- 70. "aren't you texting me anymore?"
- 71. "wasting time"

- B: And you mentioned something before. You said that you don't like that it makes you feel "addicted".
- J: Yeah, with the electronics, it 72 makes you like addicted to it when you are like too much on it and that was the bad side. The good side is that you can 73 do research and know some stuff and you can 74 talk to each other.
- B: Is that a feeling that you have felt? Feeling like you "can't get off".
- J: Yeah, that's the good side, to 75 talk to each other on like text messages or calling 76 doing research and that's the two things I do and the other stuff like 77 TikTok and just watching videos and then you 78 watch more and want to watch more than you just 79 don't want to get off.
- B: Has this ever happened to you?
- J: Yeah, um... because... it happened to my dad lots of times. He will go and do his number 2 and I am just waiting. And after that I will need to go to the bathroom and I was like, "Are you done daddy?" And he's like, "Oh, sorry I am not done!" And he is still swiping. And so that's why I say that. Also, Facebook and stuff like that. You 80 just look at it and get addicted to do.
- B: So, are these things that happen to you, or you see it happen to other people?
- J: I see it happening to sometimes my family. Sometimes it happens to me or like it 81 used to happen to me. Just like I said, now I calmed down, so I don't do it as much.
- B: So, this is how you felt when you use to use it? Feeling like you "couldn't stop".
- J: Yeah
- B: And now that you've stopped using, now you feel like...
- J: I don't want to like, **82** "Oh common, can I go on it now?" Or can I go right after lunch or 2 minutes after playing a game, "Can I go on it now?" **83** But since I stopped, I am not like that. So yeah!
- B: Interesting! Now how do you think handheld devices impact children your age? J: Uh...[pause] how the game... not really the games. Really, I am not sure but if the games were for younger kids I would say the game obviously but for now um some 84 girls usually my age probably go texting or playing on like Roblox. 85 Lot of girls in my class play Roblox. Even lots of girls at my school play that game. So, I am assuming lots of girls play that game and text. Well, that's what I think for girls and for boy's um 86 some boys text but most of the boys I know 87 play like Fortnite and stuff like that. That's another thing, I am not talking about a phone. Some of my friends that are boy, they will 88 play on tablets and stuff but most of them in my class 89 play on like a PS5 or PS4 and they will just play Fortnite and um and stuff. Mostly Fortnite, that's all I hear from them. Well, I'm 90 trying to get Fortnite on my Nintendo Switch, but I have an issue with my account so I'm still waiting. Honestly, my 91 friends really like that game, and 92 I am not gonna be like that. 93 If I was like addicted to it, I probably wouldn't play it as much. But now I don't play as much.
- B: Are you saying that you think your friends are addicted?
- J: No! 94 They are. I hear them every single day. EVERY single day. EVERY single day. I 95 hear them talk about, "Ohhh... you know... about this thing and we'll play tonight together." Cause you know, it's an online game. You know about Fortnite? B: Yes [laugh]
- J: [laugh] They just want to play together. 96 That's all they want to do. 97 At recess they just talk to each other, "This thing is cool, it's legendary." And stuff like that. That's

- 72. "makes you like addicted"
- 73. "do research"
- 74. "talk to each other"
- 75. "on like text messages or calling"
- 76. "doing research"
- 77. "TikTok and just watching videos"
- 78. "want to watch more"
- 79. "don't want to get off."
- 80. just look at it and get addicted"
- 81. "used to happen to me"
- 82. "Oh common, can I go on it now?"
- 83. "since I stopped, I am not like that."
- 84. "girls my age ... go texting or playing Roblox"
- 85. "Lots of girls in my class play Roblox"
- 86. "some boys text"
- 87. "most boys I know play like Fortnite"
- 88. "my friends play on tablets"
- 89. "most of boys in my class play on PS5 or PS4"
- 90. "trying to get Fortnite"
- 91. "my friends really like that game"
- 92. "I am not gonna be like that"
- 93. "If addicted, I probably wouldn't play as much"
- 94. "They are [addicted]
- 95. "I hear them talk about it every single day"
- 96. "That's all they want to do"
- 97. "At recess they just talk to each other"

what I would hear, 98 every single day. Before we go to recess, they just talk about it. While they're getting ready, they're talking about it.

B: How does that make you feel? Do you play?

J: I will start playing soon. Just like my dad said, he can't make an account. He said that to me. So, he'll probably take it to Zio Chris, he's an expert with computers. You said you are good at it too if I remember?

B: [laugh] My husband is better. If it's for creating an account.

J: If Zio Chris doesn't know, I will probably tell you if your husband is available for that. B: Perfect.

J: And so, once we go to Zia Fella's and Zio Chris' house, we're going to probably tell Zio Chris to try and fix I or make an account.

B: Okay. And how do you feel about all your friends playing and you not being able to play yet?

J: Uhm... I feel like ... well 99 common I want to just play for once with my friends. Cause usually not most of them play Roblox so 100 I'm not a lot with my friends. My best friend if cause he knows I have issues with Fortnite cause he asked me to play Fortnite once already but I said there is an issue so he said, "Ok, we can play Roblox." And so we play Roblox. And until I get Fortnite, I'm gonna call him and see if we can play together for once cause I never play with a friend on Fortnite. I have tried the game at a friend's house, but I've 101 never played with my friends at the game.

B: On your account?

J: On my OWN account.

B: I get it. Okay, interesting!

J: I'm just 102 really wanting to do it.

B: You said earlier that you used to play on your tablet before bed and it would make you tired ...

J: No, it 103 would make me "awake"

B: Sorry, I meant make you tired the next day because the tablet would keep you awake. If you played Fortnite, when would you play?

J: Usually, I 104 go to bed at 9:30 max, so I would play uhm ... 105 8:30 that would be the time I would stop, maximum that I would totally, like no more is 8:30-8:40 so that's he time that "no, no no, I'm not."

B: No tablets, no video games, no Smartphones...

J: Nothing! 106 Not even looking at them.

B: Okay, to give your brain a break. Is that it?

J: So like if they ask me to play at 7:30 I would say, "okay, okay, we can play for an hour maybe." But usually Fortnite, I don't have like, they're rounds that could be very long, rounds that could be really short because you die fast. And so, depends on like, depends on what like how long it would take. If I would die a lot of times, I would tell my friends, "Okay dude, I'm dying lots of times let me try practicing another time and maybe see you later." Sometimes I would play at like 8 o'clock and he called me and said, "Wanna play?" Yeah, I can play for maybe like 25 minutes to half an hour so that's what I said. I would end up staying up until 8:30 and so like then 8:35 I'm like, 107 "Okay dude! I have to stop playing because it is past my max." I was close to my max.

B: Are you the one who decided that at 8:30-8:35, you would be done.

98. "That's what I hear every single day"

99. just play for once with my friends

100. I'm not a lot with my friends

101. never played with my friends

102. really wanting to do it 103. [tablet before bed] ... would make me "awake

104. go to bed at 9:30 max 105. 8:30 that would be the time I would stop [playing]

106. Not even looking at them

107. "Okay dude! I have to stop playing because it is past my max."

- J: Yeah, and I might've said I did that but that is what I am planning to do. I would say I they would say that. This is what I would do.
- B: So, when you will have an account, this is what you plan to do?
- J: Yeah!
- B: Interesting! I like that you have a plan. Planning is always good.
- B: This is actually the last question before we open it us to any other comments.

Describe how the world would be different without handheld devices.

- J: Oh my God! That would be crazy! Actually, not that crazy because Nintendo Switch is not really important, obviously. Depends what you can get on there. But usually stuff like that is 108 not that important because it's just games. Sometimes YouTube and I'm not sure what else there could be but I know for me, it's just games so that's not very important but what I think is 109 very important is the phones and 110 sometimes the tablets but mostly the phones because 111 that's how you text, call. Um, usually maybe 112 call 911 in case a problem is happening. Um, and stuff like, you know. But there are lots of 113 apps and social media that's not really important stuff. You know sometimes it depends like on social media like on 114 Facebook there could be like, "Oh! Don't eat this. It contains wheat killer." Have you seen that?
- B: I haven't see the Gold Fish one but I do know on social media they will tell you not to eat specific onions because of salmonella, for example.
- J: My dad had a big bx of Goldfish and then he saw this video and said, "You se this big box Jax and Mason, GARBAGE!" and he threw it all out because it contains wheat killers. Something they put on the wheat to stop I don't know. They said that it causes cancer. I don't want anyone to be scared about this, this is what the video said, but um I don't think like, I don't care but I don't think it's good to give to your child.
- B: So you said that if there would be no social media, it would be ok but text messaging...
- J: It's like 115 social media is 50/50 and text messaging is more. 116 Text messaging is not as bad but is like a 60 and 117 calling is close to a 90-100.
- B: So, what if we had no Smartphones and the tablet and it would be house lines.
- J: Oh, those are important. My grandparents have those things.
- B: So, if we had screenless phones and nothing else, ho would that look like?
- J: I think it would be really good but you're missing a couple of things that are important. Because remember I told you social media is 50/50. That could be important for your life. I say 50/50 because sometimes the 118 videos cold be a scam or fake. I also said 50/50 because some of it are 119 just videos for fun.
- B: How do you feel about these videos?
- J: Those videos are on the bad side for me. 120 That would not be important.
- B: Why do you say "videos are on the bad side"?
- J: Because 121 that's what makes you addicted. Depends on the video. If it's a video in the woods, that's not that bad. But if it's something for fun that they're doing, that's on the bad side.
- B: I am curious to know why you see it as "addicting."
- J: Because 122 you want to see other videos or another of their videos.
- B: I see, because they suggest other videos.
- J: And then your like, 123 "Okay! Let's check another one."
- B: Well, this wraps up the interview. Do you have any last comments or questions?

- 108. not important ... just games
- 109. very important is the phones
- 110. sometimes the tablets but mostly the phone
- 111. that's how you text, call
- 112. call 911 in case a problem
- 113. apps and social media that's not really important 114. On Facebook... "Oh! Don't eat this."
- 115. social media is 50/50
- 116. Text messaging is not as bad
- 117. calling is close to a 90-100.
- 118. videos cold be a scam or fake
- 119. just videos for fun ... on the bad side
- 120. would not be important
- 121. [videos for fun] is what makes you addicted
- 122. want to see other videos
- 123. "Okay! Let's check another one."

J: No, honestly, I don't have anything else.

B: If you think of anything, you can always include it in your booklet

PART II

B: For the section on tablets, you wrote as one of the webs "not good", why did you write "not good"

J: I meant 124 not very good. In the sense of for eyes or brain or memory.

B: Why do you think it is bad for your eyes?

J: I think it will 125 damage your eyes, or sight. It will be hard to see.

B: And what about the brain?

J: In the sense of memory.

B: That is interesting. So why do you think using the tablet is bad for your memory?

J: Because then you 126 can forget fun things and fun times that you had.

B: Alright, thank you! You also wrote that "it makes you dumb."

J: It is harder to do math, school, harder with history and things like that.

B: How does the tablet make it harder?

J: Because it makes you have a 127 hard time with school because you are 128 always on

it. I don't how to explain. 129 My dad told me that and I am pretty sure it's true because I did have a hard time in school.

B: You think that you would have a hard time in school if you would always be on the tablet?

J: I used to always be on it, yeah.

B: I see, thank you! You mentioned that electronics before bed ...

J: 130 Keep you awake

B: Yes, keep you awake. This happened to you right? And how do you sleep now that you do not use it anymore?

J: I sleep like a baby. I am still tired because I play soccer all day at school. Always playing sports at school so I'm tired. At night I just want to go to bed but 131 I used to never go to bed, I would freak out, count sheep and nothing worked.

B: This is when you used to use tablets before bed.

J: Because right right before bed.

B: Okay, happy you get to sleep better now. For Devices and School, I was curious, what devices do you use in the classroom?

J: 132 Computers and iPads

B: And do you like it?

J: Yeah, but we don't really play games. We just 133 do research about like an animal or things like that.

B: Do you enjoy doing research on the tablet?

J: It's actually pretty interesting.

B: For Devices and Friends, you wrote that lots of kids play games online, mostly playing with their friends.

B: Do you have a lot of your friends who play online?

J: Most of my friends. Actually, all of them.

B: Do you also play online?

