

Elementary educator perceptions of student digital safety based on technology use in the classroom

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Children interact with digital devices for learning and entertainment at an early age. This study examines elementary educators' perceptions of student digital safety based on their interactions with others using technology in the classroom. Through a qualitative interview study, we analyzed data collected from ten elementary educators, including classroom teachers, media specialists, and instructional technology facilitators. Educators shared that their students interact with one another using technology for a variety of social and learning purposes in the classroom. Additionally, teachers described negative interactions with technology they have observed in their classrooms with elementary students, including incidents of cyberbullying and access to inappropriate content online. Findings from this study support the design of instructional materials for elementary student digital safety and have implications for teachers, parents, students, and administrators.

Keywords: digital safety, elementary school students, online interactions, classroom technology

Elementary educators and students increasingly rely on digital technologies for teaching and learning, especially when districts shifted to emergency remote teaching (ERT) during the onset of the COVID-19 pandemic (Hodges et al., 2020). Even as students and teachers transition back into traditional classroom spaces, they continue to utilize educational apps and websites first used during ERT. While use of digital technologies can benefit learning outcomes, it also raises concerns about students' safety and privacy (Zimmerle, 2021). As such, there is an increased need for explicit instruction in digital citizenship and digital safety for younger learners (Ribble, 2015; Richards et al., 2015). As digital natives, today's elementary learners are presumed to be digital citizens at a young age, however, they may lack the knowledge to interact in this digital world ethically and responsibly (Sziron & Hildt, 2018). According to Ribble (2015), digital citizens are individuals who demonstrate "the norms of appropriate, responsible behavior with regards to technology use" (p. 1). Understanding how elementary learners interact with technology in the classroom can support the design of digital safety curricular resources and professional development for elementary educators.

The Authors' (2021) previous study explored parent perceptions of elementary school students' digital safety and technology use. Parents were most concerned about children coming across sexually explicit content online and interacting with strangers on games or social networks. This current study extends the authors' previous work with parents of elementary-aged children to include insights from elementary educators about students' interactions with technology and concerns about negative uses of technology that impact digital safety.

In this study, we interviewed ten elementary educators to understand their perceptions of elementary students' digital safety and technology use, especially as they relate to interactions with classroom technology. Teachers were interviewed at the beginning of the

2020-2021 school year, capturing a time when students and teachers were transitioning out of fully virtual instructional spaces into hybrid and in-person learning in response to COVID-19. The timing of these interviews provided an opportunity to learn from teachers' recent immersion in online learning environments with young students to better understand the types of interactions with technology students engage in and teachers' concerns related to safe digital practices.

Teaching and Learning with Technology in the Elementary Grades

Young learners are increasingly using digital tools and technologies for learning, especially when students transitioned to fully virtual classrooms during COVID-19. This trend is only going to continue to grow as schools adopt new technologies for learning, like makerspaces and virtual reality (Adams Becker et al., 2016), and as schools continue to use technology adopted for remote learning (Zimmerle, 2021). Technology is used by elementary learners for collaborative learning and to increase engagement and motivation. Opening opportunities for learning also opens potential risks (Aftab, 2000). The following literature reviews the potentials and pitfalls related to elementary students' use of technology and the need for instruction in digital safety.

Collaboration and Communication

Technology breaks down communication barriers, increasing opportunities for collaboration in both synchronous and asynchronous settings (Adams Becker et al., 2016; Varier et al., 2017). Digital tools for social interactions became more prevalent during ERT as teachers and students practiced social distancing (Eckardt et al., 2021; Hodges et al., 2020). In a study examining second-graders' use of tablets, Davidsen and Vanderlinde (2016) found that technology fosters collaboration and engagement for young learners. Jackson and colleagues (2013) found similar outcomes when examining fourth-grade students' use of interactive tabletops for collaborative instruction in math. This is encouraging as increased collaboration

is linked to enhanced cognitive development in early childhood (Sills et al., 2016). However, to better understand how teachers can support young students' communication skills with digital modalities, we must better understand how elementary students currently interact with one another using technology.