124. not very good [tablets] for eyes, brain, or memory

125. damage your eyes

126. can forget fun things and fun times

127. hard time with school

128. always on it

129. My dad told me

130. keep you awake

131. used to never go to bed

132. Computers and iPads [at school]

133. do research

messages

147. more for chatting

J: I play sometimes with them. But now 134 I don't like to play a lot with them anymore 134. I don't like to play a lot because same reason. I haven't been focusing a lot. with them [friends] anymore B: When you are using your tablet... J: 135 I don't focus. 135. I don't focus B: Do you know why? J: I don't focus, I am always in the clouds. B: Do you see a difference when you are not using it? J: a BIG difference. 136 I talk more actually. 136. I talk more actually B: Talk more with who? [when not using tablet] 137. with my family J: 137 With my family. B: Perfect, thank you! You wrote that you feel excited when chatting with friends on the device. What about it makes you excited? J: It's like your 138 playing with your friends. So it's fun right? B: So chatting is the same as playing with your friends? 138. playing with your J: Yeah! So your 139 playing and chatting with your friends and that gets me excited friends. cause 140 I don't play with them often. 139. playing and chatting B: You also said you sometimes feel sad or upset when using my device to chat. Why is with friends 140. I don't play with them J: Yeah, because of somethings that happened so now we 141 can't have a playdate. Or often that 142 happened to that person and I feel bad for them. Or I will feel upset because this 141. [feel sad and upset] when we can't have a happened. B: So if you are chatting about something sad that happened, then that will make you playdate sad? 142. or something happened J: Mhm, yeah! I am not always sad when chatting. Sometimes I am happy. B: Depending on what you are chatting about? J: Exactly! B: You answered True for the statement, I sometimes feel upset after using my handheld device. J: Yeah, because I used to 143 lose at a really hard game when I was almost finish. 143. [upset] when I lose at a B: Oh, I get it. Alright! I see things that upset me when I am engaging with my handheld really hard game devices. J: Yeah, because sometimes there are things that go wrong, like before and I really don't like it. B: Like losing a game? J: No, 144 someone said something, but it is not true. 144. when someone said B: When you are chatting? something, but it is not true. J: Mhm B: For I see positive and happy things, you also wrote true. J: Same thing B: For children my age should own a tablet you wrote true but all children my age should own a smartphone, you wrote false. Why should they own one but not the other? J: Because you are 145 too young to own a real phone and 146 handle with real 145. too young to own a real messages. It's 147 more for chatting or something, it's not to play games. A tablet you phone can have fun or something. Do whatever you want. 146, handle with real

B: So, you think children are too young to own a phone?

J: Yea

B: And you are saying that tablets are ok because you can 148 use it to play games?

J: Yea

B: I see, perfect! Finally, for content creation, you wrote you have uploaded pictures and videos. I was curious about the type of pictures and videos and what platform.

J: It's not really me. It's actually my mom. But I will tell my mom if she could put this picture or something. And um, 149 she posted a nice picture of me and my brother. Pictures on Facebook actually. And then 150 my friends see it. Me and my brother sometimes, at places like La Ronde. Or when we are wearing fancy things, she might post me on Facebook.

B: And your friends get to see it?

J: Yeah, and all people. All my family and everybody.

B: And do you like that?

J: Yeeeeah, it's ok. 151 Sometimes I feel embarrassed.

B: How come?

J: Because sometimes 152 I don't even know she is posting these things. Like my mom took a picture of me at the Salon with Mark* and there was a picture where Mark was about to hit me. And then she posted that one on Facebook and my friend was like "Oh! Weren't you at the Salon cutting your hair? Your mom cuts your hair right?" I'm like, "Yeah!" "Well I saw a picture of your brother almost smaking you." I was like, "Oh no!" I don't want to see that. I was actually pretty surprised cause my friend said, "I saw it on Facebook with my mom this morning."

B: And you didn't want your friends to see that?

J: No not that one. Like a picture where I am smiling but not that kind of picture.

B: Well these were all my questions! Any other comments or questions that you have to say?

J: Honestly, 153 sometimes it can be fun and sometimes not fun. Its 50/50

Interview transcript 2

Interviewer: B Child 2: Mia * *Pseudonyms

PART I

B: So, the first question is: Do you own any handheld devices. If yes, what type of devices do you own personally and what type of devices do you have in your home?

M: I have a tablet that I use and that's all.

B: Is it your personal tablet or a family tablet?

M: Well, 154 it's my tablet but I 155 don't really have any accounts on it. It's only the one that I use.

B: Perfect, thank you! Question number two: Describe the type of activities you enjoy doing the most on your handheld devices.

M: I usually like to 156 listen to music or um I don't really do much but sometimes I 157 play like games like video games but not a lot though. I 158 don't have any apps, it's just more websites.

B: What platform do you use to listen to your music?

M: 159 YouTube

148. use [tablet] to play games

149. [mom] posted a nice picture of me and brother on Facebook.

150. my friends see it

151. Sometimes I feel embarrassed
152. I don't even know she is posting these things.

153. Sometimes it can be fun and sometimes not fun. 50/50

154. my tablet 155. don't really have any accounts

156. listen to music 157. play games like video games

158. don't have any apps

159. YouTube

160. jump things

B: What type of games do you like to play?

M: Like um 160 jump things. And I have like this game where you like get to 161 build a city, so I have blocks and ... it's kind of like Minecraft but it's free.

B: What is the name of the game?

M: It's called 162 Bloxd. I have an account, but I always sign in and when I log in into my thing and I start building stuff.

B: Is it an online game? Can you play with other people?

M: Yes, but 163 I don't chat. I just do it by myself. Sometimes I 164 do it with my sister.

B: You and your sister can each have your own tablet and play?

M: Yeah!

B: Fun, perfect! Next questions: Describe any activities that you enjoy doing less on your device.

M: I have um like l, 165 learning apps that I don't really use because I prefer just doing it on paper most of the time.

B: What type of learning apps?

M: There is one called IXL um I use it sometimes but there are other programs that I do that's just on paper. Like sometimes my mom will give me a workbook that I complete, and I usually prefer doing that than the online one.

B: Interesting, thank you. Number 4: On a typical day, how often do you use your handheld devices and when during the day are you more likely to use them?

M: On week days, and weekends it's different. On 166 week days I usually only ever use it after school not in the mornings. And usually I do it maybe 167 3 out of the 5 week days. And um... usually it's only for like 168 Google classroom and stuff like that. And sometimes instead of watching TV I like to play a game with my family. And then on the weekends I um like to 169 listen to music on it. For example, if I'm cleaning or taking a shower or something, I put it on and I just listen to it and 170 sometimes I play games on it.

B: Is there a specific time you are more likely to play during the day?

M: 171 Whenever I have free time.

B: Whenever you have free time. Perfect! So, you use your tablet mostly during down time or free time.

M: Not all the time. I usually only do it for like 172 half an hour if I'm playing a game. 30-45 minutes about.

B: After 30 minutes you are done? Is that a time fame that you have given yourself?

M: Yeah... I just 173 get bored after a while. 174 I like to read a lot.

B: Ok, perfect! So, after thirty minutes you do something else. Thank you! Number 5: Describe how you feel when using handheld devices.

M: Depends on what I am doing. If I'm playing a game, 175 it's easier so I enjoy doing it more. But like if I'm doing something else, it might be a little boring. Depends on what it is really.

B: What is the "something else" that might be more boring? Can you think of an example.

M: It's not that don't like doing IXL, but I find it 176 less enjoyable than playing.

B: Are you referring to the learning app?

M: Yeah

B: So, the games are more interactive.

161. build a city

162. Bloxd

163. I don't chat

164. do it with my sister

165. learning apps that I don't use

166. on week days use it after school, not mornings 167. 3 out of the 5 week days.

168. Only or like Google classroom

169. on weekends, I like to listen to music.

170. sometimes I play games

171. Whenever I have free time

172. half an hour if playing a game

173. get bored after a while 174. I like to read a lot

175. it's easier so I enjoy doing it more [games]

176. less enjoyable than playing [learning app]

M: Well, it's kind of obvious because 177 games are more fun

B: Absolutely! I agree. Okay, now question 6: how do you think handheld devices impact children your age? So, friends or classmates.

M: A lot of 178 kids in my class they have social media accounts or like they 179 play games that I'm usually not allowed to play. So, um, sometimes they 180 go on like when they get home, they don't really read or stuff like that so they're 181 always doing that instead of like I don't know, playing soccer outside or something.

B: So, they use their devices

M: ... in their free time

B: instead of going outdoors and reading a book. How do you feel about that?

M: I don't ... I never really thought about it, I guess. I mean, 182 I don't think it's really good to be on your devices all the time because I mean it's 183 more productive to do stuff outside because if you're playing soccer or reading a book you are like learning a skill or doing something that you could actually do with other people, I guess.

B: You mentioned, "doing with other people". Now let me play devil's advocate. What about playing online games? You are playing with other people.

M: I don't really do that much so I don't really know what it's like but you are 184 playing with other people but you 185 don't know them so you 186 can't really have an in-person conversation.

B: So, you value the in-person connection?

M: Yeah, but also you can't ask... like if you know them personally, it's easier to share information too, you tend to trust them more. But 187 online, it can be anyone.

B: What about playing online games that you can play with other people you know. How do you feel about that?

M: Um, 188 a lot of my friends play this game called Roblox. I've never played it before. I know what it is because they talk about it a lot and they're always asking each other, "Oh, can I know your username." But like usually they tell me that they don't play with random people, they 189 just play with their classmates. And I don't really know much about it. I just know that 190 everyone does it, that I know.

B: You don't want to play?

M: Not really, I 191 rather just do like reading or play outside.

B: You mentioned that they are always talking about the games they play. How do you feel when they do?

M: 192 Sometimes I feel left out because I don't know anything about it but also, I don't really care too too much because I mean its just a game. I don't need to know tat game to be their friends. 193 We can still talk about other things. And my closest friends don't really do that so like we talk about I don't know like the music or uh like our favorite books or something like that and my friends who do I usually play ... like at recess they don't really talk about it that much really usually when we are together, we joke around, or we play tag or something.

B: So, you seem to have other ways to connect other than games like Roblox. Did you have any other comments on how children are impacted? Do your classmates talk about other games they play on their devices or social media platforms?

M: I know what they are and like I've heard people talk about them and stuff and I've seen people on them, but 194 I don't actually own or have any accounts. I don't have the app so I can't use it.

177. games are more fun

178. kids in my class have social media accounts
179. [they] play games that I'm not allowed to play
180. go on when they get home

181. always doing that

182. I don't think it's really good

183. more productive to do [other] stuff

184. playing with other people

185. don't know them 186. can't really have an inperson conversation.

187. online, it can be anyone

188. a lot of my friends play Roblox

189. just play with their classmates

190. everyone does it

191. rather just do reading or play outside

192. Sometimes I feel left out

193. talk about other things

194. I don't actually own or have any accounts

B: But you have seen how it is?

M: Sometimes my 195 mom makes TikTok videos for adds.

B: How do you feel about those apps?

M: I don't really think their that bad, but they could be 196 used to do bad things. Well not bad things just like things that aren't important, or they could be a 197 waste of time. You could be doing other things.

B: You mentioned "used to do bad things" do you have examples of what you mean by that?

M: People could 198 lie about certain things or 199 create things that could be embarrassing for someone else. They could 200 comment mean things about someone who is doing something that they are proud of.

B: Have you seen this happened?

M: Not really but I've heard.

B: You heard about it at school?

M: I heard about it on the news and sometimes 201 people come to our class and ask us about stuff like that.

B: Ask about what?

M: Kind of like what you are doing right now. They don't interview us, but they ask about if we know social media or like 202 how to be safe on it. 203 A lot of kids in my school do use social media.

B: So, people come in the classroom to teach about social media and what's online...

M: I've heard about it more there and to find out 204 what's real and what's fake.

B: How do you feel about these courses?

M: 205 I do learn from them, but I can't use it yet maybe one day probably I'll get a social media account, but I don't really plan on having one anytime soon so, I won't really use it anytime now.

B: Why wait for it? What's keeping you from having a social media account?

M: I think 206 I am too young for it. Cause like usually older people use social media but it's a lot of younger kids using it. I think I should be learning other things other than just being on my device all day.

B: Very interesting! Do you think these courses at school will help you for when you will have your own social media account?

M: Probably

B: Anything that comes up to mind?

M: If I'm scrolling and I come across something surprising and I can't tell whether it's real or fake I might use a way to interpret it. Or if I see something that is... that looks real but is also kind of suspicious, I might like check if it is real or not.

B: Check your sources, very good, thank you! Moving on to the last question: Describe how the world would be different without these devices.

M: Well sometimes ... usually when I am on the metro or walking to school a lot of people have it and instead of just reading a book or waiting or like I don't know taking a nap or something, they're 207 always scrolling or doing something on their phone instead of doing something else. That's like their 208 way to occupy their free time. So if there wasn't that, people would probably have more conversations in person and learn more skills and stuff like that.

B: So do you think the world would be ...

195. mom makes TikTok videos

196. be used to do bad things

197. waste of time

198. lie about certain things 199. create things... embarrassing for someone else

200. comment mean things

201. people come to our class

202. how to be safe on it 203. lot of kids ... use social media.