Engagement and Motivation

In addition to encouraging collaboration, the use of digital tools for learning has been linked to higher rates of motivation and engagement among elementary learners. In a study of the impact of one-to-one initiatives on K-12 students and teachers, Varier and colleagues (2017) found that elementary learners reported work to be more fun when completing learning tasks with digital devices compared to traditional methods. Consistent with these findings, Ciampa and Gallagher (2013) identified increased engagement and productivity in elementary learners using mobile devices, particularly among reluctant learners, as the immediate feedback students received when using mobile devices contributed to higher rates of persistence with challenging tasks. With young students relying heavily on educational applications and digital tools for learning during ERT related to COVID-19, educators and parents are concerned about the online to offline transition as students ease back into traditional classrooms without the instant feedback and stimulation from the constant use of digital tools for learning and entertainment (Eckhardt et al., 2021). More information is needed about how elementary learners use technology in the classroom to support this transition with embedded digital safety content.

Challenges of Young Learners' Technology Use

While increased technology use has many benefits for learning and communication, it also presents risks. Aftab (2000) categorizes six types of risks that threaten young learners online: exposure to inappropriate information, exposure to potentially dangerous information, being stalked or harassed, disclosure of important and private information, online-purchase scams,

and enticement by cyber-predators who want to meet children face-to-face. Concerns over student data protection continue to grow as districts rely more heavily on online learning resources (Zimmerle, 2021). Aftab (2000) indicates that children have some level of control when it comes to most of these risks, highlighting the importance of digital safety education. Young learners are less likely to use traditional forms of social media than teens and young adults, but elementary students do communicate with others online through playing video games (Eckhardt et al., 2021) and interactions with online learning platforms. This raises concerns about cyberbullying among elementary learners. Much of the research on cyberbullying focuses on teens, and less is known about cyberbullying as it relates to tweens: children between the ages of 9 and 12. Patchin and Hinduja (2020) conducted one of the first national studies of tween cyberbullying in the United States. They found that nearly 20% of students in this age group have been impacted by cyberbullying in some way, indicating a need to address cyberbullying education with elementary students (Cuesta Medina et al., 2020; Santiago, 2015).

Richards and colleagues (2015) conducted a literature review to understand the impacts of social media use on the health of children and young people. They found that social media use could potentially have a positive impact on youth's ability to stay connected with peers, but is also linked to negative outcomes, such as depression, reduced self-image, and cyberbullying that can impact learning. Eckhardt and colleagues (2021) identified similar outcomes in their survey study of third- through sixth-grade students and parents using technology for social interactions during ERT. In this study, parents expressed concern over changes in their child's behavior related to overuse of social media and online gaming. Fardouly and colleagues (2018) examined the links between parental control over time spent on social media and the mental health of 10–12-year-old girls, finding better mental health outcomes for girls whose parents had more control over time spent on social media. Overall,

there are limited studies related to elementary-aged children and the effects of social media use as most of this research focuses on teens and young adults, indicating a need to better understand young children's interactions with technology.

Elementary Digital Citizenship and Digital Safety

Education in digital citizenship and digital education can help harness the benefits of learning with technology while helping young learners better understand how to minimize risks.

Issues of digital citizenship and digital safety for elementary learners must meet the demand of changing instruction due to technology, especially as schools continue to employ technologies adopted for ERT (Zimmerle, 2021). Proactively teaching digital citizenship and digital safety as an ongoing part of instruction reflects a conscious effort to move away from ineffective, fear-based strategies (Jones & Mitchell, 2016). In a 2016 national survey in the United States, educators reported that they started teaching about digital citizenship in third grade or later (Hollandsworth et al., 2017), with digital citizenship competencies taught most heavily in high school (Vega & Robb, 2019). Many researchers and educators agree that this is too late. Curran and Ribble (2017) argue that lessons on digital citizenship should begin as soon as a child has access to technology. This means these lessons and models of instruction will likely begin in the home. Based on this same logic, formal digital safety instruction should begin as soon as a child enters school and continue throughout their K-12 career. Understanding the ways elementary learners interact with technology in the classroom can support the development of instructional resources for ongoing digital citizenship and digital safety education.

Digital Citizenship and Digital Safety Instruction

The focus of instruction in digital safety and digital citizenship topics vary. In a Common Sense Media survey study of over 1,200 K-12 teachers, the most addressed digital citizenship topics were cyberbullying (46%) and digital privacy (43%), with topics of relationships and

communication (38%), digital footprint and identity (33%), and media balance (25%) less commonly addressed (Vega & Robb, 2019). Cuesta Medina and colleagues (2020) identified gains in confidence and self-efficacy among elementary students participating in cyberbullying prevention programs designed to develop understanding of the risks and opportunities of the online world. Kumar and colleagues (2019) conducted focus groups with elementary teachers and found few instances of elementary students receiving lessons on digital privacy and security; lessons that were taught typically came from the school media specialist. With growing concerns over students' data privacy (Zimmerle, 2021), more work is needed to develop digital safety instruction for elementary learners in this area.