204. what's real and what's fake

205. learn from them [classes on digital literacy]

206. to young for it

207. always scrolling 208. occupy their free time

M: Very different.

B: Very different for better or for worse.

M: It depends.

B: How would it be better?

M: Better because 209 people would be learning new things so like they might decide to 210 read a book during their free time 211 rather than scrolling onto social media. Or decide that they want to learn a new sport. So instead of when they're at home and don't have anything to do they can go to the park and play with the first person they see playing.

B: Can you think ways where you think people would be missing out without their devices.

M: They might now know that something... A lot of people 212 look on the news too so they might not know what's going on that is important on the other side of the world. Or if they want to know than ... or like maybe their 213 friend wants to talk to them but the only way to talk to them is like to see them but they don't know where they are. So, they would have to look for them or just wait until the next time they see them.

B: Are you referring to Facetime or Messenger.

M: Yes!

B: Perfect! You answered all questions. Anything else you would like to add or comment on?

I (mom) mentioned stop motion and reviewing items on social media.

M: 214 Stop motion is like filming movies. You have like an object and instead of you holding it, it moves on its own. You take a picture, move it, and take a picture and when you play it all together in looks like a movie.

B: You have made movies?

M: Yeah

B: Oh great! This can be added to our next interview under content creation if you wish to talk about your videos. You use a handheld device for this?

M: Yes, tablet. But 215 I don't share, I just 216 send it to my friends.

B: You can totally send it to me if you prefer.

PART II

B: You wrote "friends" in the Tablet word web. Why?

M: A lot of my 217 friends have a tablet and they use it to 218 message each other, communicate outside of school.

B: Do you also do that?

M: Not a lot, sometimes I 219 video chat with them but only on the weekends.

B: Using the tablet?

M: Yeah, on 220 Messenger kids. And I only have it with my closest friends and I don't have any group chats.

B: Perfect! You also wrote "Popular Roblox" What did you mean by that?

M: A lot of kids... Another way they **221** communicate outside of school is by **222** playing videogames together. And the one that I drew is one of the most popular.

B: Do you also play?

M: No, I don't have it.

B: Your friends play?

209. learning new things

210. read a book

211. rather than scrolling

212. look on the news

213. friend wants to talk

214. stop motion like filming movies

215. I don't share

216. send it to my friends

217. lot of my friends have a tablet

218. message each other

219. video chat with them on weekends

220. Messenger kids

221. communicate outside of school

222. playing videogames together

M: Not my best friends but people in my class.

B: For Smartphone, you wrote "everyone has one" Who are you referring to?

M: I mean not everyone but like it kind of seems that way sometimes because pretty much 223 everyone in sixth grade and up that I know has one. 224 Most of the kids in fifth grade have one except for my friends.

B: What do you think about that?

M: Umm... well I mean I feel like they don't really need it because you 225 don't really do anything useful on it. It's more useful to make phones calls and stuff like that. But I mean, you don't really do that that much.

B: So do you think everyone in general don't need a phone?

M: Some people just 226 use it for like fun, entertainment. But they could be 227 doing other things. It's also better to not have one all the time so you could be doing other stuff. B: Okay, so when it is being used for only entertainment, that's when your opinion is that you do not need it.

M: Yeah, or social stuff.

B: Or social stuff. Are there any examples where you might need a phone?

M: I just feel like you 228 don't really need it when you're young because you're always with your parents or at school. Or like hanging out with your friends or with someone else. But when you are an 229 adult, you need it more because you are more alone.

B: Perfect! I understand. So, adults might need it but kids don't need it because they are with their parents who most likely have one.

B: For social media, you wrote "comments 34-36, vacation, awful, ew" What did you mean by this bubble?

M: I find it can be a bit 230 negative and 231 make you feel like sad if other people 232 don't like what you're doing or 233 disagree with something that you did. So then if you go back and read the comments from someone you don't like it, it kind of makes you upset or sad depending on what it is.

B: Ah perfect! Thank you.

B: Under Devices and Friends, you mentioned that your friends talk about devices at school, "not too often so I don't really feel left out." When they do talk about it, is that a feeling that you feel "left out"?

M: Sometimes, but I also 234 have friends that don't use it so I go with them... some of my friends are not best friends or close friends. They are friends that I sit with or like if my other friend is absent and they are usually talking about something like that. So, I 235 get a bit confused, so I go do something else or I just watch them because usually my closest friends don't usually do stuff like that. I don't really feel like that because I am not often in a situation where it happens.

B: I see. Perfect, thank you!

223. everyone in sixth grade has one

224. Most of the kids in fifth grade

225. don't really do anything useful on it

226. use it for fun227. doing other things

228. don't really need when you're young [cellphone]

229. an adult [needs] it more

230. negative [comments] 231/ make you feel sad 232. don't like what you're doing 233. disagree with

234. have friends that don't use it

235. get a bit confused

something you did

Appendix I

First-cycle Codes: Parents

(3a) How do parents perceive preteens' use of handheld devices?

Interview transcript 3

Interviewer: B
Parent 1: Laura *
*Pseudonyms

B: So, the first question is: Do you own any handheld device. If yes, what type of devices do you own personally and what type of devices do you have in your home?

L: Okay, so basically just my 1 cellphone and TV

B: Tablet?

L: No, I don't have a tablet

B: So, phone only. Okay, perfect! Second question: Describe the type of activities you enjoy doing on your handheld devices.

L: Um... mostly 2 for work. For 3 appointments, 4 chatting with family and friends. I don't really play games. Also, 5 emails.

B: Perfect! Describe how you feel about the use of handheld devices in general.

L: I find we're 6 overusing them. Sometimes I even catch myself thinking... because it is work-related, I am always on it. I tend to always want to 7 check if clients texted me. So, 8 I am constantly on it and sometimes like at the end of the day I just want to 9 take it and chug it. Even as adults, as much as children, adults we have to time ourselves to in some ways.

B: Perfect! How do you think handheld devices impact your child and other preteens?

L: I think 10 definitely socially. So that's why I try to 11 keep them off as much as possible. They will go on it for sure. But I find I 12 want them to interact with people when we have guests over, family. I think it is important to 13 sit down and have conversations. If everyone is looking at their devices or their phones, 14 no one is socializing anymore. So, I find that this aspect from my generation to my kids' generation, it changed a lot. And it's our 15 role as parents to limit them with time you know.

B: Do you see a difference between your children and other preteens. You think this is a common thing among preteens?

L: Yeah, yeah! A lot of parents talk about it at school. Clients at work. A lot of 16 families are impacted by this. And a lot of 17 young kids like one-year-olds, two-year-olds are on iPad and you 18 take it away and they have a crisis. I find that absurd because they shouldn't even be on it at this age. Watching TV like when we were young that's one thing but parents now 19 bring their iPads everywhere. They can't have their kids not be on it either. So it's 20 not the kids' fault. The kids, if you don't introduce it to them, they don't know what it is. Especially at such a young age. At my house it's just their tablets, at their fathers' house they have their Nintendo but for here, 21 I will never buy a Nintendo.

B: Next question: How do you think handheld devices impact the family in general?

L: I find that there is 22 a lot less communication between family members and friends. 23 A lot more of texting. We are 24 losing the human touch, the 25 human connection. It's now all through devices. All 26 so robotic.

B: And finally, how does it feel to parent in this digital world?

1.cellphone and TV

- 2. for work
- 3. appointments
- 4. chatting with family and friends
- 5. e-mails
- 6. overusing them
- 7. always check if clients texted me
- 8. constantly on it
- 9. take it and chug it
- 10. impacts "socially"
- 11. keep them off
- 12. want them to interact
- 13. sit down and have conversations
- 14. no one socializing
- 15. role as parent to limit
- 16. families are impacted
- 17. one-year-olds
- 19. take it away crisis
- 20. not kids' fault
- 21. never buy Nintendo
- 22. less
- communication
- 23. more texting
- 24. losing the human touch
- 25. human connection
- 26. so robotic

L: It is 27 very challenging because you don't want them not to have it because 28 their friends have it and their friends are all on these games or what not. But you definitely need to put 29 rules and restrictions because it does 30 affect their grades. We were having an issue with J a few months ago, we took it away and it make a huge difference. So, for sure it impacts children.

B: You mentioned rules and restrictions. What does that look like here in this family?

L: Basically, **31** during the week I try to limit it a lot. Like before, when he came home he really wanted it so I said, "Okay! Only 20 minutes." And then when B and R come over, you get off. B: I noticed that haven't been on a tablet this whole time.

L: 32 Time restriction. I feel like if you don't give a time frame, they will just go on it and then you get into your stuff and you kind of forget to balance it out. But for sure 33 during the week were more strict.

B: Perfect, thank you! I asked all six questions for this interview. Are there any last comments you would like to make regarding preteens' use of devices?

L: The first session of his school this year, he has the same teachers he had last year. And they wanted to meet with us for the report card so I went in and she said, "I don't know what's happening with J but you might have to get him evaluated." So, I said, "Excuse me?" She says, "Yeah, yeah! I think he has something, a 34 TDAH." So, I said, "Oh my God! But what's going on? We had you guys last year." So then I said, "I think he is getting used to you guys or he is taking advantage of the fact that you're the same teachers and he's comfortable. And you guys have to make him uncomfortable again. Or it's the devices." Cause back then I would not pay attention to the time so I spoke to J's father and I'm like, "Let's try it out for a few months." And not he's been getting 100 percents. He was getting 40s. He was failing! 35 He was failing! And then the teachers after a month asked us, "What did you guys do?" and we said, 36 "We took away the tablet." So his homework he was rushing everything and pretending he understood but he 37 just wanted to go back to the tablet. So it's overstimulation.

B: What made you think it was the due to the devices?

L: Because of the way he was acting. His behavior changed, he would never want to do homework. It was always a 38 challenge to do homework. So now we have a routine also. Today is Monday so we are taking it easy because we did lots of exams last week and we can catch up during the week. But I find we are also 39 calmer without the devices.

B: Why do you think you feel calmer now without the devices?

L: Because there 40 isn't as much stimulation. It's 41 like a drug right? 42 The more you are on it, the more you want to be on it. 43 When you get off of it, you don't need it. I feel like it's the same thing. That's why when my kids say, "I'm bored! Theres nothing to do mommy!" And that's been said a lot less lately cause M colors a lot more now. And J too. I told them, "If you don't play with your toys, mommy will donate them to a daycare." So, they play more. They play with each other; they draw a lot. So, it's doing different things. You 44 need to get off these things, it's 45 not good for the brain. My kids now say to other kids, "Why are you on your tablet so much, it's not good for your brain."

B: Do you have a lot of conversations with them about screen time and devices?

L: Yeah!

B: Any last comments about the impact of devices?

L: No, pretty much it!

B: You covered it all! So, thank you!

27. very challenging

28. their friends have

29. rules and restrictions

30. affect grades

31. limit it a lot during week

32. time restrictions

33. more strict during week

...

34. TDAH

35. was failing 36. we took away the tablet

37. back to the tablet

38. challenge to do homework 39. calmer without

devices

40. isn't as much stimulation

41. like a drug

42. the more you're on it, the more you want it

43. get off it, you don't need it

44. need to get off

45. not good for brain

Interview transcript 4

Interviewer: B Parent 1: Ali * *Pseudonyms

B: So, the first question is: Do you own any handheld device. If yes, what type of devices do you own personally and what type of devices do you have in your home?

A: I have a phone; I have an iPad and we have a laptop. And then we have and iPad that each of the girls can use which we bought during covid when they were doing online classes. We also got a Chromebook um because it was the same thing, at the beginning of covid the iPad wasn't enough to do some of the work and since they were doing a lot on the Google platforms, so we just had it on that, also much more affordable. So we have the Mac book, 3 iPads, because I was teaching as well, sometimes I had to use my phone because my work laptop died.

B: Second question: Describe the type of activities you enjoy doing on your handheld devices. A: Sometimes I 46 look up silly things I want to know. Random information, I look up 47 schedules, maps. When I have little down time, I will go on 48 social media once in a while. 49 Watching videos, I do a lot of gardening, so I always look up things I think I want to do. I do a lot of DIY projects, so painting, how to do things, repair things, build things so that's really helped a lot. 50 Online shopping, we don't have a car anymore so it's one of those things that we do. Walk to the store every day or every couple day, um but, other times I'll order stuff in and it's very similar in price. So that's something we do as well.

B: Perfect, question number three: Describe how you feel about the use of handheld devices in general.