Teacher and Administrator Support for Digital Safety Education

Teacher and school leader knowledge plays a role in how digital safety is modeled and incorporated into instruction (Adams Becker et al., 2016; Samsung, 2015). Teachers are now called upon to serve as guides for modeling responsible digital citizenship practices and encouraging students to do the same (Adams Becker et al., 2016). However, Hollandsworth and colleagues (2017) identify a need for improved digital citizenship awareness for both administrators and teachers to accomplish this goal.

Beyond awareness, other barriers to incorporating digital safety and digital citizenship education into instruction include knowledge of digital safety topics, access to resources, and time. In a study of social studies teacher candidates' (TC) perceptions of the role of digital citizenship education, TCs reported that digital citizenship education should be incorporated into their curriculum but felt that their teacher education programs provided insufficient emphasis on these topics (Karaduman, 2017). K-12 educators participating in a graduate-level professional development course on digital citizenship demonstrated gains in knowledge and attitude toward implementing digital citizenship content into their instruction, yet they cited time and lack of curricular resources as some of the barriers to meeting this

need (Authors, 2020). Collectively, these studies demonstrate a need for teacher education and resources that helps educators build digital citizenship and digital safety content into their instructional practice.

Conceptual Framework

Ribble (2015) identifies nine elements of digital citizenship organized into themes of Respect, Educate, and Protect (REP). The REP model based off those themes organizes repeated cycles of digital citizenship curricular content beginning with the K-2 grade band. This instruction should be embedded throughout the core curriculum rather than taught as isolated concepts that are unrelated to everyday interactions with technology. We use the REP model for digital citizenship in this study to understand how digital citizenship and safety instruction connects with students' current interactions with technology in the classroom and educators' concerns. We use the REP model to connect findings from teacher interviews to implications and recommendations for elementary digital safety education.

Respect

In the REP model, *respect* refers to respect for self and respect for others. K-2 teachers should focus on content related to etiquette. For young learners, etiquette should focus on empathy and kindness, both while interacting with others online and in-person. In grades 3-5, Ribble (2015) recommends educators focus on digital access. A focus on digital access allows educators to extend lessons on empathy to help students better understand disparities in access to digital resources. Digital access also includes helping students understand how to use resources to interact with others online using a variety of networking tools (Curran & Ribble, 2017).

Educate

The *educate* area of the REP model addresses educating yourself and educating others to keep up with changing technology. The model suggests K-2 teachers focus on digital literacy,

including “life skills that focus on finding, using, summarizing, evaluating, creating, and communicating information while using a variety of digital technologies” (Curran & Ribble, 2017, p. 38). Teachers in grades 3-5 should extend digital literacy learning to focus on communication, helping students think critically about how different technologies can affect communication of their message.

Protect

The third theme in the REP model is *protect*, addressing how to protect yourself and others while interacting with digital technologies. In grades K-2, teachers should introduce lessons related to digital rights and responsibilities, including how to be good citizens both on- and offline (Curran & Ribble, 2017). Digital security is the focus for the 3-5 grade band. This includes helping students understand privacy settings, how to protect their personal information, and the potential consequences of sharing certain information online. As Ribble (2015) indicates, in today’s connected world, security is the responsibility of everyone.

Purpose of this Study and Research Questions

To support the development of digital safety instructional resources for elementary learners, we interviewed ten elementary school educators to get their perspectives on the ways students interact with technology in their classes and the negative uses of technology they have observed. Data collected from these interviews will allow for meaningful connections in the design of instructional resources to the contexts in which elementary learners interact with technology in school. Additionally, these interviews will provide context for the kinds of negative or unsafe behaviors elementary educators have observed that need to be addressed with younger learners. As research into other safety programs demonstrates, programs that target actual risks rather than perceived risks are most effective (Jones, 2010). By interviewing teachers about their own experiences with students’ digital safety, we seek to

target actual risks rather than perceived risks for elementary learners. The following research questions guide this study:

- (1) In what ways do elementary students interact with others using technology in their class?
- (2) What are teachers' perceptions of elementary students' negative uses of technology in the classroom?