A: Um, I really have mixed feelings. So I find they 51 can enhance and help you in so many ways but I find that if they are not monitored or like self-regulate your us or what you use it for um or maybe if you are unaware you 52 can get sucked into this rabbit hole they 53 can impact your socialization, they can almost like take the place of what other social interactions would be. I think I feel really strongly about a 54 good balance because I am kind of in the crossed generation that I grew up with a completely analogue life because I am 40 and so I didn't have handheld devices until I was in my mid-teens and that was the beginning of beepers giant phones. Didn't have a computer in my house until high school and still didn't use it that much because you could still hand-write your work. So, I have a foundation in the analogue, do-it-yourself, talk to people, have conversations with people, talk to your neighbors, keep in touch with friends and family, go outside with your kids, take walks. But then all of these other things that normally, I would go to the library, like I still remember using Encyclopedias and dictionaries and looking things up like if you didn't know how to do something you had to go to the bookstore and by a how-to book or there wasn't YouTube. It was oh, I'm stuck on this project. I was having an issue with an Ikea dresser, and I wondered, is this a common issue. So, I looked up on Reddit if it was normal and found out that there was a defect with the certain dresser. I was thinking normally this doesn't happen but Reddit said it was so I didn't have to call Ikea, and then I went on YouTube and I watched how it was supposed to be done to make sure that I did it properly and I did so it was likely just a defect with the holes.

B: So, this is an instance where you were thankful for the internet.

A: Yeah, but if it would've happened 20 years ago you would've had to pack it up and bring it back to the store, talk to the sales associate, get a new one and then you bring it home and you don't know if it will be the same problem. I try to maintain that balance so there are little checks

46. look up silly things
47. schedules & maps
48. down time, social media
49. watching video – DIY
50. online shopping

51. can enhance and help 52. can get sucked into this rabbit hole 53. can impact your socialization 54. good balance and balances that we do in our family, but we talked about too before we had kids about cell phone use and exposure and have the exposure be with us first and respect the ages that are recommend. So, its not recommended to have social media before the age of 13. You are not supposed to have an account before then. So, starting to 55 expose your kids to what it is the good and the bad and 56 showing them, modeling the good and the bad will help them have routines that are healthy. And we don't have data on our phones. So, if I choose to sit down and watch TikToK for 10 minutes, I'm at home during my downtime. So, my transition time if I'm taking the metro, if we're going somewhere whether I am alone or with my kids I am never on social media, or anything. Not using apps like Google maps allows you to develop your sense of direction. You have to 56 pay attention instead of zoning out. We have an old GPS, the one you plug into a car, but we don't have a car. When we use Commune auto, we that but it's really if we are going somewhere I really don't know. But back in the day you had to know where you were going ahead of time, and you had to know how to read a map and follow directions. And when I went to University, I went to Peterborough, I had to get a map of Ontario, or Peterborough, the map was huge.

B: You are absolutely right!

A: It creates unnecessary anxiety that didn't exist before because we now rely on it. My anxiety kinda kicks in with the parking in Montreal, but if I'm going somewhere also because 57 we don't ask or directions anymore and 58 nobody speaks to each other in public anymore like we used to. Like I used to take the bus and if I was on my local bus, I would see most of my neighbors or people my age wherever and she would just start talking, "Hello! Hey! Oh you go to this school? Oh! you live here?" But now if someone speaks to you in public, you think their creepy? I'm like, "Are you gonna stalk me? Why are you talking to me?" And that did not exist before. Before you would think, "Oh! That's nice." Same thing if someone asks you for directions. I think, "Are you going o kidnap me?" And you know, human trafficking that now we are more aware of it, not that it did not exit before, we are just more aware now and 59 internet has facilitated the movement of bad reign. But those things come to mind if someone asks for something I am just like, where's my bat, how fast can I run and I am looking for, "Is there a van?"

B: I agree, when people stop to ask you for directions, we tend to take a step back a wonder why they are asking you, yet that is how people used to get around. And same thing if someone speaks to you on public transit. Like Mila said, in the bus, everyone is looking down at their screens. A: And the headphones... in public, 60 everyone almost have headphones or ear buds. So you are always bombarded with something. 61 Continuously bombarded with noise. And its like you 62 don't know how to be without, you 63 don't know how to be bored, to look around, or 64 be observant. Cause you're 65 always zoned out.

B: Sometimes I keep my phone in my purse just to force myself to be bored and I end up people-watching.

A: But then doesn't that feel a little uncomfortable? Because it is not as common. And you wonder, "Why am I feeling this?"

B: Absolutely! Let's move on to question number 4: How do you think handheld devices impact your child and other preteens?

A: I really think that all of the abovementioned are for me as an adult, but it removes completely the ability to develop basic foundational skills that we developed so like 66 social and life skills, directions, being able to observe. I you are always on a device and always listening to something and even like walking with music, will you be paying attention to traffic while navigating through

55. expose your kids 56. showing them, modeling

56. pay attention instead of zoning out

57. don't ask for directions58. nobody speaks to each other

59. internet has facilitated the movement of bad reign

60. everyone almost have headphones or ear buds
61. continuously bombarded with noise
62. don't know how to be without
63. don't know how to be bored
64. don't know how to be observant
65. always zoned out
66. social and life skills

your neighborhood? It is so important to 67 be constantly aware and such conversations are so important to have. The 68 ability to just have a conversation that is not awkward and that's not centered around only devices. I think it impacts greatly being aware of the world. So when I was their age, even if I didn't sit and watch the 6 o'clock news... even how news was shared there was a lot more research and to understand what is true and not true and to get news that's accurate. And when you talk about things that are researched, you had people that that's their profession. So, what you read in the newspaper and watched on the 6 o'clock news, you could rely on. But there are 69 so many the conspiracies on social media. When you see a popup after popup, after popup you can start questioning or believing. But that's social media and it's 70 all the algorithm.

B: That's why I think courses at school on the topic of social media is so important. I find that lots of teenage girls see perfection on social media due to all the available filters. And if you are not aware as a user that this is not reality, it can play a toll on your self-esteem.

A: Now they call it the 71 Sephora pandemic where eight-year-olds are invading Sephora and destroying everything in there and being crazy. And I'm like, "That's wild!" And I think this would be completely preventable by more 72 active parenting.

B: You mentioned earlier that you respect the age requirement. I am curious, will you only let your children go on social media when they turn 13 because that is the age requirement? A: I don't think it really matters to me what they say because they 73 don't really seem to enforce it. If the companies cared, they would go about deleting a ton of the accounts. It's not difficult to see whether an account is featuring a child. There's even other accounts like TikTok or other accounts but especially TikTok that moms will make accounts about their baby doing all sorts of things. This opens up a whole other 74 network of predators, creepy people. But I think I am open to having any discussions that is reasonable. With my first son, there was so much 75 interference in our parenting because we had to manage devices such as the iPad becoming so popular and access to devices. If we had 76 left him without guidance, I think he would be a very 77 different person now a day.

B: You mentioned that there are lots of rules that you have established prior to being a parent.. But because iPads became popular while you were already parents, so there were decisions you had to do on the spot.

A: Yes, with my son. For the girls, like I think if I had a partner that was really into gaming or even the amount of time you spend on Facebook. When I was in university, you could only open up an account if you had a university email. Facebook was used almost as a scrapbook of your partying time as a university student. I think it was never intended to be what it became. And now you have so much 78 access to information where originally you were only sharing with friends. And now it's 79 public domain. So, I feel like that is a hard lesson too and there are things that we have seen happen to us or people we know that 80 now we know better. I enjoy my time on social media, but I am 81 not dependent on it. If it went away tomorrow, I would just be like, "Oh, that was pretty fun!"

B: You mentioned "if I had a partner who worked in the gaming industry..." How do you think parenting would be different?

A: I don't think it in necessarily working in the gaming industry but rather somebody who doesn't see, whose values are not aligned in having a 82 regulated amount of screen time. And screen time is not just scrolling on social media. To me, screen time is television, movies, video games, where you are 83 staring at a screen and not doing other things. But doing other things also contributes in running a household um... on top of leisure. So, I mean, if that's your work

- 67. be constantly aware 68. ability to just have a conversation
- 69. so many conspiracies 70. all the algorithm
- 71. Sephora pandemic72. preventable by more active parenting
- 73. companies don't enforce it [age requirement]
- 74. network of predators, creepy people
 75. interference in our parenting
 76. if we left him without guidance
 77. different person
- 78. access to information 79. public domain 80. now we know better 81. not dependent on it
- 82. regulated amount of screen time 83. staring at a screen not doing other things

but then after your work day you are then contributing to other things like the house, that's one thing. But then I think if you are doing that for work but then you're playing, playing, playing, watching, watching, watching, then it's impossible to contribute to your household in a way that you need t be present, especially if you have kids. And then what are you showing. I have been teacher for 15 years and I saw this shift happen about eight years ago, and the kids coming in to kindergarten are 84 lacking significantly in their self-regulation. Self-regulation I find is massively triggered to 85 instant access to everything. Kids are 86 two years old and watch YouTube videos and know how to open a tablet and touch things. When we go to the restaurant, my kids bring a book, but they will never never look at a screen. You will never see my kids on a screen while we are eating a meal at the restaurant. And when we are done, we can sit for another hour and have a glass of wine or dessert and they will sit and either enjoy social time or draw a picture, read a book. I want them to learn how to 87 exist without having to stare at anything. I think it's really important. My kids can be around and act appropriately or contribute to the conversation. And if it is something private, I can say, "Okay, go play for a little bit, and come later" And they do!

B: I want to be conscious of your time so we will move on to the next question: How do you think handheld devices impact the family in general?

A: I find in all the same ways, I think it 88 impacts your quality time together, um... but then in today's world, this is something that is now, almost part of our culture, use it as a 89 form of entertainment, use it as way to 90 learn and teach yourself something, or look up something. I think you can 91 choose to let it have a positive or negative impact by how you 92 decide to allow the usage in your home. With a lot of the evolution, social media is a part of it, you are able to see gender roles, I think I am more aware of having had both boys and girls, and then being in relationships and having families and how I was raised. My mom is a boomer and I was raised over half the time by my grandparents who are from the silent generation. And just their views on everything kind of seeped into me. A little bit from them, a little bit from my mom. You know, just by being out in the world. I lived the majority of my life in the pre-social media, pretechnology so I guess I see the 93 value in it when you use it properly and even if you look at it as entertainment. We used to watch silly shows, go to comedy shows, watched soap operas like is all clearly entertainment. So is social media, or videos just replaces that in a certain way. I do think that it should 94 replace and not be an addition. One of the most disappointing thing that social media has taken away from people with all that and 95 not knowing what's true or not true sometimes that creates this, "Well, I just won't look at anything because all of it is too much in my mind." But knowing what is happening in the world and being able to have conversations on a variety of topics impacts your social skills, even just talking back-and-forth.

B: Last question: how does it feel to parent in this digital world?

A: It feels like I'm 96 free falling because what I think I know, I don't know and 97 I'm always second guessing. I also think the 98 advice available is overwhelming. You still look online for advice. And even just opinions. I like Reddit for that, I see it as a poll. If somebody puts something that I can relate to and 80 percent are like, "That's silly, look at this perspective." I would be like, "Oh yeah, that's true! I was so convinced I was right, and this made me look at it from a different viewpoint." It's really like you made a poll for your group of friends. One thing I find super interesting about parenting and social media is that "Is it 99 Bill Gates who doesn't allow his kids to have electronics. Isn't that wild!" And that tells me that I am on the right path, I am not crazy. So yes, sometimes 100 I have been called, mean, extreme, or a lot. I 101 feel like I'm in the minority. 102 Technology is addictive. Even us, if I think now, if it was even just five

- 84. lacking significantly in their self-regulation 85. instant access to everything 86. two years old watching YouTube
- 87. exist without having to stare at anything
- 88. impacts your quality time together, 89. form of entertainment 90. learn and teach yourself something 91. choose to let it have a positive or negative impact 92. decide to allow the usage in your home
- 93. value when use it properly 94. replace and not be addition 95. not knowing what's true ad not true 96. free falling 97. always second guessing 98. advice available is overwhelming 99. Bill Gates and parenting 100. been called mean, extreme, or a 101. feels like I'm in the minority 102. technology is addictive

years ago. If I forgot my phone at home, I could've gone to work and go about my day. And the other day I actually forgot my phone at home and I came back and got it. I think that speaks for itself. It's go 103 ingrained in us to have it. The other thing that makes a big difference is that most people eliminated their home phones and replaced with their cellphones. So, your cellphone is now your houseline. Feels like they are 104 forcing us to have it somehow in our life. I also feel like with technology, you are 105 never experiencing anything other than your first choice, so again 106 instant gratification. And I think we are impacted like that as adults. But when we walk together to school, we are walking outside so we are getting our dose of vitamin D in the morning but the exposure that's one thing that I don't think it's disputed anymore. That its really really healthy for your body, everything. When you wake up in the morning it's important to get sunlight, to be outside. Um... so that's one thing, walking is another thing that is very healthy. If you are someone who is always on technology, and that's your life, it will be a big part of your kids' life. You will be in your car and all your kids are going to have iPads, they won't know how to travel without staring at something.

B: I watch my daughter Haley stare out the window while I am driving and I think it's beautiful how children notice everything because they live in the moment and are so observant if we give them the opportunity to just observe. It's beautiful.

103. ingrained in us to have it 104. forcing us to have it 105. never experiencing anything other than first choice 106. instant gratification

Appendix J

First-cycle Codes: Teachers

(3b) How do teachers perceive preteens' use of handheld devices?

Interview transcript 5

Interviewer: B
Parent 1: Tammy*
*Pseudonyms

B: Do you have any handheld devices in the classroom. If yes, what type of devices are students allowed to engage with?

T: Yes, I have iPads in the classroom.

B: Perfect! And describe how you feel about the use of handheld devices in general.

T: I am 1 obsessed with them. I 2 use them all the time. I have two iPad pros, an Apple watch, an iPhone pro.

B: Perfect, thank you! Describe how you feel about your students using handheld devices.

T: With the iPad in the classroom, 3 I really enjoy it. I find it extremely helpful because of the accessibility feature I am able to 4 lock them onto exactly what I want them to focus on. Because I also use the laptops with my students and when I use the laptops if I am 5 not right beside them I always 6 catch them looking at something else like a picture or going on some other site and then they 7 minimize it very fast as I come closer to them. Even when its like direct instruction, or entering data in a Spreadsheet, 8 they get distracted very quickly and 9 try to go on other things. But with my iPads I can 10 lock them on exactly the website I want, and they can't get off. I can even 11 cover up the URL so they can't touch it and go anywhere else. I have 12 complete control over it, I love it! Whenever the kids ask to use an iPad, I ask them, "What do you want to use it for?" And then they tell you so you make it go where they want, and then you start the 13 guided access, and they 14 can't get out off it until I take it off because I have to 15 enter my passcode.

B: So interesting!

T: Also lets you 16 draw a shape over the URL so they can't type a different website.

B: This must keep them on task.

T: Yes, they are 17 only able to be on task. They 18 cannot do something else with it. But they are using the technology. And they 19 admire the fact that I have control over it. They don't know a lot of people who can do that.

B: This is a setting I would totally use in the classroom. Thank you so much. Next question: How do you think handheld devices impact your students and other preteens in general? T: It depends, outside when I see children like on the bus and everywhere in the community there are 20 obsessed with it so that's disturbing. So even if I am sitting on the bus, public transportation, it's annoying because I am sitting next to children, actually it's all age groups, 21 everybody is like on their device and the screen is annoying, I don't want to see their screen. Everybody is either 22 looking at social media or playing games. A lot of people are using it so I find it's too bad that they 23 can't disconnect from it. I enjoy just sitting on the bus and look out the window but they are 24 not able to enjoy just being present because they are looking at their device rather than just being in the moment. I have a daughter who is also a teenager and it's like she is 25 part robot. She always has the iPad and she 26 doesn't want

- 1.obsessed with them
- 2. use them all the time
- 3. I really enjoy it
- 4. lock them onto exactly what I want
- 5. beside them
- 6. catch them looking at something else.
- 7. minimize very fast
- 8. get distracted very quickly
- 9. try to get on other things
- 10. lock them on
- 11. cover up URL
- 12. complete control over it
- 13. guided access
- 14. can't get off
- 15. enter passcode
- 16. draw shape over URL
- 17. only able to be on task
- 18. cannot do something else
- 19. kids admire I have control
- 20. obsessed with [devices]
- 21. everybody is on their device
- 22. looking at social media or playing games
- 23. can't disconnect
- 24. not able to enjoy being present
- 25. part robot
- 26. doesn't want to let go

to let go of it, like ever. She has her headset on and she is watching it but she is 17 so I don't control what she does on there. She walks around with the headset on and the iPad on so to me its like she is part robot. Like if she is preparing food, working on homework, she feels like she 27 needs to have a little video in the bottom corner, and she is doing all this work which is great but she feels like she must have this going on in the bottom corner and then also, I don't know if it's related but she 28 won't sleep with the light off. That's my kid, my seventeen-year-old. She is older than these kids so maybe it won't happen to them because whenever she was growing up, I have been using technology my whole life so when she was growing up, iPads existed, but it was kinda new, we didn't know that she would get to the point where she would 29 look like a robot walking around. So I think 30 parents now have a better understanding and a 31 better control over it but it's really weird that they 32 must have it on all the time. If you want them to do something sometimes you have to 33 tell them you will turn off the internet from their device or else they refuse, that's my kid. She 34 doesn't want to get off of it. But not in the classroom, it's outside that I see it.

B: You think it is different in the classroom because o the structure?

T: Yes, because 35 I keep it locked up until they need to use it. But I am 36 constantly using it because I use it for teaching. I use my iPad to teach, and I have two Apple TVs, and iPad pro so I can get information on the two screens at the same time.

B: And this is a great segway to question number five, how do you think handheld devices impact your students' experience in the classroom?

T: I think it 37 helps them to focus and they like that I am able to... what I like about it is that everything that I am doing on these devices, I am taking screenshots, I am saving it and I convert it to PDFs and uploading it on Google classroom so when they are at home or even their parents they can see what I was doing in class so if they were absent or unsure of things they can follow along and ask questions on Google classroom. So I think that for teaching it is 38 very helpful and advantageous. I can show videos when there are words that are not in the dictionary or things they don't understand, I am able to pull it up very quickly using good sites like BBC or Canadian Encyclopedia and I can show them right away. So it is very advantageous. When I was in school, if the information was not there, it was not there. You had to go to the library and try to find it.

B: How are your students' feelings towards Google classroom?

T: They 39 enjoy using it, they don't even think about it. It's been 40 part of their lives since they were in school because when the pandemic hit, my students were in grade 1 so they were 41 forced on digital technology at home whether they were ready for it or not. At my school we use Google classroom, that's what we adopted as a school. We use Google classroom as 42 a communication tool with parents. The children also 43 enjoy collaborating through it because they can each work on it. And once I even had a child who had early dismissal and we were working on a class project and he had a dentist appointment and then the children were like, "Oh it's G!" Well G was working on the project at his dentist appointment. That was amazing.

B: It gives children various opportunities. That's great! You kind of answered answer number 6 throughout the interview but I will ask anyway. How does it feel to teach in this digital world?

T: Well, I love teaching in this digital world. I have always been in the digital world since I was the age of my students when I had a commodore 64 and a commodore 128 and I was writing programs with my dad. We were running commodore basic to make the computer

27. need to have a little video

28. won't sleep with light off

29. look like robot

30. parents now have better understanding

31. better control

32. must have it on all the time

33. tell them you will turn it off

34. doesn't wasn't to get off

35. keep it locked up

36. constantly using it

37. helps them to focus

38. helpful and advantageous

39. enjoy using it

40. part of their lives

41. forced on digital technology

42. communication tool

43. enjoy collaborating

make what we wanted. So, I have always used it and have seen the evolution and I have been teaching since 1998 so I've been part of the whole process of moving forward. So, it's been really fun, and I have enjoyed it, and I 44 can't imagine not having it. Like if there is not internet, I am still able to use it. I guess I am 45 addicted to it too as well because 46 it is addictive, but I guess it's because you can keep working without internet and when internet comes back you just reconnect and refresh. I enjoy it but there is one thing that I have noticed I wanted to add which is sometimes things come 47 into the classroom that wouldn't normally be in the classroom. For example, there were some children or friend group, and at home some of the friends were on TikTok and doing TikTok dances and whatever and another girl that would've been the leader of the group normally, she 48 felt like ostracized by the group because she 49 did not have this technology at home. Sometimes there are stuff like that that happens outside on social media and then they are 50 upset when they enter the classroom and they are physically discussing it. Sometimes I noticed with male students. Whenever they are playing an online game together like Fortnite, if they are competing against each other, they will come in first thing in the morning, as you are lining them up to walk into the building, they are 51 angry at each other because of what happened on Fortnite. So yeah, there is this aspect that sometimes the 52 digital causes um conflicts in the school. Which I guess is good because we are then able to 53 address it and discuss it with all members and since we have behavior techs, I guess that's good that it kind of does happen. At first, we were 54 not ready for that because it just happened you know, but now as a school we are very prepared and I think it helps with 55 having discussions about what is 56 acceptable behavior on these things. And they understand that what they are doing online affects them in actual life, not just online.

B: So in your class or classroom, are there lots of discussions about being online users, online safety, solving conflicts?

T: Yeah, well it's 57 part of our curriculum so we do discuss it and as it comes up. But what is new I find is that everyone will be taking a test or something and then you look over and somebody is doing this weird dance move thing and then someone is doing it back but like a mirror image from it. It may be from TikTok. That's a weird thing that happens during test sometimes. It's kind of like they can have a 58 conversation without words, with movement. Like they 59 connect with each other with difference dances. So, it's interesting to see that, B: How do you respond?

T: I tell them to stop and focus on their test. You can't look at anyone during a test so I tell them to focus on their test.

B: Oh so they are also bringing things they see on TikTok in the classroom. That's why it is so important as parents and teachers to stay up to date with the new trends. Thank you so much for your answers. Any other comments, questions, examples.

T: No but if you think of any other questions just send them to me.

Interview transcript 6

Interviewer: B Parent 1: *Ella *Pseudonyms

B: Avez-vous des appareils portables (Tablet, Smartphone, etc.) dans la classe ? Si oui, quels types d'appareils les élèves peuvent-ils utiliser ?

- 44. can't imagine not having it
- 45. addicted to it
- 46. it is addictive
- 47. into the classroom
- 48. felt ostracized
- 49. did not have this technology
- 50. upset when enter classroom
- 51. angry at each other
- 52. digital causes conflicts
- 53. address and discuss
- 54. not ready for it
- 55. having discussions
- 56. acceptable behavior

57. part of our curriculum

58. conversation without words 59. connect with each other

E : Les tablettes ne restent pas en classe. C'est dans un labo de science qu'on va cherche les tablettes pour les 3^e année et j'ai des laptops pour les 4^e qu'on se partage entre Anglais et Français. Dans la classe j'ai un tableau numérique Smartboard.

B : Parfait, et quel est votre opinion sur l'utilisation des appareils portables en général. E : Ça va 60 aider beaucoup les élèves en difficultés, surtout en 61 français langue seconde.

On a 62 accès à une panoplie d'activités. En même temp, je vois de plus en plus que l'accès de l'utilisation des électroniques nous 63 empêche de travailler certaines compétences chez l'enfant.

B : Quel compétence exactement? Et aussi, pouvez vous élaborer sur les avantages et désavantage dans votre opinion.

E : Je vois deux mondes. Un, on fait des exercices sur l'ordinateur, ont se pratiquent, on fait des activités. Mais il reste qu'on a des 64 examens en papier. Il reste qu'il y a de la 65 production qu'il reste à faire en papier donc pour certain élève, ceux en difficultés qui ont besoin d'un texte auditif, quand quelqu'un ou 66 l'ordinateur lit le texte, ça l'aide beaucoup. Mais il y a d'autre élèves que cette habilité d'avoir en papier, de faire un teste, de lire un texte plus long sur papier, ils n'ont 67 plus la patience. Ça 68 élimine cette patience, cette endurance. Avec l'ordinateur, 69 toute est très vite, ils veulent 70 être en action, cliquer ici, cliquer là, aller chercher t'elle information, faite un Google slide. À la fin de l'année on a 71 des examens du ministère, à la fin de l'étape on a des 72 compréhensions écrites. Ça fait que les 73 élèves ils refusent parfois. Ils sont vraiment 74 déçus de travailler sur papier. Vous comprenez?

B : Oui, très intéressant. C'est parfait, vous avez même répondu question numéro trois. E : Aussi, de ce qu'y est compliqué de l'utilisation que j'ai noté, c'est 75 le coup de ses appareils. J'ai une classe de 22 élèves et une classe de 16. Il faut que ses ordinateurs soient complétement fonctionnels parce que dès qu'il y a deux ordinateurs qui ne marchent pas bien, comment je fait avec ses deux enfants que leur 76 ordinateur ne marche pas bien? Donc là ca 77 créer de la frustration pour l'enfant, le prof est dans une 78 situation difficile aussi et les appareils qui ont été acheté là dix ans, il commence à avoir 79 des problèmes et là ont vie ca présentement dans l'école. Il faut renouveler. Moi, quand je dois utiliser des ordinateurs, si l'activité me permet de travailler 80 à deux, je suis tranquille. Mais s'ils doivent être 81 individuels, c'est un stresse. Aussi il y a le rooter qui ne marche pas toujours bien dans certain coin dans la classe. Donc ce sont des choses qui apparaissent. Quand je mets dans mon menu du jour qu'il aura des ordinateurs ou tablettes, ils sont 82 vraiment happy. Ils adorent ça, c'est un moment de joie. Ça 83 dépend parfois de l'activité. Quand c'est une 84 activité de recherche, ou utiliser un dictionnaire électronique, ça ils aiment moins parce qu'ils veulent encore continuer dans 85 l'idée du jeu. Pas des travailles trop linéaire qui faut une 86 concentration trop soutenue. Ça ils vont chialer. Ils pensent qu'on va faire juste des 87 activités amusantes, site qui permet l'interaction mais ce n'est pas toutes les activités qui veulent le faire.