Methods

We used a qualitative research design to gather elementary educators' perceptions of elementary students' digital safety needs. During the time of the interviews used in this study, educators were working with elementary learners in virtual, in-person, and hybrid learning models due to COVID-19. As such, students' interactions with technology described in this study represent a range of learning settings and novel classroom interactions with technology from remote learning.

Participants

For this study, we recruited ten elementary-level educators to participate in individual interviews. Participants included educators from public, charter, and private schools from six neighboring districts in the southeastern United States. Of the ten participants, five serve as general education classroom teachers, three serve as instructional technology facilitators (ITF), and two teach media and computer literacy as elective teachers. Participants' years of experience in education range from one to 17 years. Educators in this study serve a range of elementary grades with the majority working with grades two through five. Seventy percent of participants reported participating in professional development related to elementary digital safety in the past. Table 1 summarizes the demographic characteristics of the teachers interviewed.

Data Collection

Each educator participated in a semi-structured, individual interview via Zoom. Each interview lasted approximately 30 minutes. Interviews were video- and audio-recorded for transcription purposes. Interview questions were designed to allow educators an opportunity to share their experiences using digital technology with students, their perceptions of what elementary students must learn to stay safe online, as well as their concerns about elementary students' digital safety both in and out of school. Participants were encouraged to elaborate on their responses by sharing stories from classroom experiences. Since these interviews were intended to inform the design of digital safety modules for elementary learners, questions directly addressed educators' experiences with the digital safety module topics of digital footprint, digital identity, cyberbullying, netiquette, and digital privacy. We shared a copy of the interview questions and the terms defined in Table 2 with participants via email at least two days prior to the scheduled interview. The terms defined in Table 2 served to clarify content-specific terms that were used throughout the interview.

Data Analysis

Machine-based Otter transcription was used to transcribe the audio recordings of each interview before being verified manually by a member of the research team for accuracy. Interview data was analyzed using an inductive thematic process (Miles et al., 2013). Two coding cycles were used by two members of the research team. Initial codes were derived from open coding of the first three transcripts. The team members met to discuss initial coding and created a codebook of agreed upon codes from these first three interviews.

The first three interviews were recoded based on the shared codebook before coding the remaining transcripts. Additional codes were added, as needed. Once all interviews were coded, the two researchers organized codes into axial codes (Strauss & Corbin, 1990) based on the needs assessment and common patterns of response. As needed, portions of interview

transcripts were shared with participants via email to clarify their responses during the analysis phase.

Findings

The findings from the teacher interviews for the two research questions are included in the section below.

Student Interactions with Technology

Initial codes related to the first research question include *peer interactions*, *student-teacher interaction*, *educational technology used*, and *noneducational technology used*. Student interactions with others using technology centered around two themes: social connections and collaborative learning.

Social Connections

During the time of the interviews (early Fall 2020), some educators were still teaching students virtually due to COVID-19 restrictions while others were recently transitioning back into in-person instruction. During the time of full virtual learning, educators relied on technology to build relationships with students and facilitate social connections between classmates. While most teachers reported disabling the direct messaging features on Zoom or Microsoft Teams, the group chat features in these platforms allowed students to engage socially with the teacher and their peers. One elementary ITF shared how students used the group chat in her class: “Everything from ‘Hi, good morning, hello,’ to ‘I lost a tooth. Would anyone like to battle me on Prodigy right now?’” Other teachers shared how they set aside time before or after virtual class meetings just to allow students to socialize with one another. One third grade teacher shared how she encouraged social interactions between peers during small group instruction: “When we do small groups, I share my screen so they can see each other and sometimes I’ll turn my camera off so they can pretend I’m not there.”

Even outside of the virtual learning setting, teachers described how their students used digital media to interact with their peers. Few participants were certain if their elementary students were using social media platforms, such as Twitter or Instagram, to communicate with one another. However, some teachers describe how their students would share YouTube videos with one another as a form of social interaction. Additionally, teachers reported that students sometimes would arrange times to compete against one another in online educational games used inside and outside of class time.

Collaborative Learning

Teachers shared several applications and programs that students used during both virtual and in-person instruction to collaborate with peers for learning. Students used video conferencing platforms and the Google suite to share assignments for collaborative learning tasks, such as digital museum projects. Additionally, teachers described how Padlet, Showbie, and Flipgrid allow students to share their work with others and give feedback to peers. One fourth grade teacher described how the recording feature in Flipgrid allowed students to share and respond to peer feedback through video commentary: “They can record themselves, and then they can record back a response, as well.” In this way, the technology facilitated the process of exchanging peer feedback, as students were able to share more information than they would have by writing or typing feedback to peers.