B : Semble que les élèves associent la tablette au jeu.

E : Oui parce que j'ai l'impression qu'ils veulent garder la même sensation qu'ils ont chez eux quand ils jouent. Si l'activité est en 88 format de jeu, ils vont s'intéresser, mais j'envoie un doc ou ils doivent écrire un texte en français, c'est beaucoup moins intéressant. Moi, ça fait 13 ans que j'ai mon blog. Je mets plein d'activités dans mon blog si je demande aux élèves de faire tel-tel activités, c'est déjà placé sur le blog. Je crois que l'informatique aide beaucoup mais je dirai que je n'utiliserais pas les tablettes et ordinateur plus que 2 fois par

60. aider beaucoup les élèves en difficultés 61. français langue seconde 62. accès à une panoplie d'activités 63. empêche de travailler certaines compétences

64. examens en papier 65. production ... en papier 66. l'ordinateur lit le texte 67. plus de patience 68. élimine cette patience 69. toutes est très vite 70. en action 71. examens du ministère 72. compréhensions écrites 73. élèves refusent parfois 74. déçus de travailler sur papier 75. coup des appareils 76. ordinateur ne marche pas 77. crée de la frustration 78. situation difficile 79. avoir des problems 80. deux – tranquille 81. individuels – une stresse 82. vraiment happy [kids when using device] 83. dépend de l'activité 84. activité de

recherche

85. l'idée de jeu

semaine. 89 Ça me cause un stress. Pour les petits, je vois que les 90 profs se découragent parfois. Aussi, l'école ne fournis pas des écouteurs donc si 15% des élèves n'ont pas apporté cette journée-là, je ne peux pas les obligés non plus, bon l'activité ne marche pas. Je ne peux pas imaginer le professeur qui utilise les laptops or tablette avec les troisièmes et quatrième année pour une période de 60 minutes de temps. Le temp de tout déplacer, ramassé. Et 91 l'organisation avant – je dois réserver, voir si ça marche, si quelqu'un d'autre n'a pas pris, la planification. Je trouve un moyen de les utiliser, de les stimuler, mais pas à chaque jour parce que sinon j'ai une charge, une pression, et à la fin je ne suis pas encore convaincue que l'apprentissage c'est plus avec l'ordinateur. Les élèves essaient toujours de 92 négocier pour rester plus longtemps.

B : Selon vous, quel est l'impact des appareils portables sur vos élèves et sur les autres préadolescents en général ?

E : J'ai un adolescent de 13 et 16 à la maison et j'observe ça en classe. Ce qu'ils font à la maison, les jeux comme Fortnite, cette 93 conversation continue en classe. À mon avis, ça aide à 94 l'intégration d'un côté. Ceux qui n'ont pas accès à ça n'arrivent pas à s'intégrer à ce sujet. Mes enfants n'ont pas eu le droit de jouer à Fortnite jusqu'au secondaire. Mais là j'ai des élèves en 3^e et 4^e année qui utilise fréquemment. Donc ça devient 95 un monde – il parlent de ça. Leurs amies sont autour de ça. Et là j'ai une situation à la maison. Mon fils il a un ami qui n'a pas accès aux tablettes, cellulaires, jeux vidéo. Les parents ont décidé comme ça. Là je dit à mon fils, invite N parce que quand on l'invite le garçon peut utiliser la technologie chez nous, nos bébelles. Mais la mon fils dit, « Mais maman, il ne joue pas aussi bien que moi à Fortnite, on n'a pas les mêmes conversations. » Donc ça gère un 96 problème d'intégration parce que mon fils qui a des habilités sociales assez bien, lui veut être avec des amis qui 97 jouent la même chose que lui. Donc si je n'avais pas donner cette option là à mais enfants à partir du secondaire, ils seraient 98 limités dans leur conversation. Je leur demande de quoi il parle quand ils sont avec des amis et ils disent qu'ils parlent des choses qu'ils ont vu su TikTok, Fortnite, des stratégies de tel jeu. 45% de mes garçons jouent à Fortnite à l'âge de 10 ans. Ils parlent de ca souvent aussi, 99 c'est leur monde.

B : Est-ce que vous voyez la différence entre les garçons qui jouent à Fortnite et ceux qui ne jouent pas?

E : Oui, ils sont complétement 100 à part dans cette conversation, ils peuvent jouer un peu dehors mais ça ne fait 101 pas partie de la clique. Il a comme une clique de Fortnite. C'est comme si ces garçons développent 102 des intérêt en commun, les joueurs de soccer sur TikTok, c'est le même groupe.

B: Donc on le voit au secondaire ainsi qu'au primaire.

E: Moi je trouve ça affreux de le voir au primaire. Mais parce que ce ne sont 103 pas des jeux appropriés pour les enfants. Et je vois qu'à la maison, il y a une 104 irritabilité avec mes enfants. Dès qu'ils 105 arrêtent de jouer ils sont super 106 excités, et agiter, ça se 107 chicane à cause de la compétition. C'est très facile de laisser l'enfant deux heures, 108 on a la paix parce qu'ils sont en traîne de joué, mais après ces deux heures, 109 ça déclenche. Je ne veux pas dire non complétement, maintenant c'est 110 les éduqué à savoir arrêter. Bon, Oscar*, t'as joué, qu'elle est la conséquence de ça? Tu es super frustré. Est-ce que ça vaut la peine? On a cette conversation, Est-ce que tu peux faire quelque chose d'autre? Jouer moins? Chercher un jeu qui provoque moins de stress? Un jeu que tu peux jouer seul, pas en group ou en compétition. Toutes ses 111 questions là je me pose et j'essaye et j'essaye de les 112 faire prendre conscience.

86. pas ...
concentration trop
soutenue
87. activités amusantes
88. format de jeu
89. cause un stresse
90. profs se
découragent
91. l'organisation
92. négocier pour rester
plus longtemps

93. conversation continue en classe 94. l'intégration

95. un monde – parlent de ça

96. problème d'intégration 97. jouent la même chose 98. limités dans leur conversation 99. c'est leur monde

100. à part dans cette conversation 101. pas partie de la clique 102. des intérêts en commun 103. pas des jeux appropriés 104. irritabilité avec mes enfants 105. arrêtent de jouer 106. excités et agités 107. chicane – compétition 108. on a la paix 109. ça déclenche 110. les éduqué

- B : Les conversations sont très importantes.
- E : Je ne crois pas que en fermant le Wifi ou en empêchant ça va régler. Les moments qu'on a 113 fermer le Wifi, c'était très difficile. Peut-être de valoriser les moments positives. Je crois que des fois en tant qu'enseignantes, nous devons aller 114 contre le courant, de ne pas faire des choses qui se font toujours à la maison pour qu'ils puissent toucher à d'autre aspect de l'apprentissage, par exemple, aller à un musé. Aller à un musé c'est rendu plate pour les enfants. Je trouve que 115 l'école doit faire le contraire. Moi je vais t'offrir ce que à la maison tu ne peux pas avoir ou que tes parents ne sont pas capables d'offrir. Ouvrir un livre, il en a plein qui veulent lire sur internet.
- B : Vous avez répondu à ma question : Comment pensez-vous que les appareils portables influencent l'expérience de vos élèves dans la classe ? Donc parfait!
- E : Je trouve que les gros problèmes que sa crée, c'est de 116 problèmes d'interaction sociale face-à-face.
- B : Nous avons souligné l'impact au niveau social mais trouvez-vous qu'il y a un impact au niveau physique, langagier...?
- E : Je trouve dans les discours, ça va être des 117 discours coupés, moins articulés, parce que le discours, je pense beaucoup au Français parce qu'eux ils vont articuler des théories, vont faire une conversation, d'avoir des idées, des contre-points. Cette interaction là il y a 118 moins de discussion. L'élève, pour développer leur esprit critique je pense que c'est compromis. Ils prennent l'opinion de quelque d'autre sans contester ou seulement leur opinion.
- B : Et vous croyez cela est un impact des appareils?
- E : Si je prends un texte de la presse. Avant t'allais lire jusqu'à la fin et t'allais décortiquer le point de vue de la presse à comparé de la dictature en France. Maintenant 119 ont lit peu, juste le titre ou début du texte donc 120 on travail moins ses idées là. Il y a 121 moins d'endurance pour lire un livre, pour tous ce qui est long et demande une concentration soutenue. C'est comme si 122 le cerveau à changer.
- E: La position aussi, je vois que la manière que mon garçon tien son cellulaire, il est 123 toute courbé. Plus de personne qui utilise des lunettes.
- B : Je veux respecter votre temp donc dernière question : Quels sont vos sentiments envers enseigner dans ce monde digital ?
- E : Quand on a commencé avec l'informatique, j'étais très enthousiasme. Je travaillais dans l'école, et je trouve que pour l'apprentissage des langues, ça l'a été phénoménale. Tout ce qu'il est auditif. Avant on avait des casettes ou une personne qui parle cette langue. Maintenant il y a une panoplie. Mais je pense qu'il ne faut 124 pas exagérer. Il faut trouver 125 un juste milieu. Il faut 126 parler aux élèves.
- B : Merci, c'était parfait! On a eu une belle conversation.

- 111. questions je pose
- 112. faire prendre conscience
- 113. fermer le Wifi
- 114. contre le courant
- 115. l'école doit faire le contraire
- 116. problèmes d'interaction sociale face-à-face
- 117. discours coupés, moins articulés
- 118. moins de discussion
- 119. ont lit peu 120. on travail moins ses idées 121. moins d'endurance pour lire 122. le cerveau à changer 123. toute courbé
- 124. pas exagérer 125. juste milieu 126. parler aux élève

Appendix K

Second-cycle Codes: Children

Research Question:

- (1) How does a preteen engage with handheld devices?
- (2) How might a preteen perceive handheld devices and their impact on individuals' social, emotional, and physical well-being?

Themes:

- 1. Socializing with friends: feeling mostly happy and excited when chatting or playing with friends, can't hug them on the phone,
- 2. Waste of time and addiction could do more productive things, always scrolling, want to see more, don't want to get off, all they want to do.
- 3. Sleep one participant

1. Preteens' use of handheld devices

1(a). When and where

1."mostly on the weekends"

- 8. "I get bored, find a game"
- 16. "week normally 20-30 minutes"
- 17. "more free ...on the weekend"
- 18. "don't use it in the morning"
- 19. "morning I am all tired"
- 21. "I don't play in the morning"
- 22. "play mostly.... before supper"
- 28. "used to play a lot in the week"
- 166. on week days use it after school, not mornings
- 167. 3 out of the 5 week days.
- 169, on weekends. I like to listen to music.

171. Whenever I have free time

- 172. half an hour if playing a game
- 219. video chat with them on weekends

2(b). Type of devices

- 1*. a tablet and a phone
- 34. "play like on my tablet"
- 88. "my friends play on tablets"
- 89. "most of boys in my class play on PS5 or PS4"
- 148. use [tablet] to play games
- 154. my tablet

3(c). Types of activities and apps

- 2. "play games"
- 3. "take photos of me"
- 4. "Messenger Kids"
- 5. "I play Roblox"
- 6. "word games"
- 7. "I play chess"
- 9. "videos of people like friends"
- 10. "take photos"
- 11. "look at my text messages"

2.Preteens' attitudes, feelings & experiences towards handheld devices

2(a). Attitudes towards games & apps

- 12. "not really good things that I like"
- 14. "some of them [games] are not that good"
- 15. "50/50 Roblox"
- 20. "uh... a lot of solving"
- 40. "happy with ... some games"
- 39. "happy because... on Roblox there are different people"

42. "happy when playing a game with someone else"

- 43/44. "on Roblox... friends playing with you ...that's when I am happy"
- 58/59. "don't really feel like talking/ I use text messages"
- 67. "prefer looking at him... rather than texting"
- 108. not important ... just games

113. apps and social media that's not really important

- 114. On Facebook... "Oh! Don't eat this
- 115, social media is 50/50
- 116. Text messaging is not as bad
- 118. videos cold be a scam or fake
- 119. just videos for fun ... on the bad side
- 121. [videos for fun] is what makes you

addicted

- 122. want to see other videos
- 123. "Okay! Let's check another one."

175. it's easier so I enjoy doing it more [games]

176. less enjoyable than playing [learning

- 177. games are more fun
- 184. playing with other people
- 185. don't know them
- 187. online, it can be anyone

3. Preteens' perceptions on the impact of devices on social, emotional & physical well-being

3(a). Devices and sleep

- 24. "I just want to fall asleep"
- 23. "don't usually play before bed"
- 25. "used to play at night"
- 26. "I would never go to bed"
- 27. "I was like tired"
- 103. [tablet before bed] ... would make me "awake
- 104. go to bed at 9:30 max
- 105. 8:30 that would be the time I would stop [playing]
- 130. keep you awake
- 131. used to never go to bed

3(b) Devices and friends and family

- 36. "text my friends saying compliments"
- 37. "excited because they [friends] ask to play"
- 38. "we form playdates"
- 46/47. "I like playing with people ... my friends... just fun for me"

48. "Everyone likes playing with their friends"

- 53. "talk to each other from far"
- 54. "call my cousin that's in Punta Cana"
- 55/56. "every week that we talk to him [on WhatsApp]"
- 69. "waiting 5-2 minutes and you're not even answering"
- 70. "aren't you texting me anymore?"
- 74. "talk to each other"
- 91. "my friends really like that game"
- 94. "They are [addicted]
- 95. "I hear them talk about it every single

- 13. [Roblox] is an app ... a bunch of games"
- 41. "mostly text messages"
- 73. "do research"
- 75. "on like text messages or calling"
- 76. "doing research"
- 77. "TikTok and just watching videos"
- 84. "girls my age ... go texting or playing Roblox"
- 85. "Lots of girls in my class play Roblox"
- 86. "some boys text"
- 87. "most boys I know play like Fortnite"
- 155. don't really have any accounts
- 156. listen to music
- 157. play games like video games
- 158. don't have any apps
- 159. YouTube
- 160. jump things
- 161. build a city
- 162. Bloxd
- 163. I don't chat
- 165. learning apps that I don't use
- 168. Only or like Google classroom
- 170. sometimes I play games
- 194. I don't actually own or have any accounts
- 195. mom makes TikTok videos
- 214. stop motion like filming movies
- **219. video chat** with them on weekends
- 220. Messenger kids

- 196. be used to do bad things
- 197. waste of time
- 198. lie about certain things
- 199. create things... embarrassing for someone else
- 200. comment mean things
- 230. negative [comments]
- 231/ make you feel sad
- 232. don't like what you're doing
- 233. disagree with something you did

2(b) Feelings about using or owning handheld devices

- 29. "no point"
- 30. "feel less comfortable"
- 31. "tired"
- 32. "I feel lazy"
- 33. "I would get really lazy"
- 35. "I feel happy sometimes excited"
- 45. "mostly happy and excited when text messaging"
- 49. "this technology it is good but also bad for me"
- 50. "it makes you lazy"
- 51. "never want to stop"
- 52. "you get addicted"
- 57. "I like talking"
- 60. "sometimes I don't feel like calling"
- 61. "I mostly prefer calling"
- 62. "prefer facing each other"
- 63. "prefer seeing their faces"
- 64.you wonder, "When is he going to say this and that."
- 65. "like face-to-face like rather than going on the phone"
- 66. "I can't like hug him on the phone"
- 68. "just wasting my time"
- 71. "wasting time"
- 72. "makes you like addicted"
- 78. "want to watch more"
- 79. "don't want to get off."
- 80. just look at it and get addicted"
- 92. "I am not gonna be like that"
- 93. "If addicted, I probably wouldn't play as much
- 102. really wanting to do it [play Fortnite]
- 109. very important is the phones
- 110. sometimes the tablets but mostly phones
- 111. that's how you text, call
- 112. call 911 in case a problem
- 117. calling is close to a 90-100.
- 145. too young to own a real phone
- 146. handle with real messages
- 147. [phones] are more for chatting
- 151. Sometimes I feel embarrassed

- 96. "That's all they want to do"
- 97. "At recess they just talk to each other"
- 98. "That's what I hear every single day"
- 99. just play for once with my friends
- 100. I'm not a lot with my friends
- 101. never played with my friends
- 107. "Okay dude! I have to stop playing because it is past my max."
- 129. My dad told me
- 134. I don't like to play a lot with them [friends] anymore
- 136. I talk more actually [when not using tablet]
- 137. with my family
- 138. playing with your friends.
- 139. playing and chatting with friends
- 140. I don't play with them often
- 141. [feel sad and upset] when we can't have a playdate
- 142. or something happened
- 149. [mom] posted a nice picture of me and brother on Facebook.
- 150. my friends see it
- 164. do it with my sister [Bloxd]
- 188. a lot of my friends play Roblox
- 192. Sometimes I feel left out
- 193. talk about other things
- 213. friend wants to talk 216. send it to my friends
- 217. lot of my friends have a tablet
- 218. message each other
- 234. have friends that don't use it
- 235. get a bit confused [when friends talk about devices]

3(c) Devices and the body

- 124. not very good [tablets] for eyes, brain, or memory
- 125. damage your eyes
- 126. can forget fun things and fun times

3(d) Devices and school

- 127. hard time with school
- 128. always on it
- 132. Computers and iPads [at school]
- 133. do research
- 178. kids in my class have social media accounts
- 179. [they] play games that I'm not allowed to play
- 180. go on when they get home
- 181. always doing that
- 189. just play with their classmates
- 201. people come to our class
- 202. how to be safe on it
- 203. lot of kids ... use social media.

- 153. Sometimes it can be fun and sometimes not fun. 50/50
- 173. get bored after a while
- 182. I don't think it's really good
- 183. more productive to do [other] stuff

186. can't really have an in-person conversation.

- 190. everyone does it
- 191. rather just do reading or play outside
- 206. to young for it

207. always scrolling

- 208. occupy their free time
- 209. learning new things
- 210. read a book
- 211. rather than scrolling
- 212. look on the news
- 225. don't really do anything useful on it
- 226. use it for fun
- 227. doing other things
- 228. don't really need when you're young [cellphone]
- 229. an adult [needs] it more

2.Preteens' attitudes, feelings & experiences towards handheld devices

2(c) Personal experiences using handheld devices

- 81. "used to happen to me"
- 82. "Oh common, can I go on it now?"
- 83. "since I stopped, I am not like that."
- 24. "I just want to fall asleep"
- 23. "don't usually play before bed"
- 25. "used to play at night"
- 26. "I would never go to bed"
- 27. "I was like tired"
- 90. "trying to get Fortnite"
- 103. [tablet before bed] ... would make me "awake
- 131. used to never go to bed
- 135. I don't focus
- 141. [feel sad and upset] when we can't have a playdate
- 142. or something happened
- 143. [upset] when I lose at a really hard game
- 144. when someone said something, but it is not true
- 151. Sometimes I feel embarrassed
- 152. I don't even know she is posting these things.
- 215. I don't share

204. what's real and what's fake

- 205. learn from them [classes on digital literacy
- 221. communicate outside of school
- 222. playing videogames together
- 223. everyone in sixth grade has one
- 224. Most of the kids in fifth grade

Appendix L

Second-cycle Codes: Parents

(3a) How do parents perceive preteens' use of handheld devices?

Themes:

- 1. Social skills and self-regulation: impacts family, conversations, losing human touch
- 2. Parents' role: limit, model and active parenting, finding good balance, overuse
- 3. Causing interference: always second guessing, being in the minority, free falling

1.Parents' use of handheld devices

- 1.cellphone and TV
- 2. for work
- 3. appointments
- 4. chatting with family and friends
- 5. e-mails
- 7. always check if clients texted me
- 46. look up silly things
- 47. schedules & maps
- 48. down time, social media
- 49. watching video DIY
- 50. online shopping

2.Parents' attitudes and feelings towards handheld devices

2(a). Attitudes and feelings towards general use of handheld devices

6. overusing them

- 17. one-year-olds
- 19. take it away crisis
- 26. so robotic
- 41. like a drug
- 42. the more you're on it, the more you want it
- 43. get off it, you don't need it
- 44. need to get off
- 45. not good for brain
- 51. can enhance and help
- 52. can get sucked into this rabbit hole

54. good balance

- 69. so many conspiracies
- 70. all the algorithm
- 78. access to information
- 79. public domain
- 83. staring at a screen not doing other things
- 86. two years old watching YouTube
- 89. form of entertainment
- 90. learn and teach yourself something
- 93. value when use it properly
- 94. replace and not be addition
- 95. not knowing what's true ad not true

102. technology is addictive

- 103. ingrained in us to have it
- 104. forcing us to have it
- 105. never experiencing anything other than first choice
- 106. instant gratification

2(b). Attitudes and feelings towards preteens' use of handheld devices.

10. impacts "socially"

- 12. want them to interact
- 20. not kids' fault

3. Parenting in this digital world

3(a). Parents' role

- 31. limit it a lot during week
- 32. time restrictions
- 33. more strict during week
- 11. keep them off
- 15. role as parent to limit
- 27. very challenging
- 29. rules and restrictions
- 55. expose your kids
- 56. showing them, modeling
- 72. preventable by more active parenting
- 80. now we know better
- 82. regulated amount of screen time
- 87. exist without having to stare at anything
- 92. decide to allow the usage in your home
- 99. Bill Gates and parenting

3(b). Parents' experiences

- 28. their friends have
- 34. TDAH
- 35. was failing
- 36. we took away the tablet
- 37. back to the tablet
- 38. challenge to do homework
- 39. calmer without devices
- 40. isn't as much stimulation

75. interference in our parenting

- 76. if we left him [son] without guidance
- 77. different person [son]
- 81. not dependent on it
- 91. choose to let it have a positive or negative impact

97. always second guessing

- 96. free falling
- 98. advice available is **overwhelming**
- 100. been called mean, extreme, or a lot

101. feels like I'm in the minority

- 30. affect grades
- 71. Sephora pandemic
- 73. companies don't enforce it [age requirement]
- 74. network of predators, creepy people

84. lacking significantly in their self-regulation

85. instant access to everything

2(c). Attitudes and feelings towards how handheld devices impact people in general

- 13. sit down and have conversations
- 14. no one socializing
- 22. less communication
- 23. more texting

24. losing the human touch

25. human connection

16. families are impacted

- 53. can impact your socialization
- 57. don't ask for directions
- 58. nobody speaks to each other
- 59. internet has facilitated the movement of bad reign
- 60. everyone almost have headphones or ear buds
- 61. continuously bombarded with noise
- 62. don't know how to be without
- 63. don't know how to be bored
- 64. don't know how to be observant
- 65. always zoned out

66. social and life skills

- 68. ability to just have a conversation
- 88. impacts your quality time together,

Appendix M

Second-cycle Codes: Teachers

(3a) How do teachers perceive preteens' use of handheld devices?

Themes

- 1. Different world: all they talk about, bringing it inside the classroom, cliques depending on who plays, integration, kids who don't play are excluded
- 2. Role of the teacher: control and making it part of the curriculum, discussions
- 3. Conflicting feelings: does not prepare kids for ministry exam done on paper, helps children with learning difficulties and second language.

1. Teachers' attitudes and feelings towards handheld devices

1(a). Attitudes and feelings towards general use of handheld devices

- 46. it is addictive
- 1.obsessed with them
- 3. I really enjoy it

44. can't imagine not having it

- 45. addicted to it
- 20. obsessed with [devices]
- 39. enjoy using it
- 75. coup des appareils
- 125. juste milieu

1(b). Attitudes and feelings towards preteens' use of handheld devices.