Negative Uses of Technology

Initial codes related to the second research question include *inappropriate peer interactions*, *accessing inappropriate content*, *accessing technology at inappropriate times*, and *computer/technology issues*. While there were benefits to using technology, two themes emerged regarding teachers’ perceptions of students’ negative use of technology: misuse of technology during learning and inappropriate peer interactions.

Misuse of Technology during Learning

When asked about students' negative uses of technology, several teachers shared examples of students using the classroom technology in ways other than the intended learning purpose. During virtual learning, one educator shared how students discovered ways to split their screens so they could play games while they were supposed to be participating in online lessons. In both in-person and virtual learning, teachers described students wandering onto sites they should not be on during instructional time, primarily YouTube. The monitoring program DYKnow allowed some of the teachers to observe students accessing these sites even when students were learning remotely. One teacher expressed that these types of interactions result when students do not have clearly defined boundaries between appropriate use of technology at school versus home use.

Teachers also shared examples of elementary students using the school technology resources to try to look up inappropriate content. Through direct observation or by using network monitoring programs, teachers reported elementary students attempting to access gambling sites and looking up sexually explicit images. This type of behavior was rare and more commonly observed when students were using school-issued devices outside of the school network during remote learning. While network filters help block students from accessing this content, over half of the teachers interviewed described access to inappropriate content as one of their main safety concerns for their students.

Inappropriate Peer Interactions

Some of the inappropriate peer interactions teachers described simply involved students using technology to communicate with their classmates at the wrong time. One fourth grade teacher shared how two students in her class were able to access the school counselor's Showbie during class time to discreetly communicate with their friends. However, other inappropriate interactions teachers described involved students using technology to send hurtful comments to their peers. While most teachers were careful to disable private messaging features on

technology platforms used in class, some students were able to find other ways to direct-message negative comments to their classmates. As one elementary ITF shared, “Within our Microsoft Teams, students have found ways to get into chats that we didn’t know you could. And they’ll pick on each other.” A third-grade teacher described how some boys in her class were able to use private messaging in Google Classroom to send rude comments to one girl in her class, sharing how they would, “just call her dumb and annoying and rude.” Another ITF shared how students discovered that they could use white-colored fonts to secretly send curse words to one another since the text was only visible when highlighted. Participants also described incidents of students using comment features to leave harsh feedback on other students’ work anonymously. The anonymous nature of some online interactions warrants special attention when teaching young students how to interact with others online.

Discussion

This study helps understand elementary learners' interactions with technology, both positive and negative, to provide context for digital safety instructional materials that can be embedded into ongoing education in the classroom. Findings from this study capture insights from elementary educators who were immersed in their students' online interactions due to ERT. Every time students are using digital technologies in class is an opportunity to explicitly teach and model digital safety and digital citizenship practices. Consistent exposure to safety messages is proven more effective than lessons taught in isolation (Jones, 2010). Findings from this study are organized by the REP model (Ribble, 2015) to highlight ways in which digital safety topics can be embedded into learning based on elementary students’ current use of technology. This study also has implications for professional development related to digital safety.

Respect: Netiquette and Cyberbullying Awareness

As related to research question 1, elementary teachers in this study reported frequent use of technology to facilitate collaborative learning experiences between students, particularly with providing peer feedback. Elementary teachers can use the social interactions they have established for students to interact with technology as teachable moments related to netiquette and cyberbullying awareness as part of the *respect* theme of the REP model (Ribble, 2015). Rather than rushing to find ways to prevent students from directly contacting one another, teachers can use these opportunities for feedback to model proper netiquette, guidelines for respectful interactions online. This aligns with a vision of digital citizenship and safety that gives more attention to overall respectful online behavior (Jones & Mitchell, 2016).

Few participants indicated certainty that their elementary students were currently using social media for peer interaction, but interviews in this study reveal that elementary students are using online platforms for instructional use that mirror more traditional social media, as seen in chat and direct messaging features through Google Classroom, Padlet, Flipgrid, and Showbie. Teachers should use these interactions to make explicit connections between netiquette within the classroom and traditional social media. Participants in this study shared how students would leave harsh comments on their peers' work when the comments were left anonymously. The anonymous nature of online interactions is one factor contributing to cyberbullying (Santiago, 2015). When teachers encourage students to share feedback with peers, they should discuss norms for leaving constructive feedback online, including thinking about the person behind the screen. Additionally, teachers in this study highlighted the advantages of students sharing feedback through video rather than text. Video feedback removes anonymity and encourages students to connect with their peers in a more personal way.

Protect: Digital Footprint and Privacy

Increased access to digital devices both inside and outside of school means that children are creating digital footprints at a younger age, which has risks for their privacy and safety (Chawla, 2018). Overall, teachers in this study described a lack of student awareness of their digital footprint as they navigated through internet content without concern for the trail they left behind. When students were aware of their digital footprint, it was typically connected to a disciplinary action when students' inappropriate activity was tracked using programs like DYKnow. This can lead to the assumption that the purpose of taking control of your digital footprint is only to avoid negative consequences rather than as a means of crafting a positive digital identity and taking proactive measures to ensure safety and privacy. While research related to the effective instruction of digital footprint content cautions against instructional practices that overly emphasize the role of surveillance of online activity (Buchanan et al., 2017; Hollandsworth et al., 2017), teachers can use these existing surveillance methods in schools to help make issues of data privacy less abstract for students and bring awareness to online tracking meant to protect versus that which puts students at risk (Finkelhor et al., 2021).

Educate: Teacher Knowledge and Practice

The rapid shift to virtual learning experienced during the onset of COVID-19 revealed areas of need for teachers related to online instruction and safety features. While teachers in this study attempted to take proactive measures to ensure positive interactions between students, such as blocking direct messaging features, in several cases students were able to access technology features of which teachers were unaware. In line with the *educate* theme of the REP model (Ribble, 2015), this highlights a need for ongoing professional development for teachers to stay on top of changing technology and be better prepared to respond to ERT in the future (Marshall et al., 2020).

Having a better understanding of the ways elementary students interact with technology can support teacher professional development that targets the technology and safety needs most relevant to their instructional practice. Findings from this study demonstrate the need for digital safety lessons that help students develop skills for respectful online communication and bring awareness to how their actions online can put their privacy and safety at risk. While young students may display a natural ability with navigating the technology used in the classroom, it is important to remember that ethical and responsible use of technology is not intuitive and must be modeled for young learners (Sziron & Hildt, 2018).

Limitations and Implications

Participants in this study were interviewed about elementary students' interactions with technology during a time when students and teachers were transitioning out of ERT due to COVID-19. While the timing of these interviews provided insight into students' online interactions as they were immersed in technology, findings may not accurately reflect typical classroom instruction and interactions. Additionally, in describing students' interactions with technology, teachers could only speak with certainty about students' interactions with school devices. Findings from this study must be combined with studies conducted with parents and students to develop a more complete picture of elementary learners' digital safety needs.

Findings from this study will be used to support the development of instructional resources and professional development for elementary digital safety education. Further research is needed into how these resources can be embedded into ongoing elementary instruction. Additionally, more research is needed into elementary student digital safety practices, both inside and outside of school, as this younger demographic is often left out of this research area. These studies should include a combination of interviews with school administrators, teachers, parents, and students about their experiences with digital safety.

Further, there is a need to collect in situ (classroom-based) data about teachers' and students' experiences while teaching digital safety concepts.

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Table 1. Teacher Demographic Characteristics

Teacher	Gender	Years of Exp.	Grades Taught	State	Prior Professional Development on Digital Safety
A	female	14	2, 3, 4	NC	yes
B	female	15+	mostly k-5, some ms/hs	NC	yes
C	female	6	2, 3	NC	no
D	female	8	k-5	NC	no

E	female	2	4	NC	yes
F	female	1	3	NC	yes
G	female	17	4, k-6	NC	yes
H	female	14	3, 4, 5, k-5	NC	yes
I	female	9	3	NC	no
J	female	7	2, 3-5	NC	yes

Table 2. Digital Safety Terms

Digital Citizenship Elements	Description
Cyberbullying	Cyberbullying is bullying that takes place over digital devices like cell phones, computers, and tablets.
Digital Footprint	A digital footprint is a trail of data one creates while using the Internet.

Digital Privacy	Digital Privacy refers to the privacy of the digital information shared.
Digital Netiquette	Digital netiquette is formal or informal rules that apply when communicating online.
Digital Identity	Digital Identity refers to how one perceives oneself and how others perceive the person based on the person's online activity.