- 8. get distracted very quickly
- 25. part robot
- 26. doesn't want to let go
- 27. need to have a little video
- 28. won't sleep with light off
- 29. look like robot
- 30. parents now have better understanding
- 32. must have it on all the time
- 33. tell them you will turn it off
- 34. doesn't wasn't to get off

40. part of their lives

- 41. forced on digital technology
- 43. enjoy collaborating
- 68. élimine cette patience
- 69. toutes est très vite
- 70. en action
- 82. vraiment happy [kids when using device]
- 83. dépend de l'activité
- 84. activité de recherche
- 85. l'idée de jeu
- 86. pas ... concentration trop soutenue
- 87. activités amusantes
- 88. format de jeu

2. Teaching in this digital world

2(a). Teachers' role

- 4. lock them onto exactly what I want
- 5. beside them
- 10. lock them on
- 11. cover up URL

12. complete control over it

- 13. guided access
- 14. can't get off
- 15. enter passcode
- 16. draw shape over URL
- 17. only able to be on task
- 18. cannot do something else
- 19. kids admire I have control
- 31. better control
- 53. address and discuss
- 54. not ready for it

55. having discussions

56. acceptable behavior

57. part of our curriculum

- 110. les éduqué
- 111. questions je pose

112. faire prendre conscience

- 113. fermer le Wifi
- 114. contre le courant
- 115. l'école doit faire le contraire

2(b). Teachers' experiences

- 6. catch them looking at something else.
- 7. minimize very fast
- 9. try to get on other things
- 35. keep it locked up
- 48. felt ostracized

49. [kids] did not have this technology

- 50. upset when enter classroom
- 51. angry at each other
- 58. conversation without words
- 59. connect with each other
- 76. ordinateur ne marche pas

- 92. négocier pour rester plus longtemps
- 93. conversation continue en classe
- 94. l'intégration
- 95. un monde parlent de ça
- 96. problème d'intégration
- 97. jouent la même chose
- 98. limités dans leur conversation
- 99. c'est leur monde
- 100. à part dans cette conversation
- 101. pas partie de la clique
- 102. des intérêts en commun
- 103. pas des jeux appropriés
- 116. problèmes d'interaction sociale faceà-face
- 117. discours coupés, moins articulés
- 118. moins de discussion
- 104. irritabilité avec mes enfants
- 105. arrêtent de jouer
- 106. excités et agités
- 107. chicane compétition
- 108. on a la paix
- 109. ça déclenche
- 1(c). Attitudes and feelings towards how handheld devices impact children's academics
- 37. helps them to focus
- 38. helpful and advantageous
- 47. into the classroom
- 60. aider beaucoup les élèves en difficultés
- 61. français langue seconde
- 62. accès à une panoplie d'activités
- 63. empêche de travailler certaines compétences
- 64. examens en papier
- 65. production ... en papier
- 66. l'ordinateur lit le texte
- 67. plus de patience
- 71. examens du ministère
- 72. compréhensions écrites
- 73. élèves refusent parfois
- 74. déçus de travailler sur papier
- 126. parler aux élève
- 1(d). Attitudes and feelings towards how handheld devices impact people in general
- 21. everybody is on their device
- 22. looking at social media or playing games
- 23. can't disconnect
- 24. not able to enjoy being present
- 52. digital causes conflicts
- 119. ont lit peu
- 120. on travail moins ses idées
- 121. moins d'endurance pour lire

- 78. situation difficile
- 77. crée de la frustration
- 89. cause un stresse
- 90. profs se découragent

122. le cerveau à changer	
123. toute courbé	

Appendix N

Consent Forms: Children



INFORMATION AND CHILD CONSENT FORM

Study Title: The Role of Hand-held Devices in the Life of a Preteen

Researcher: Bianca Doheney

Researcher's Contact Information: b dohene@live.concordia.ca

Faculty Supervisor: Professor Sandra Chang-Kredl

Faculty Supervisor's Contact Information: Sandra.chang-kredl@concordia.ca

Source of funding for the study: n/a

Your child is being invited to participate in the research study mentioned above. This form provides information that may affect your decision as to whether or not to let your child participate in this research study. Please read it carefully before deciding if you will give your child permission to participate. If there is anything you do not understand, or if you want more information, please ask the researcher.

A. PURPOSE

The purpose of the research is to investigate preteens' experiences with handheld devices in addition to exploring the perceptions of preteens, parents and teachers on the impact of devices on preteens' social, emotional, and physical well-being. The goal of this study is to use a descriptive case study of two preteens to acquire an in-depth and authentic analysis of preteens' experiences using handheld devices.

B. PROCEDURES

If you allow your child to participate, they will be asked to participate in two 30-45-minute interviews which will be recorded. During the interviews, we will be discussing their experiences with hand-held

devices and their perceptions on how hand-held devices impact preteens' social, emotional, and physical well-being. They will also be provided with a booklet titled, "Me in a World of Devices" where they will be given a variety of opportunities to communicate their knowledge and perspective about hand-held devices. The booklet will consist of entry titles for them to free write, activities such as designing word maps, short comic strips, and poems in addition to Top 5 lists, fill-in-the-blank statements, Would You Rather and True or False quizzes. Finally, throughout the study, they will be given the opportunity to share any content they have created and uploaded on their social media platform(s).

In total, participating in this study will take approximately four weeks.

C. RISKS AND BENEFITS

Your child might face certain risks by participating in this research. These risks include experiencing difficult emotions as they will be asked to reflect on their feelings when browsing social media platforms. For example, one True or False question asks whether they have ever encountered inappropriate content using their handheld device. Another True or False statement asks if they have ever felt upset and one question asks if they have ever felt left out after using the device. Such questions may bring back memories of a negative experience. This being said, your child will be reminded throughout the interview that they can at any time skip a question, take a break, or ask to end the interview altogether.

Potential benefits include giving preteens a voice when discussing how handheld devices impact them socially, emotionally, and physically. If educational settings want to eventually create and implement well-developed programs to support children in adopting healthy habits and lifestyles around technological devices and social media, it is critical that we first seek to understand the role hand-held devices play in our youth's overall wellness. Moreover, if decisions are to be made regarding children's media consumption, it is only fair that their opinions be heard and valued prior to the decision-making process.

D. CONFIDENTIALITY

We will gather your child's experiences and perception about the use of hand-held devices amongst the preteen population.

We will not allow anyone to access the information, except people directly involved in conducting the research. We will only use the information for the purposes of the research described in this form.

The information gathered will be confidential. We will protect the information by renaming all recordings and protecting all audio recordings with a password. Names in the final report will also be changed.

We intend to publish the results of the research. However, it will not be possible to identify your child in the published results.

We will destroy the information five years after the end of the study.

F. CONDITIONS OF PARTICIPATION

You do not have to permit your child to participate in this research. It is purely your decision. If your child does participate, they can stop at any time. You can also ask that the information your child provided not be used, and your choice will be respected. If you decide that you don't want us to use your child's information, you must tell the researcher before April 30, 2024.

In addition to your permission, your child must agree to participate in the study. If your child does not want to participate, they will not be included in the study and there will be no penalty. If your child initially agrees to be in the study, they can change their mind later without any penalty.

There are no negative consequences for not participating, stopping in the middle, or asking us not to use your child's information.

G. PARTICIPANT'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 permit my child to participate in this research under the conditions described.

NAME OF CHILD (please print)

SIGNATURE OF PARENT OR LEGAL GUARDIAN				
DATE				

If you have questions about the scientific or scholarly aspects of this research, please contact the researcher. Their contact information is on page I. 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.

Appendix O

Consent Forms: Parents



INFORMATION AND PARENT CONSENT FORM

Study Title: The Role of Hand-held Devices in the Life of a Preteen

Researcher: Bianca Doheney

Researcher's Contact Information: b_dohene@live.concordia.ca

Faculty Supervisor: Professor Sandra Chang-Kredl

Faculty Supervisor's Contact Information: Sandra.chang-kredl@concordia.ca

Source of funding for the study: n/a

You are 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 the research is to investigate preteens' experiences with handheld devices in addition to exploring the perceptions of preteens, parents and teachers on the impact of devices on preteens' social, emotional, and physical well-being. The goal of this study is to use a descriptive case study of two preteens, as well as a teacher and parent, to acquire an in-depth and authentic analysis of preteens' experiences using handheld devices.

B. PROCEDURES

If you participate, you will be asked to participate in one 30-45-minute interview which will be recorded. During the interview, we will be discussing your experiences with hand-held devices and your perceptions on how hand-held devices impact preteens' social, emotional, and physical well-being. You will also be encouraged to reflect on your feelings regarding parenting in this digital world.

In total, from beginning to end, this study will take approximately four weeks, however your participation will take 30 to 45 minutes.

C. RISKS AND BENEFITS

Potential benefits include acquiring authentic information on the impact of hand-held devices on preteens' physical, social, and emotional well-being to further create and implement well-developed programs to support children in adopting healthy habits and lifestyles around technological devices and social media.

D. CONFIDENTIALITY

We will gather your experiences and perception about the use of hand-held devices amongst the preteen population.

We will not allow anyone to access the information, except people directly involved in conducting the research. We will only use the information for the purposes of the research described in this form.

The information gathered will be confidential. We will protect the information by renaming all recordings and protecting all audio recordings with a password. Names in the final report will also be changed.

We intend to publish the results of the research. However, it will not be possible to identify you in the published results.

We will destroy the information five years after the end of the study.

F. CONDITIONS OF PARTICIPATION

You do not have to participate in this research. It is purely your decision. If you do participate, you can stop at any time. You can also ask that the information you provided not be used, and your choice will be respected. If you decide that you don't want us to use your information, you must tell the researcher before April 30, 2024.

There are no negative consequences for not participating, stopping in the middle, or asking us not to use your information.

G. PARTICIPANT'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 participate in this research under the conditions described.

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.

Appendix P

Consent Forms: Teachers



INFORMATION AND TEACHER CONSENT FORM

Study Title: The Role of Hand-held Devices in the Life of a Preteen

Researcher: Bianca Doheney

Researcher's Contact Information: b dohene@live.concordia.ca

Faculty Supervisor: Professor Sandra Chang-Kredl

Faculty Supervisor's Contact Information: Sandra.chang-kredl@concordia.ca

Source of funding for the study: n/a

You are 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 the research is to investigate preteens' experiences with handheld devices in addition to exploring the perceptions of preteens, parents, and teachers on the impact of devices on preteens' social, emotional, and physical well-being. The goal of this study is to use a descriptive case study of two preteens to acquire an in-depth and authentic analysis of preteens' experiences using handheld devices.

B. PROCEDURES

If you participate, you will be asked to participate in a one 30–45-minute interview which will be recorded. During the interview, we will be discussing your experiences with hand-held devices and your perceptions

on how hand-held devices impact preteens' social, emotional, and physical well-being. You will also be encouraged to reflect on your feelings regarding teaching in this digital world.

In total, participating in this study will take approximately four weeks.

C. RISKS AND BENEFITS

Potential benefits include acquiring authentic information on the impact of hand-held devices on preteens' physical, social, and emotional well-being to further create and implement well-developed programs to support children in adopting healthy habits and lifestyles around technological devices and social media.

D. CONFIDENTIALITY

We will gather your experiences and perception about the use of hand-held devices amongst the preteen population.

We will not allow anyone to access the information, except people directly involved in conducting the research. We will only use the information for the purposes of the research described in this form.

The information gathered will be confidential. We will protect the information by renaming all recordings and protecting all audio recordings with a password. Names in the final report will also be changed.

We intend to publish the results of the research. However, it will not be possible to identify you in the published results.

We will destroy the information five years after the end of the study.

F. CONDITIONS OF PARTICIPATION

You do not have to participate in this research. It is purely your decision. If you do participate, you can stop at any time. You can also ask that the information you provided not be used, and your choice will be respected. If you decide that you don't want us to use your information, you must tell the researcher before April 30, 2024.

There are no negative consequences for not participating, stopping in the middle, or asking us not to use your information.

G. PARTICIPANT'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 participate in this research under the conditions described.

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.

Appendix Q

Preteens' Assent Forms



CHILDREN'S ASSENT FORM FOR PARTICIPATION IN RESEARCH

Study Title: The Role of Hand-held Devices in the Life of a Preteen

Researcher: Bianca Doheney

Researcher's Contact Information: b_dohene@live.concordia.ca

Faculty Supervisor: Professor Sandra Chang-Kredl

Faculty Supervisor's Contact Information: Sandra.chang-kredl@concordia.ca

Source of funding for the study: n/a

I want to tell you more about the research project you will be participating in. I want to invite you to share your experiences using hand-held devices (e.g., Smartphones, tablets, portable consoles) and discuss your perceptions about the impact of hand-held devices on preteens' social, emotional, and physical wellness.

If you agree to participate in this study, we will meet for two sixty-minute interviews for us to discuss hand-held devices. I will also provide you with a booklet titled, "Me in a World of Devices", where you will be provided with a variety of opportunities to communicate your knowledge and perspective about hand-held devices. The booklet will consist of entry titles for you to free write, activities such as designing word maps, short comic strips, and poems in addition to Top 5 lists, fill-in-the-blank statements, Would You Rather and True or False quizzes. Finally, throughout the study, you will be given the opportunity to share any content you have created and uploaded on your social media platform(s).

It is entirely up to you whether you want to participate in this study. If you choose to participate, at any point you can decide to stop without any consequences whatsoever. Nobody will be upset if you choose not to participate or change your mind during.

Finally, if you have any questions now, or at any point during the study, you can stop me to ask your question or contact me. I will be more than happy to answer all your questions.
If you have any questions about this study, you can contact us at:
Bianca Doheney: (514) 883-0230 or <u>b_dohene@live.concordia.ca</u>
Dr Sandra Chang-Kredl: (514) 848-2424, ext. 8632 or sandra.chang-kredl@concordia.ca
If you choose to take part in the study, please circle YES and complete the information below. Yes, I want to participate in this study. No, I do not want to be in this study
Child's name: Signature:
Person obtaining assent: Signature: