Digital Citizenship: a Journey to Internet Safety

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Students need academic tools and digital skills for proper social interactions in a digital society. Researchers Ribble and Park (2019) designed the S3 Framework which stresses the importance of developing safe, savvy, and social digital citizens. Using this framework, a series of interventions were developed for students and staff to increase the demonstration of appropriate digital literacy skills and digital citizenship. This mixed-methods study provided the opportunity for 6th-grade students to receive an additional intervention for internet safety, along with students and teachers sharing their knowledge and understanding of being safe, savvy, and social digital citizens. The goals of the research included determining the ways in which the internet safety training supported students’ perceptions of behavior and digital skills with technology; understanding how students have grown as safe, savvy, and social people; and identifying the ways in which the digital citizenship training for the staff supported their understanding of digital citizenship in the classroom. Findings indicated through teacher and student interviews, along with pre-assessment and post-assessment scores of the intervention that students know the right or safe answer when asked how to be safe online and teachers understand that digital citizenship and internet safety is an important component of technology in education. The results showed that students are not using, applying or transferring the knowledge of how to be safe or kind in the moment when a situation is presented.

KEYWORDS: digital citizenship; internet safety; online; COVID-19, remote learning, digital skills; technology
DIGITAL CITIZENSHIP: A JOURNEY TO INTERNET SAFETY

LYNN BROWN

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DIGITAL CITIZENSHIP: A JOURNEY TO INTERNET SAFETY

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Guy Banicki
Bill Link
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To my husband, Walter. Thank you. Your love and support have been steady and strong since the day I met you. Thank you for taking the lead in parenting so many times so I could hide in my office to research, analyze data, and write. You are my favorite, forever.

L. B.
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Teachers believe students are excited about technology.

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CHAPTER I: DEFINING AND FRAMING A PROBLEM OF PRACTICE

Introduction

On August 5, 2020, I received a text message from our Assistant Superintendent during an administrators’ meeting, asking me if I wanted to work with him as the administrator of the virtual school (later to be named Remote Learning School). Five minutes later, my new role as Principal of the Remote Learning School was announced during the meeting, along with continuing my role as the Principal of Neil Armstrong Primary School (a Kindergarten through third-grade school in the district). Little did I know that our Remote Learning School would have over 850 Kindergarten through eighth-grade students enrolled, with more than 35 staff teaching.

While leading the two schools, I quickly learned that students were inappropriately using academic tools for non-academic purposes and lacked skills for proper social interactions in the digital society and staff were not well prepared to support students with their development of the appropriate digital citizenry skills. My problem of practice was determined based on information from students and teachers while participating in remote learning and information from when school resumed to in person instruction and learning after the COVID pandemic restrictions were lifted.

The Adoption of GoGuardian

Rewind time to February of 2018, the beginning of our District Technology Steering Committee. I volunteered to be a committee member, along with three other Principals, the Assistant Superintendent, the technology director, and four teachers. We were charged with determining the district’s plan for technology implementation and integration into the classroom. We needed to create a technology plan from the department's goals. After multiple meetings, discussions, and research, we determined three questions to guide us in our program for our
district: How do we support our teachers in learning to use technology? How do we support our
teachers with the implementation of technology in their classrooms? How do we integrate
technology into the curriculum we have developed? Digital citizenship was not in the
implementation plan yet.

We continued to meet throughout the 2018-2019 school year, as the district purchased
more devices for schools and teachers to use with students. The devices were purchased for
students to use in a computer lab setting or Chromebooks on a cart that could travel from
classroom to classroom. At this time, we did not have devices for every student. Teachers often
would give students a task on the computer and walk away from the student, trusting that
students would do as instructed. However, teachers recognized that students would often get
distracted and navigate to other websites or create unrelated drawings, etc. when the teacher
walked away. Teachers continued to tell administrators they needed to know more about what
the students were doing on their devices when the staff was not standing right beside them.
These conversations brought on the pilot of GoGuardian, a software program to help schools
manage their devices, to better understand their students’ needs, and to keep students safer
online, in the spring of 2019 for the junior high schools in our district. The pilot proved
successful with teachers knowing what students were doing on the device and supporting the
students’ learning. The district implemented GoGuardian for all schools and students in the fall
of 2019. The use of GoGuardian supported our staff and helped us understand that while students
were only using devices at school, they were using technology safely and respectfully with the
supervision of teachers.
The Impact of the COVID-19 Pandemic

On March 13, 2020, when the governor of Illinois announced that schools must close due to the COVID-19 world pandemic, our school district was not equipped to provide technology devices to all students in the district. Our school district central office staff collaborated with school administration and instructional coaches and determined a temporary solution to providing education to students during the shutdown was to give all students paper packets of learning materials. A few weeks later, after an inventory of technology devices across the district, we determined that we could provide technology devices to all third-grade through eighth-grade students. Our school district was also able to secure and provide internet access to any family needing it.

When the students received the technology (Chromebooks) for use in their homes, the GoGuardian alerts quickly rose. Staff were not with the students to monitor the usage of the devices and students were taking it upon themselves to use the devices for purposes other than education. The alerts from the GoGuardian software told us that students were not being safe or respectful online. Administrators and teachers contacted the students and their families to inform them of what was happening. However, often, the unsafe and disrespectful behavior (for example, navigating inappropriate websites or making inappropriate comments) continued. As our online instruction continued, we recognized that staff were not equipped to teach in an online environment and students were showing behaviors and work ethic they would not show in person. There was, therefore, a need for staff development and student ethical training.

Due to the need for staff development, during the spring of 2020, our school district created a position and hired a district technology coach. The role was to support the District Technology Steering Committee and the staff with implementing technology, an ever-growing
resource in our district. The school district also received Elementary and Secondary School Emergency Relief (ESSER) funding. The ESSER funding was used to purchase more technology so the entire school district could move to a 1 device to 1 student (1-1) model.

During the summer of 2020, our school district began reopening our schools after the shutdown due to COVID-19. The Illinois State Board of Education stated that all school districts must have a remote learning plan with the reopening plan. Our district decided to have in-person learning on an alternate day schedule, with an option to enroll in a remote school. It was at that time I became the Principal of the Remote Learning School, an optional school for students to enroll in, along with staying on as the Principal of Neil Armstrong Primary School. Our Remote Learning School became a school with nothing but our student information system (Skyward) in place for our Remote Learning School. Registration for the school district opened and the number of students enrolling in Remote Learning School continued to grow.

After looking at enrollment within our in-person schools, we assigned students to classes and asked for volunteer staff. Next, we arranged for remote learners' devices and internet access pickup. Then, we purchased an online curriculum for all students K-8, rather than asking staff to create digital versions of our current Units of Study (our district curriculum).

With the start of school, the phone calls and emails from families and staff began to flood my inbox. Although families were told of the structure of the Remote Learning School and opted into the Remote Learning School, families were frustrated and concerned with the amount of support the families needed to give the students while participating in at-home learning on a Chromebook. Rarely, if ever, did I receive an email or phone call stating that the online curriculum purchased for students was a favorable situation. Students were missing their friends at school. Families noticed the social-emotional effects of students being at home instead of at
school. Students became uninvolved in the Remote Learning School classes and started using the district technology for purposes other than education. Staff were frustrated with the lack of student understanding of how to use the technology and students' lack of involvement, including attendance. To use the word stressful to describe life in the virtual school world is an understatement.

After about two weeks of online education, GoGuardian alerts were turned on for me, as the Principal of the Remote Learning School. Multiple alerts of students being unsafe and disrespectful online immediately filled my email inbox. District staff determined the responsibility to respond to GoGuardian alerts was too much for me. At this time, an Assistant Principal in the district was then brought on to the Remote Learning School staff to address GoGuardian alerts. Around this same time, students stopped attending online lessons and stopped doing the assigned work. Another Assistant Principal in the district was brought on to address attendance concerns. District staff continued to respond to the student needs I expressed.

In October 2020, our district decided to stop using the online program purchased for Remote Learning School. The amount of digital skills students needed was too much for the students, families, and staff. Now that the staff would be using the district curriculum, throughout the school year, staff and administration received professional development on the different technology programs we could use with our District Units of Study and online learning. Along with teaching students how to use the sites and tools, we also sent videos and tutorials to families on how to navigate the different sites and tools we used in our online education. We made our Remote Learning School work to the best of our ability.

Across the nation, schools were participating in remote learning, and these schools also saw the effects online education had on students. Students were not engaged in rigorous learning
experiences, students were not able to collaborate with one another in the school setting, and students were feeling social isolation with remote learning. We recognized the effects of remote learning were hurting our students physically, emotionally, and educationally in our district and our schools.

When COVID-19 hit Illinois, the Illinois State Board of Education mandated that schools have a remote learning environment. Because our Remote Learning School was created due to this mandate, we decided that we would close the school when the mandate was lifted due to the effect students were having by not being in school.

**Shifting to Current Practice**

Although our Remote Learning School closed its virtual doors at the end of the 2020-2021 school year and I was transferred from being the Principal at Neil Armstrong Primary School to be the Principal at Lincoln Intermediate School in our school district, we continued to see the need for digital literacy skills and digital citizenship as our students were given the responsibility of taking their devices home every night. Over time, we continued to see that our students were still not using the devices safely and respectfully.

Due to this need, our District Technology Steering Committee created and implemented a digital citizenship professional development three-part badging series for staff during the 2021-2022 school year. This professional development was intended to inform staff of a digital citizen's safe, savvy, and social responsibilities.

The three-part badging series consisted of a one-hour training, three times throughout the school year on an early release school day. Each part of the three-part series consisted of multiple videos (created by District Technology Steering Committee members) and multiple questions after each video. The first part of the series taught district staff about the importance of
digital citizenship, the definition of digital citizenship, the nine elements of digital citizenship, the S3 (safe, savvy, social) Framework, the understanding of the International Society of Technology Education (ISTE), and the ISTE standards. The second part of the series taught district staff a review of the nine elements of digital citizenship, information about the Children’s Online Privacy Protection Rule (COPPA), Family Educational Rights and Privacy Act (FERPA), Children’s Internet Protection Act (CIPA), Student Online Personal Protection Act (SOPPA), the District Acceptable Use Policy (AUP), and Creative Commons. Finally, the third part of the series taught the district staff what it means to be safe, savvy, and social, the nine elements progression chart, and a description of the proposed next steps of district training.

In addition, as a Principal, I noticed that some teachers knew how to incorporate many digital learning opportunities, while others did not. Therefore, I decided that some staff would benefit from additional interventions to authentically allow for student technology experiences within their classes. I was of the impression that when students are allowed to use technology, they will be given the opportunity to showcase their digital citizenship skills or lack thereof as well. My goal was to encourage teacher and student technology use.

As educators, we recognize the need for digital citizenship. Students were communicating and learning in a technologically advanced world. School districts have implemented policies to define and prohibit behavior such as cyber-bullying. School districts also have policies to outline what the district’s access to the electronic network is limited to (Hometown Public Schools, 2015). Also, in Illinois, our state government requires us to implement an internet safety course for all students, but our school district does not have a defined way of doing this. There is often no defined policy or program for students to understand how to be citizens in a digital world. With the increase in technology access and use in the home
and classroom, students need to be taught safe and respectful behaviors with technology use. To teach our children this new citizenship, we need to fold their digital tools into the general flow of school (Ohler, 2011).

Districts vary with the implementation of technology and systems for creating an online community. Often, schools within the same district have different approaches to teaching students how to use technology. Monterosa (2017) found that digital citizenship programs vary across schools and remain limited in their scope to meet the needs of today’s students, often focused only on internet safety. Our students need a guide on interacting safely and respectfully in a digital world, not only internet safety.

Laboratory of Practice

Hometown Public School District 1 has eleven schools, approximately 3,500 students, and 450 staff members. According to the 2021-2022 school data, Lincoln Intermediate School, of which I am the Principal, comprises approximately 430 students in grades 4-6 and is one of two intermediate schools in Hometown Public School District 1.

Again, according to the statistics presented on the 2021-2022 Illinois Report Card (n.d.), Lincoln Intermediate School was composed of the following: 88.1% white students, 22% students with disabilities, 51.1% low-income students, and an 11% mobility rate. During the 2021-2022 school year, Lincoln Intermediate School had 19 sections of general education classrooms and seven special education teachers, providing services to students in the general education and pull-out settings. Of the 26 staff members listed, eleven were new to Lincoln Intermediate School during this school year, and of the eleven, seven are in years 1-3 of teaching. Our support staff consisted of one Principal, one Assistant Principal, one school instructional coach, two reading/math interventionists, two learning center paraprofessionals, two
secretaries, and six special education paraprofessionals. The current curriculum, the District 1 Units of Study, did not have a specific technology implementation plan. Our learning center consisted of a library and a Warrior Lab - an innovation space for students to create their learning using technology while the task is incorporated into the curriculum.

Our District Technology Steering Committee created a digital citizenship professional development for the staff in the district, but nothing yet for the students. The aim of the professional development was for staff to better understand digital citizenship and why students need to learn how to be digital citizens. I wanted to work with our staff to determine if the professional development provided gave the staff an understanding of digital citizenship, learn what steps need to be taken to gain a deeper understanding of digital citizenship, and find out how we can incorporate the work of a digital citizen into our student's education. I also wanted our staff to work with students and teach students what it means to be a digital citizen and safe online citizen.

The 2021-2022 school year was my first year at Lincoln Intermediate School and I worked to form open and positive relationships with the staff. The staff were still getting to know me, yet understood that I had the students’ best interest in mind when I made decisions and worked with anyone. I wanted staff to be open and honest when talking about the next steps in supporting student learning regarding digital citizenship.

The Problem of Practice

The emergency shift to remote learning in our district caused by COVID further illuminated multiple concerns related to students' appropriate use of technology. Students continued to inappropriately use academic tools for non-academic purposes and lacked skills for
proper social interactions in the digital society. Students lacked sufficient instruction in using technology and online platforms for learning and assessment.

Despite a return to in-person instruction, these behaviors still interfered with learning. Students continued to show inappropriate behaviors and mannerisms when working with technology. School staff still saw the challenges of this overnight switch to virtual learning and back to in-person learning. School staff continued to appear to be ill equipped with the knowledge and skills to implement the tools of technology within instruction in an effective manner even after receiving professional development.

My problem of practice was determined to be that students were inappropriately using academic tools for non-academic purposes and lacked skills for proper social interactions in the digital society and staff were not well prepared to support students with their development of the appropriate digital citizenry skills. As evidenced by the faculty and staff feedback regarding the challenges of implementing technology within instruction and the student inappropriate behavior, there was a need to address this issue, which was the overall lack of digital literacy skills and digital citizenship that continued to impact both the students and staff as instruction returned to the school. In collaboration with a small group of my teachers, I wanted to identify areas of need to develop a series of interventions for students and staff that could be adopted school-wide and potentially district-wide to increase the demonstration of appropriate digital literacy skills and digital citizenship for students and staff.
CHAPTER II: MAKING INTUITIVE THEORIES OF ACTION EXPLICIT

Remote Learning

The world pandemic of COVID-19 heightened the use of technology in education. Remote learning took on a whole new look when the world pandemic of COVID-19 shut down school buildings for in-person learning. School districts searched for ways to educate students in response to the pandemic. Some schools already had devices in all students’ hands and provided instruction to students online, but some schools did not.

Remote learning is not a new concept; however, it became necessary due to COVID-19. Remote learning brought “space to re-create and reimagine a more expansive and experiential view of the critical literacy practices necessitated for digital citizenship in the post-COVID-19 world” (Buchholz et al., 2020, p. 12). The term hyflex learning was also an option with remote learning. Hyflex learning combines online and traditional teaching strategies with self-directed learning (Nur-Awaleh & Kyei-Blankson, 2010). Hyflex could be the next step with remote learning.

Schools hoped to take implemented ideas during pandemic teaching and apply them in new situations. “Schools’ abrupt move to remote/e-learning may ultimately strengthen the digital literacy practices of students and teachers” (Buchholz et al., 2020, p. 11). However, we must embrace the changes and support our students and teachers as we navigate the learning process with technology.

Fisher et al. (2020) shared the “highest effects of digital technology are interactive videos (0.54), intelligent tutoring systems (0.51), in writing (0.42), and in mathematics (0.35)” (p. 5). Remote learning has a positive but low effect size (Fisher et al., 2020), meaning what educators do matters, not the medium of instruction.
Hodges et al. (2020) stated, “effective online learning results from careful instructional design and planning…and the careful consideration of different design decisions have an impact on the quality of the instruction” (p. 7). However, the emergency shutdown did not allow for the design and planning of remote learning. Therefore, the quality of instruction may suffer. Furthermore, according to Harris (2020), studies about online learning imply that students learn more in-person and disadvantaged students would learn even less online. Therefore, online learning could increase the inequity and gaps for students living in poverty (Harris, 2020). Online learning needs a specific design and plan, including designing and planning for digital citizenship.

**Definition of Digital Citizenship**

Digital citizenship is the term society uses to describe the responsible and appropriate use of technology. Ribble and Park (2019) developed a definition of digital citizenship as “the umbrella term that is used to address a broad area of inquiry and activity related to the ethics, concerns, and opportunities associated with living in a digitally engaged society” (p. 9). However, Sheneniger (2019) defines digital citizenship as a responsibility to “empower students to develop positive digital footprints when they create content online or share it through social media” (p. 108). Both definitions incorporate the idea of living and navigating through a digital world.

A digital citizen, according to the International Society for Technology in Education (ISTE) (2021), is when “students recognize the rights, responsibilities, and opportunities of living, learning, and working in an interconnected digital world, and they act and model in ways that are safe, legal, and ethical” (p.2). ISTE (2021) gives more detail to the definition. The details include managing digital identities, being aware of the permanence of actions in the
digital world, engaging in positive behavior with technology and while online, respecting the
rights of digital property, and managing and protecting data and privacy.

**Need for Digital Citizenship**

Why do we need the word digital in front of citizenship? Students are taught citizenship
through character education programs every day in school. We expect the idea of character
education or citizenship to transfer automatically to the digital world. With the rise of
technology, students and people are changing; therefore, digital citizenship is necessary (Ribble
& Park, 2019). We need to make sure students are behaving appropriately with technology and
learning the skills needed to use technology. Ohler (2011) defines digital citizenship as balancing
technology use with personal responsibility, incorporating technology into character education,
and not replacing it.

Technology and the world continue to evolve, and learners continue to adapt (Scheninger,
2019). It is becoming more apparent that students are often not safe or respectful online. “The
proliferation of technology and ease of access has resulted in changes to behavior” (Scheninger,
2019, p. 5). Now is the time for schools to embrace this change and adapt to the world of
technology, teaching students to be safe and respectful online. Not only do we need to ensure
students are behaving online, but students are learning the skills needed to be good online
citizens.

We must teach our students to make good decisions both in-person and online.
Responsible decision-making is the ability to make constructive choices about personal behavior
and social interactions based on ethical standards, safety concerns, and social norms (Sprenger,
2020). “Parents and schools need to provide a consistent message to our children and use
common, shared language” (Ribble & Park, 2019, p. 8). As a school, we can inform families of the message we are giving to students, for the message to also be given by families.

According to Frey et al. (2019), schools are finding it crucial “to implement systems that develop students’ social and emotional skills so that they can carry, practice, and use these throughout their day, at home when the school day is over, and for the rest of their lives” (p. 12). However, Buchholz et al. (2020) stated there is “no successful curriculum that outlines and abstractly instructs youth on how to be responsible democratic citizens” (p. 12). We need to create a curriculum that will allow students to acquire the knowledge and desire to be good online citizens and learn online. Buchholz et al. (2020) also wrote that engaging and participating in democratic communities, whether that be face-to-face, online, or anywhere in between, requires learning about citizenship and digital civic literacy.

We cannot separate the offline and the online. For instance, students need to know that taking a photo from a teacher’s desk without permission is similar to taking a picture from Google images without permission. Also, students need to know that showing manners in a digital world are just as important as showing manners in person. Monterosa (2017) wrote about the large role that digital tools and spaces play in the lives of today’s youth and separating the online from the offline life has become a challenge. This is especially evident as the access youth have to these spaces begins at a very early age.

**Digital Citizenship and Hometown Public Schools**

Hometown Public Schools District 1 quickly moved from an integrated technology model within the school buildings to a one-to-one technology-to-student model. Unfortunately, this quick transition caused a bit of misunderstanding among staff and students regarding which program (communication to families, word processing, internet, etc.) to use and how to use it
safely and respectfully. Teaching children to be safe and respectful outside of the digital world should transfer to the digital world. And, our culture should inherently support students in making safe and ethical decisions, creating a safe online presence, and advocating for themselves.

Policies were in place for students and staff to bring their own devices and for internet safety when using the district devices. Technology devices, connections, wifi for home use, the Google platform, and infrastructure were all supplied for students (and many for staff) within the school district. There were specific expectations for using technology, but an implementation plan, a professional development plan (for staff and administration to understand how to teach students about digital citizenship), and an evaluation plan for digital citizenship was not currently in place. Another essential missing piece of the plan was recognizing how to address the need to keep or abandon technology as new technology is available.

Hometown Public Schools District 1 had a technology department that operated with two goals: to implement technology in schools with proper hardware support and use technology for instructional purposes (Technology Department, 2016). These two goals led the district steering committee’s goals. The district provided some professional development for staff to learn how to use technology (Google Classroom and other technology platforms) for instructional purposes. In addition, staff and administrators received training to understand digital citizenship. However, our district was also missing a plan for keeping our new staff trained and “up to speed” on district technology initiatives.

Our students need to be prepared for the decades to come and for life and beyond. We wanted all (teachers, students, families, and the community) to share our district’s vision. However, our district’s view of digital citizenship may not be the same as the families’ view.
Because of the different perspectives, we needed to be inclusive, provide resources with equity and equality, and be socially responsible and professional when giving the expectations of the initiative.

The National Council of Teachers of English (NCTE) advocated for federal funding to support the education world in “advancing critical media literacy and promoting digital citizenship skills that are critical to meaningful social and democratic participation” (NCTE Joins Call for Federal Appropriations Supporting Digital Citizenship and Literacy, n.d., p. 2). Although the Evidence-Based Funding model does not explicitly outline an area for funding for digital citizenship, we could find funding for digital citizenship within the teaching and learning funding, along with the funding for professional development.

We wanted to set high expectations for our students and we wanted our students to be an active part of society, including a digital presence. Doing this would build our community with students who are skilled in technology. Teaching our students about digital citizenship through the district will allow for the symbolism of togetherness because we are all working on the same initiative, a district initiative. Students and staff would also have the opportunity to form relationships through the school community, within the district, and within the community by having a digital presence through digital citizenship. The idea of students being safe and respectful online is just the beginning of digital citizenship. “Digital citizenship is about more than online safety...it’s about creating thoughtful, empathetic digital citizens who can wrestle with the important ethical questions at the intersection of technology and humanity” (ISTE, 2021, p. 1). We also wanted students to be inclusive, informed, engaged, balanced, and alert (Home | DigCitCommit, n.d.). Our idea of digital citizenship in Hometown District 1 consisted of being safe, savvy, and social online.
Assembling the Team

As I navigated my problem of practice, I determined an intervention administration team of staff to collaborate with when deciding how we could authentically move to the next step of digital literacy and citizenship. The intervention administration team consisted of myself, our district Assistant Superintendent, our district Director of Technology, and our district technology coach. Together, we collaborated with Lincoln Intermediate School to include the staff as part of the cycle of inquiry. I wanted an authentic engagement and partnership with the faculty to determine their understanding of digital literacy and digital citizenship and the equity of resources and learning experiences. By doing so, I also sought to determine the professional development needed for the next steps in our district. Seeking these answers directly from the Lincoln staff was transformational in the methods for the next steps.

Tacit Assumptions

While working with my intervention administration team (which consisted of myself, our district Assistant Superintendent, our district Director of Technology, and our district technology coach), we collaborated with the staff of Lincoln within the cycle of inquiry. I aimed for an authentic engagement and partnership with the faculty to determine their understanding of digital literacy and digital citizenship and the equity of resources and learning experiences.

While meeting with the intervention administration team, we realized we have assumptions about digital citizenship. Some of these assumptions are:

1. **If** we teach digital literacy skills and digital citizenship, students will make safe, savvy, and social choices when not supervised by an adult.

2. **If** we teach students the consequences of their actions when using technology, students will be reflective prior to using technology.
3. If we motivate students to use technology responsibly, they will make choices that will support their learning.

4. And, if we give students the opportunity to engage in social interactions in the digital world, they will have the opportunity to prove their ability to have the skills and to be appropriate.

**Exploration of the Data**

As an intervention administration team, we completed the 5 Whys improvement science tool. We knew students were not being safe online or using technology appropriately, but we did not know why. To find the answer, we asked ourselves why five times and this is what we found:

1. COVID required us to make a quick shift to virtual learning.
2. Students were handed a device and wifi connection.
3. Students were told to use the device for learning.
4. Students either did not do the work or did not understand how to do the work. And finally,
5. We recognized that students have not been taught to be safe online or how to use the technology appropriately.

With my problem of practice being that students were inappropriately using academic tools for non-academic purposes and lacked skills for proper social interactions in the digital society and staff were not well prepared to support students with their development of the appropriate digital citizenry skills, teaching the students how to use the technology safely and appropriately in regards to internet safety was our goal. We also wanted to learn about the teacher’s perspectives on the digital citizenship training in which they participated.
CHAPTER III: UNDERSTANDING THE PROBLEM AND THE CHANGE PROCESS

Literature Review

Many have heard and often use the “golden rule” - treat others as you would like to be treated. Educators often use the golden rule to teach students at an early age how to treat others with kindness and respect, be safe, and be appropriate. Students learn such rules through character education programs in school to become citizens in a real-world setting.

Educators recognize the need for digital citizenship as well. Students are communicating and learning in a technologically advanced world. School districts have implemented policies to define and prohibit cyberbullying. School districts also have policies to outline what the district’s access to the electronic network is limited to (Hometown Public Schools, 2015). However, there is often no defined policy or program for students to understand how to be a citizen in a digital world. With the increase in technology access and use in the home and classroom, students need to be taught safe and kind behaviors with technology. To teach our children this new citizenship, we need to fold their digital tools into the general flow of school (Ohler, 2011). Our digital world needs a golden rule embedded within the in-person real world.

Literature Collection Process

The literature review examined digital citizenship and its connection to character education in the school setting. Resources gathered for this review were produced from a search of databases such as GoogleScholar, EBSCO, and ERIC. Character education, digital citizenship, cyberbullying, stages of development, technology inequity, and remote learning were all keywords used when searching the different databases. Surfacing authors include Scheniger, Ribble, Park, and Ohler. The themes that emerged from the literature review include the history and importance of character education, the definition of digital citizenship, the purpose of digital
citizenship and the connection to character education, roadblocks to implementing technology, and remote learning. The following literature review contains discoveries to date.

**History and Importance of Character Education**

Character education dates back to the beginning of schooling (Jeynes, 2019). Thomas Lickona’s (1993) article, *The Return of Character Education*, states, “Education has always had two great goals: to help people become smart and to help them become good” (p. 34). Educators always want students to make good choices, but to make good choices, students need a teacher to teach them how to make good choices and the consequences of good or poor choices.

When children enter school, it is essential to build empathy, strengthen humanity, and support kind behavior (Laminick & Wadsworth, 2012). This character education does not happen all at once. It takes time and many staff for children to understand how to develop their character. Over time, educators build relationships, teach empathy, make students self-aware, help students regulate feelings, support students in becoming skilled in social awareness, teach students how to handle relationships, and teach students how to choose and make wise decisions (Sprenger, 2020).

When classrooms have an open and welcoming environment, this leads to engaged students and families (Jung et al., 2019). The engagement then leads to better long-term outcomes for students (Jung et al., 2019). Engaging students in developing character qualities can be challenging. Determining which character qualities should be taught is often up for debate. According to a poll cited by Jeynes (2019), educators should teach character qualities such as honesty, sincerity, responsibility, respect, courage, and patriotism in public schools.

Social-emotional learning is another term used for character education. Some districts have implemented the method of Responsive Classroom in their social-emotional learning or
character education. “Responsive Classroom is an evidence-based approach to teaching and discipline that focuses on engaging academics, positive community, effective management, and developmental awareness” (Responsive Classroom, 2021, p. 1). The Responsive Classroom approach is just one method for teaching character education in schools.

**Roadblocks to Implementing Technology**

There is a divide in technology devices, experiences, and opportunities students face. The digital divide, defined by Cruz-Jesus et al. (2016), is “the gap between individuals, households, businesses and geographic areas at different socio-economic levels with regard both to their opportunities to access information and communication technologies and to their use of the Internet for a wide variety of activities” (p. 72). DeMartino and Weiser (2021) associate access, usage capability, and outcome regarding the digital divide. Too often, assumptions are made that everyone has equitable access to technology tools and connectivity. This assumption is false and must be recognized before beginning a technology program (Ribble & Park, 2019).

Not all students come to school with an electronic device or have regular access to an electronic device at home. Gorski (2013) writes, “poor and working class students have lower levels of access to computers and the internet at home than their wealthier peers” (p. 104). Sometimes, the only device students have access to is their parent’s phones. However, there are many drawbacks to using only a phone. One is that at times a phone’s size can be too small to interact with and create the necessary tasks associated with a classroom project. Another disadvantage is that there are times when the student is not with the parent to use their phone. Therefore, engagement and learning will not happen.

Often there are times when families do not have access to the internet. Rural areas often have limited or nonexistent internet connections (Lai & Widmar, 2020). Without an internet
connection, connecting to the school to learn at home is impossible. “The COVID-19 pandemic has exposed inequities that were less obvious in the context of face-to-face learning, particularly in relation to access to digital devices and dependable broadband” (Buchholz et al., 2020, p. 15). School districts are trying to address the problems that internet access has caused with equitable access to education by placing internet access on school buses around town and public access at libraries, fire departments, and other public places (Lai & Widmar, 2020). Other districts give internet connection boxes to families for use at their homes.

Scheninger (2019) writes about those who have and have not brought a device to school. Some students have a device, and some do not, therefore dividing students. Educational leaders need to engage in strategies that address gaps and disparities among students in our schools (Horsford, 2011).

**Conceptual Framework/Theory of Action**

**The S3 Framework: Guiding Principles for Digital Citizenship**

The framework used for this study is the S3 Framework created by education and technology experts Mike Ribble and Marty Park. Ribble and Park (2019) have identified three guiding principles as a framework for digital citizenship and integrating digital skills into the classroom. The three principles are:

1. Safe - protect yourself and protect others
2. Savvy - educate yourself and educate others
3. Social - respect yourself and respect others (p. 37)

The concept of digital citizenship has been a topic in education for a long time, but this concept is often misunderstood. Ribble and Park (2019) have also identified nine elements that compose digital citizenship to make it more understandable. The nine elements include digital
access, digital commerce, digital communication and collaboration, digital etiquette, digital fluency, digital health and welfare, digital law, digital rights and responsibility, and digital security and privacy (Ribble & Park, 2019, p. 39-41). Although the S3 principles overlap, they also have differences that must be discussed separately. The S3 Framework is used as a guide to integrating digital citizenship into the classroom. Ribble and Park (2019) include the nine elements of digital citizenship within the S3 Framework to understand the complex issues with technology, forming a foundation on which digital societies are based.

The first principle of the S3 Framework is Safety, which focuses on protecting yourself and protecting others, creating the base for digital citizenship (Ribble & Park, 2019). The elements within Safety are digital health and welfare, digital rights and responsibilities, and digital security and privacy. The second principle of the S3 Framework is Savvy, which builds upon the concepts of safety and focuses on educating yourself and connecting with others (Ribble & Park, 2019). The elements within Savvy are digital commerce, digital communication and collaboration, and digital fluency. Finally, the third principle of the S3 Framework is Social, committing to help everyone make decisions that show our respect for ourselves and others (Ribble & Park, 2019). The elements within Social are digital access, digital etiquette, and digital law.

Cycle of Inquiry

Our District Technology Steering Committee reviewed the student’s use of technology through GoGuardian and from teacher feedback. We found the need to teach students the importance of behaving appropriately with technology, how to behave appropriately with technology, and the digital literacy skills needed to use technology to learn. My cycle of inquiry,
based on the model by Mintrop (2018), contained the district’s intervention for internet safety, which brought me to my evolving conceptual framework and theory of action.

Over time, our District Technology Steering Committee identified training in internet safety as a specific area of digital citizenship our students needed. In conjunction with my intervention administration team (which consisted of myself, our district Assistant Superintendent, our district Director of Technology, and our district technology coach), we developed a series of interventions for students (the district's original student internet safety training) that was adopted district-wide to increase the demonstration of internet safety with appropriate digital literacy skills and digital citizenship for students. In addition, I used the implementation of the district's original student internet safety training intervention to develop an initiative (additional intervention - Chatting Safely Online) that I would study within the cycle of inquiry. The intervention administration team and I also tested the outcomes of the professional development of the teachers. My intervention administration team and I engaged in reflection throughout the cycle of inquiry to further our study.

District staff also participated in professional development centered on digital citizenship and internet safety training. I wanted to know if this training was sufficient for teachers to be able to implement digital citizenship within their classroom. I was also interested in learning how the staff have changed based on the professional development they received on digital citizenship. Did staff understand the need to assist students to use technology wisely after participating in professional development?

The Safe, Savvy, and Social principles are necessary when using the internet appropriately with the needed digital skills. Therefore, the cycle of inquiry aligned with the S3 Framework. The district’s original student internet safety training intervention included concepts
of Safe, Savvy, and Social. Some safety concepts that need to be addressed included digital identity, digital upstander or bystander, navigating and searching the internet, acceptable use policies, and the Children’s Internet Protection Act. Students also needed to learn about the digital footprint, email, fake news, passwords, and plagiarizing, which are all concepts of being savvy. Finally, concepts about social interactions included cyberbullying, social media, forums, and data sharing.

My problem of practice was determined to be that students were inappropriately using academic tools for non-academic purposes and lacked skills for proper social interactions in the digital society and staff were not well prepared to support students with their development of the appropriate digital citizenry skills. We believed that when this problem was addressed with the additional internet safety intervention of digital citizenship, the students would understand how to behave appropriately online and have the digital literacy skills needed. This was the theory of action that I intended to pursue. Once I had designed the additional intervention, implemented the intervention, collected data on the intervention, and evaluated the intervention and design principles, I was then able to revise the theory of action for future studies.

**Reaching and Teaching All Students**

All students need to have access to digital tools and resources. Gorski (2013) found that high-poverty schools have fewer digital devices per student than wealthier schools. Teachers in these high-poverty schools are also using technology for rote skills, rather than research, multimedia projects, or creative thinking skills (Gorski, 2013). For all students to have access, devices and professional learning for our staff need to be in place. Turnbull (2002) recommends developing our teachers in the field of technological practice to support our students for the future.
A study conducted by Wang and Xing (2018) examined the effects of parental involvement and socioeconomic status on teens' digital citizenship, including digital access, digital etiquette, and digital safety. The study found that the home environment with parental involvement and socioeconomic status influenced the technology experiences brought into the classroom. In addition, the study revealed that parents’ socioeconomic status had a significant relationship with all aspects of digital citizenship and parental involvement had a positive effect on digital etiquette and safety (Wang & Xing, 2018).

Fox-Turnbull (2012) studied how children’s prior and ongoing experiences influenced their learning and actions when developing technological solutions. The study identified participation and observation as two effective methods for understanding experiences. The Fox-Turnbull (2012) study indicated that students bring knowledge gained at home to technology education at school and use it to understand and contribute to technology education in a collaborative way. Similarly, Joves, Siques, and Esteban-Guitart (2015) found that all people have resources and skills from family and personal lives that can be brought to school. These resources and skills lead students to form their identities, which are essential pieces for defining and presenting themselves (Joves, Siques, and Esteban-Guitart, 2015).

The research conducted by Poole (2016) focused on the online identities formed from avatars, virtual learning environments, and hypertext and their pedagogical application within the classroom. Poole (2016) found that digital funds are a possible effective strategy for social justice and developing critical pedagogy and the generation of new knowledge, giving educators more significant access to student learning. Teachers are able to provide stimulating and relevant learning for students when involving their real-world experiences (Turnbull, 2002). Social transformation is linked to the relationship between under-represented students and educational
practice and culture, according to Llopart and Esteban-Guitart (2016). Therefore, the curriculum within technology education can be linked to students' experiences and the contexts of their lives (Llopart and Esteban-Guitart, 2016). Poole (2016) continued to consider the role that digital funds of identity could play in bridging the digital divide between school and home to allow critical pedagogies into the classroom.
CHAPTER IV: INTERVENTION/INITIATIVE/IMPLEMENTATION

Internet Safety Interventions

Based on the data from GoGuardian and feedback from staff, the District Technology Steering Committee determined the need to teach students the importance of behaving appropriately with technology, how to behave appropriately with technology, and the digital literacy skills needed to use technology to learn. We believed this needed to be taught district-wide.

Internet safety is the specific area of digital citizenship our students needed. Digital citizenship has been taught to the staff, it needed to be taught to the students. In conjunction with my intervention administration team, we developed the district’s original student internet safety intervention for all students in the district to increase their understanding of internet safety with appropriate digital literacy skills and digital citizenship for students.

The use of the internet at school is a privilege. We wanted our students to use the internet for the purpose of education, such as research, creation, and communication, but it must be consistent with the educational objectives of the district. The internet is a tool for life-long learning, but it is also a public space. We wanted to train teachers on the importance of technology use and then assist student development when it comes to character development or being a digital citizen. We wanted students to understand and practice proper and ethical use of the internet. With this want, we needed to teach our students the importance of behaving appropriately online. Students learned the importance of and how to keep their account and password private, the need to only access their own accounts, why they are to only post material with their name (not anonymous) created by him/her with school-related content, and how to access/download only school related content. We also wanted our students to have good
manners, be polite, obey copyright laws, only post true information, ask for help when needed, and treat people online how they would like to be treated or how they would treat an honored guest at school.

As a district initiative, all students in the school district were taught information regarding how to care for their Chromebooks, how to be safe online, and our district’s acceptable use policy. The information and teaching style was consistent throughout grades four through eight. Each section of the training had a video for students to watch and then specific topics to discuss after watching the video. The online safety portion was a five-minute Brain-Pop (BrainPOP, n.d.) video that shared how to stay safe online. Brain-Pop gave five rules and more information to remember when online: 1. Online life is real life, 2. Keep your private info private, 3. Be extra careful with strangers, 4. Tell somebody, and 5. Protect your passwords.

The district initiative training given to students satisfied the district policy of providing basic information to students. Once the training took place, data for this district initiative was in existence but was not yet collected. However, for school instructional purposes and for the cycle of inquiry, I collected the data.

I believed the district’s original student internet safety training may not be enough for students to understand the importance of internet safety. Along with the district's original student internet safety training initiative, I implemented an additional internet safety intervention (Chatting Safely Online) with the sixth-grade students at Lincoln Intermediate School. The information gathered from the district initiative and school intervention was used within the cycle of inquiry.

We believed that the additional intervention (Chatting Safely Online) my intervention administration team and I gathered would deepen the understanding of online internet safety.
Teaching the students how to use the technology safely and appropriately in regard to internet safety was our goal.

The additional intervention (Chatting Safely Online) implemented with the sixth-grade students at Lincoln consisted of a lesson about chatting safely online. Staff taught the lesson (Common Sense Education, 2020) to the students, which involved showing videos, playing games, and participating in activities. The lesson was tailored to sixth-grade students. During the lesson, students also had the opportunity to chat in person with one another about the ways they can stay safe online. Finally, students completed a 5 question assessment prior to instruction and after instruction to show their understanding and growth with learning. Information sheets about internet safety were also given to students to take home to families, strengthening the family and school partnership. The additional intervention (Chatting Safely Online), from Common Sense Education, is included in the Appendix. Appendix A is the Teacher Lesson Plan, Appendix B is the Slideshow for Presentation, Appendix C is the In Class Activity - Student Version, Appendix D is the In Class Activity - Teacher Version, and Appendix E is the Family Conversation Starter.
CHAPTER V: METHODOLOGY

Research Questions

This study examined the following research questions:

1. In what ways has the internet safety training of digital citizenship supported students' perceptions of behavior with technology?
2. In what ways has the internet safety training of digital citizenship supported students' digital skills with technology?
3. How have students grown as a Safe, Savvy, and Social members of the digital world?
4. In what ways has the digital citizenship training for staff supported staff’s understanding of digital citizenship in the classroom?

During a 90-day cycle of inquiry, I implemented the additional intervention (Chatting Safely Online), interviewed staff regarding the staff digital citizenship training, interviewed students regarding the district’s original student internet safety training and the additional intervention (Chatting Safely Online), and collected student pre-assessment and post-assessment scores from the additional intervention (Chatting Safely Online). Finally, I shared the results with the intervention administration team for this study and collaborated with the Lincoln staff to analyze the results.

Research Design

The research was conducted using a Convergent Mixed Methods design (Creswell & Creswell, 2018). Through this design, I collected quantitative and qualitative data, analyzed the data separately, and then compared the results. The quantitative and qualitative data gave different types of information, and the results are shared in the next chapters.

I collected all of the data during the same time frame to reduce the time between giving
the additional intervention (Chatting Safely Online) and collecting data. The Convergent Mixed Methods (Creswell & Creswell, 2018) design addressed my problem of practice because I was able to compare multiple sets of different types of data after multiple trainings or interventions. Through the use of a mixed methods design, I compared different perspectives and developed a more complete understanding of each intervention and evaluated the outcomes of the interventions.

There were challenges with this design and form of research. Data collection was extensive and time-consuming. Analysis of data required a deep understanding of the types of data organization. Clear visual models were necessary to understand the research.

The quantitative data collected was student pre-assessment and post-assessment scores from the additional intervention (Chatting Safely Online). The interview data were collected from the staff after the initial digital citizenship staff training and student interviews were conducted after the original student internet safety training as well as after the additional intervention (Chatting Safely Online).

**Participant Sampling and Setting**

Lincoln Intermediate School had an enrollment of approximately 400 students in grades four, five, and six during the 2022-2023 school year. Eighteen general education teachers and six special education teachers provided service to students during the school year. Of the 24 staff members listed, three were new to Lincoln Intermediate School in 2022-2023 and did not take part in the digital citizenship training during the 2021-2022 school year, leaving 21 teachers.

Teachers who were employed by Hometown District 1 during the 2021-2022 school year participated in the digital citizenship training. These teachers were eligible to participate in the data collection for my study. I purposefully selected ten teachers with multiple years of teaching
experience for the interview. Three teachers from each grade level and one teacher from the Special Education department were selected as the 10 teachers for the interview. The names of the participating teachers in each of the grade levels were placed in alphabetical order. I selected the first teacher on the list, and then every other teacher was selected for interviewing purposes. Staff who agreed to participate returned the consent form with permission to use their data in the study. The staff were willing to take their time and share honest information when asked to participate.

Lincoln Intermediate School enrolled students in fourth grade through sixth grade. This study was limited to sixth-grade students since the sixth grade is the final grade before leaving the school. Many sixth-grade students also had their personal devices and apps on their phones that required a person to be the age of a sixth-grade student or older. All students in grade six of Lincoln Intermediate School (approximately 140 students) took the pre-assessment prior to receiving instruction on the additional intervention (Chatting Safely Online) and the post-assessment after participating in the additional intervention (Chatting Safely Online). I also interviewed students from the sixth grade. Only students who received permission from their family and brought back the permission slip have pre-assessment and post-assessment data included in this study.

I also asked the sixth-grade teaching staff to purposely select two students from each classroom to be interviewees and then asked for the student's willingness and permission from families to participate. The students selected were required to have adequate attendance and be willing to participate in online classroom activities. Only students who received permission from their families and brought back the permission slip were included in this study.
Ethical Consideration

Prior to beginning my study, I obtained many permissions. First, I requested approval to begin the study from the Superintendent of Hometown Public Schools District 1. Next, I submitted a proposal to Illinois State University’s Institutional Review Board (IRB). Finally, I gathered signed informed consent from the staff and families of the students, agreeing to the provisions of my study. Once all were complete, I began the study, disclosing the purpose without pressuring participation and by being sensitive to the needs of students and staff.

Description of Research Protocols/Instrumentation

I worked with my intervention administration team (which consisted of myself, our district Assistant Superintendent, our district Director of Technology, and our district technology coach) to design the staff interview, student assessment, and student interview protocol to ensure content validity. The questions on the interviews were planned with the intervention administration team, while the questions on the pre-assessment and post-assessment were automated from the lesson.

Staff interviews took place at Lincoln Intermediate School in a location of the interviewees' decision. I wanted all staff to feel comfortable and allowed staff to choose a location that supported comfortability. Staff interviews were voice recorded to ensure accuracy and lasted no longer than 30 minutes. I planned to ask the following questions to the staff:

1. What information from the digital citizenship training was beneficial to you?
2. Describe the student's perceptions of appropriate online behavior.
3. What digital skills have students learned from you?
4. What does digital citizenship look like in your classroom?
5. What else do you need to learn about digital citizenship?
Students participated by taking a pre-assessment prior to receiving the instruction of the additional intervention (Chatting Safely Online) and a post-assessment after receiving the instruction of the additional intervention (Chatting Safely Online). The pre-assessment was taken in class just prior to receiving the instruction of the additional intervention (Chatting Safely Online) and the post-assessment was taken in class immediately after receiving instruction of the additional intervention (Chatting Safely Online). The questions on the assessments were automated, pre-determined, and the same for the pre-assessment and the post-assessment. There were five questions on the assessments and students who received a perfect five out of five scores were considered to have passed the assessment. If a student received less than a perfect score, I planned to notify the teacher, and the student would be awarded the opportunity to receive additional internet safety instruction. I also planned for the student to be allowed to retake the assessment. The retake score was used in this study.

All student interviews took place before school, after school, or during the students’ recess, so that classroom instruction was not interrupted. All student interviews took place in the school office, were voice recorded, and lasted no longer than 15 minutes. I planned to ask the following questions to the students:

1. How do you stay safe online?
2. What types of information about you is OK to share online?
3. What types of information about you is not OK to share online?
4. How do you keep online friendships safe?
5. How do you chat safely with people you meet online?
6. Have you ever felt unsafe while chatting online?
7. What are you to do if you feel safe while chatting online?
All interview questions, designed with the support of my intervention administration team, were brief and allowed for detailed information to be collected. I trusted the teaching staff to implement the additional intervention (Chatting Safely Online) with fidelity and for all students to participate with the best intentions, whether they decided to participate in the study or not. The interview questions were not designed to lead or sway the teachers or students. I trusted staff and students to give their honest answers during all interviews. During the interviews, I did not persuade or defend any answers.

Data Collection and Procedures

Data were collected using assessments and interviews. Both staff and students participated. The amount of quantitative data greatly outweighed the amount of data collected through qualitative measures. However, comparing quantitative data to qualitative will be explained further in this chapter.

To collect data efficiently, economically, and validly, I planned to follow these steps:

1. Select staff and email the teachers (10 total) about the interview and set up dates, times, and locations for the interview
2. Interview teachers after the staff digital citizenship training
3. Email sixth-grade teachers asking for names of students (two from each classroom, 12 students total) for the interview, set up dates, times, and locations to interview students
4. Interview students after the original student internet safety training
5. Explain to sixth-grade teachers the additional intervention (Chatting Safely Online) for students
6. Students take the pre-assessment prior to the additional intervention (Chatting
Safely Online)

7. Sixth-grade teachers teach additional intervention (Chatting Safely Online) to students

8. Students take the post-assessment after the additional intervention (Chatting Safely Online)

9. Set up with sixth-grade teachers the dates, times, and locations to interview the students (12 students total)

10. Interview students after the additional intervention (Chatting Safely Online)

**Researcher Positionality**

Peshkin (1988) wrote that it is important to recognize that subjectivity is inevitable. And, as researchers, we need to seek out our subjectivity while research is in progress so that we might know how our subjectivity may shape the inquiry of our research and the outcomes.

My problem of practice centers on digital citizenship and character education within the school setting. As I conducted my research, I needed to recognize and be aware of my subjectivity in the following areas:

1. My working relationship with staff: I conducted research with the staff in my current school building. I needed to recognize that answers given in an interview are for research purposes only.

2. My participation on the District Technology Steering Committee: I was a 5-year member of the district technology steering committee and our basic charge was to implement technology into our district curriculum. I also supported the creation and implementation of a digital citizenship training program for our district staff. I needed to recognize my participation and my role on the committee as I conducted and analyzed research.
3. My role as a teacher: As teachers, we expect our students to learn and retain the information taught. We also want our students to go beyond the teaching and apply the learning in other situations. We teach students to be kind and safe in person and we expect students to transfer that learning to the digital world. While doing research, I must remember that transferring knowledge to another situation is an advanced learning process and not all students are ready for this process yet.

4. My role as a school administrator: Staff often see the need for character education because they are with students in person daily. While researching, I needed to be aware that not all have a deep understanding of the need for digital citizenship. Students also receive teaching and training in the classroom. I must recognize and remember that while students are in the classroom during this time, all students learn at different rates and with different styles of learning. The data the students gave is from a moment in time and representative of that time.

5. My role as a mother: I have taught my own children to be kind and safe in person and in a digital environment. I must recognize that not all children receive the same type of instruction or have the same expectations from families.

Peshkin (1988) describes one’s subjectivity as “a garment that cannot be removed” (p. 17). I cannot remove my subjectivity, but I recognized it and managed it as I collected, analyzed, and reported the data.

**Ensuring Validity/Reliability**

To ensure the validity and reliability of the qualitative data, I administered the staff and student interview questions to the District Technology Steering Committee for field testing and member-checked the interview. The interview questions were reviewed, commented on, and
edited by the committee several times to establish validity. I kept an ongoing record of meanings and changes to give truth and value to the interview questions. The interview questions were also submitted to a doctoral student in the Educational Administration Foundation department at Illinois State University for peer review.

When administering the interviews, the members of the Research Team (the intervention administration team, teachers, and students) all trusted one another to give honest answers and presume positive intentions when asking and answering questions. The authenticity of the staff was recognized in the answers to the questions. Reflexive thinking was also incorporated into my study. As the interview occurred, I wrote notes and thoughts to help with the coding process (Creswell & Creswell, 2018). Reflecting on past experiences, personal experiences, and how these ideas may form an interpretation of results also allowed for reflexive thinking. I limited my speaking about my experiences so that the interview focused solely on the interviewee.

**Data Analysis and Interpretation Techniques**

As mentioned above, this study examined the following research questions:

1. In what ways has the internet safety training of digital citizenship supported students' perceptions of behavior with technology?

2. In what ways has the internet safety training of digital citizenship supported students' digital skills with technology?

3. How have students grown as Safe, Savvy, and Social members of the digital world?

4. In what ways has the digital citizenship training for staff supported staff’s understanding of digital citizenship in the classroom?

In order to answer the research questions, descriptive statistics (percentages, means, and standard deviations) and t-test for dependent samples analyses were conducted on the students’
pre-assessment and post-assessment scores. In addition, the interview data were coded and analyzed.

**Summary**

Students inappropriately using technology tools and staff lacking the necessary technology skills and therefore underprepared to support students with their development of the appropriate digital citizenry skills comprised the problem of practice for my study. In Chapter V, I presented the research questions, research design, participant sampling and setting, ethical consideration, description of research protocols and instrumentation, data collection and procedures, researcher positionality, ensuring validity/reliability, and data analysis and interpretation techniques. I gathered and analyzed staff interviews, student interviews, and student pre- and post-assessment scores to answer the research questions posed in the study. The findings from the data analysis are presented and discussed in the following chapters.
CHAPTER VI: IMPLEMENTATION OF INTERVENTION

Implementing the Intervention with the Team as Planned

The intervention administration team (which consists of myself, our district Assistant Superintendent, our district Director of Technology, and our district technology coach) met with six sixth-grade teachers to inform them briefly about the additional internet safety intervention (Chatting Safely Online). The staff were told the basics about the intervention and that we would meet again before giving the intervention. I wanted to ensure all staff were well informed of the goals and objectives of the study.

Next, the intervention administration team and I determined how to select the staff to interview. I specifically chose staff with multiple years of experience who received the digital citizenship training during the 2021-2022 school year. I chose teachers with multiple years of experience because these teachers were teaching during the COVID-19 pandemic, when this problem of practice originated. I also specifically chose staff who received the digital citizenship training, so I may learn about their understanding of the training. Three teachers in fourth grade, three teachers in fifth grade, three teachers in sixth grade, and one teacher from the Special Education department were to be chosen to participate in the teacher interviews. I placed names in alphabetical order and selected every other teacher. Once selected, I emailed each staff member separately to inform them of their selection. I distributed and collected consent forms from staff who agreed to participate in the interview.

When the permission slips were ready, I met with sixth-grade students in their classrooms. I explained the problem of practice and the purpose of the study to the students. Students were required to return the distributed permission slip with parental consent and student assent to use the student pre-assessment and post-assessment data. Regardless of whether the
student returned a permission slip or not, all students participated in the additional intervention (Chatting Safely Online).

 Teachers then selected students for the interviews. I asked teachers to purposely select students (two from each classroom) because the teachers know the students best. Teachers know which students would participate and give honest answers. Students were required to have adequate attendance to participate in the interview. Once selected, students were given a permission slip for the interview to obtain parental consent and student assent. Only students who returned a signed permission slip for the interview were included in the interview.

 Dates, times, and locations were set with the staff for the staff interview. All interviews took place in my office, a quiet area free from distractions. All student interviews were arranged with the teacher and also took place in my office. All interviews were conducted face-to-face by myself with the interviewees.

 I met again with the sixth-grade teachers to give more information about the additional internet safety intervention (Chatting Safely Online). All intervention materials were found online, however to review the materials with the staff, I made paper copies of the teacher lesson plans, slide show, and activities to reference during the meeting. Electronic links of the teaching materials for the additional intervention (Chatting Safely Online) were also given to the staff and the date for teaching the intervention was determined. The sixth-grade teachers planned to administer all components of the additional intervention (Chatting Safely Online) on the same day. Teachers administered the pre-assessment and taught the lesson. Students participated in the lesson and teachers administered the post-assessment immediately following the instruction of the additional intervention (Chatting Safely Online).

 All students in sixth-grade at Lincoln Intermediate School in Hometown were given the
electronic pre-assessment by their sixth-grade classroom teacher on December 9, 2022. Immediately following the pre-assessment on December 9, 2022, the sixth-grade classroom teachers gave the instruction of the additional internet safety intervention (Chatting Safely Online) to all sixth-grade students. Finally, after the instruction of the additional internet safety intervention (Chatting Safely Online) was given, all students in sixth grade were given the electronic post-assessment by their sixth-grade classroom teacher on December 9, 2022. All scores from the pre-assessment and post-assessment were sent to me through the website of the intervention which was designed by Common Sense Education. The data was collected by me and kept in my office.

**Establish Protocols and Evidence Collection System**

After meeting with the intervention administration team (which consisted of myself, our district Assistant Superintendent, our district Director of Technology, and our district technology coach) we determined more information needed to come from the staff interviews and student interviews. Therefore, we added questions to the interview protocol to inquire about staff and students’ thoughts on being savvy digital citizens. In addition, more detailed information was gathered by including additional questions that focused on students’ being safe and social digital citizens. After further discussion with the intervention administration team, all interview questions were aligned with the S3 Framework.

The S3 Framework identified the following concepts: 1. Safe - protecting yourself and protecting others. 2. Savvy - educating yourself and educating others. And 3. Social - respecting yourself and respecting others. All interview questions were aligned to show their connection with the research questions and the S3 Framework.

Based on the discussion with my intervention administration team and after being peer
edited, the final questions used in the staff interviews are presented in Table 1, along with the original interview questions to show how the protocol was modified and how the questions aligned with the S3 Framework. The staff interview protocol was expanded from five to eight items.

**Table 1**

*Staff Interview Questions*

<table>
<thead>
<tr>
<th>Original Staff Interview Questions</th>
<th>Edited/Final Staff Interview Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What information from the digital citizenship training was beneficial to you?</td>
<td>1. What information from the digital citizenship training was beneficial to you? (savvy)</td>
</tr>
<tr>
<td>2. Describe the student's perceptions of appropriate online behavior.</td>
<td>2. Describe the student's perceptions of appropriate online behavior. (safe, savvy, social)</td>
</tr>
<tr>
<td>3. What digital skills have students learned from you?</td>
<td>3. What digital skills have students learned from you? (safe, savvy, social)</td>
</tr>
<tr>
<td>5. What else do you need to learn about digital citizenship?</td>
<td>5. How has the introduction of the Innovation Lab supported your students? (safe, savvy, social)</td>
</tr>
<tr>
<td></td>
<td>6. We have many technology options. How do you know what technology to use in a specific situation? (savvy)</td>
</tr>
<tr>
<td></td>
<td>7. How do you learn about new technologies? (savvy)</td>
</tr>
</tbody>
</table>

(Table Continues)
Note. The intervention administration team aligned the final interview questions to the S3 Framework. The alignment is shown in parentheses after each interview question.

In the same vein, modifications to the student protocol are presented in Table 2. The final protocol comprised ten items.

Table 2

Student Interview Questions

<table>
<thead>
<tr>
<th>Original Student Interview Questions</th>
<th>Edited/Final Student Interview Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. What types of information about you is OK to share online?</td>
<td>2. What types of information about you is OK to share online? (safe, social)</td>
</tr>
<tr>
<td>3. What types of information about you is not OK to share online?</td>
<td>3. What types of information about you is not OK to share online? (safe, social)</td>
</tr>
<tr>
<td>4. How do you keep online friendships safe?</td>
<td>4. How do you keep online friendships safe? (safe, social)</td>
</tr>
<tr>
<td>5. How do you chat safely with people you meet online?</td>
<td>5. How do you chat safely with people you meet online? (safe, social)</td>
</tr>
<tr>
<td>6. Have you ever felt unsafe while chatting online?</td>
<td>6. Have you ever felt unsafe while chatting online? (safe, social)</td>
</tr>
<tr>
<td>7. What are you to do if you feel safe while chatting online?</td>
<td>7. What are you to do if you feel unsafe while chatting online? (safe, social)</td>
</tr>
</tbody>
</table>

(Table Continues)
8. How can you educate others to be safe online? (savvy)

9. We have many technology options. How do you know what technology to use in a specific situation? (savvy)

10. How do you learn about new technologies? (savvy)

Note. The intervention administration team aligned the final interview questions to the S3 Framework. The alignment is shown in parentheses after each interview question.

I trusted the teaching staff to implement the additional intervention (Chatting Safely Online) with fidelity and for all students to participate with the best intentions. Students joined my Google Classroom, clicked on the link I posted for the pre-assessment and took the assessment. The data was immediately given to me in a spreadsheet from a link provided by Common Sense Education. The same process was initiated for the post-assessment.

The pre-assessment questions and the post-assessment questions were exactly the same and created by Common Sense Education. After discussing the assessment items and possible answers with the intervention administration team, we determined the assessment items needed to be aligned with the S3 Framework. The assessment items and possible answers are presented in Table 3.

Table 3.

Assessment Questions and Answers

<table>
<thead>
<tr>
<th>Pre- and Post-Assessment Items</th>
<th>Possible Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. You can meet people online with similar</td>
<td>A. Online friends might only want to talk about</td>
</tr>
</tbody>
</table>

(Table Continues)
interests. But online friendships can also be risky. Which of the following is a risk of online-only friendships? (safe, social)

A. You could learn about the interests of online friends.
B. Online friends might disagree with your opinions.
C. You might not know if your online friends are who they say they are.

2. Lola is friends with a boy she chats within an online video game. Lola knows this boy by only his screen name and avatar. He knows her in the same way. Lola is careful to make good choices when talking to someone online, even someone she thinks she knows well. The boy asks her the following questions in a recent chat room meetup. Which question should she NOT answer? (safe, social)

A. What kind of music do you listen to?
B. What is your favorite subject?
C. What is your favorite video game?
D. What's your real name?

3. Sydney is friends with shaj205 on Instagram. She has never met shaj205 in person, but they message often and comment on each other's photos. Sydney feels like she knows shaj205 well because she follows his posts. She feels secure that she is talking to a real person. In a recent conversation, Sydney mentions that her birthday is coming up, and shaj205 asks Sydney for her address so he can send her a gift. Why might Sydney feel uncomfortable sharing her information, even though they are friends? (safe, social)

A. Sydney doesn't think shaj205 is going to get her something she will like.
B. Even though Sydney feels like she knows shaj205 well, she has not met him in person and does not know how he plans to use her information.
C. Sydney does not want the birthday gift delivered to her home because she did not get him anything for his birthday.

4. Vince has many online friends. Some he knows in real life, and some he has connected with through group chat and his other friends. Recently many friends were posting in a group chat about a movie they all had seen. One person Vince never met was using bad language and attacking others' opinions. This made Vince uncomfortable, but he likes talking to the other people in the group. Thinking (Table Continues)
(Table Continued)

through the Feelings & Options steps you learned, what would you recommend Vince say or do? (safe, social, savvy)

5. How confident are you in being able to chat safely with people you meet online? (safe, social, savvy)

   A. I feel very confident.
   B. I feel somewhat confident.
   C. I don't feel confident.

Note. The S3 Framework alignment is in parentheses after each question. Common Sense Education determined all answers for question five were correct.

   All staff and student interviews were recorded and conducted by myself with the interviewee in my office. All pre-assessment data and post-assessment data were only viewable by me. I shared the data with the intervention administration team once they were de-identified. The team met to review the data and to determine existing themes and patterns.

Ongoing Collection of Evidence in Ongoing Team Collaboration

   Throughout the cycle of inquiry, I communicated with my intervention administration team (which consisted of myself, our district Assistant Superintendent, our district Director of Technology, and our district technology coach). We discussed the study's progress through email, in-person meetings, text messages, shared documents, virtual meetings, and phone conversations. Our communication with one another focused on the data collection and timing of interventions.

Presenting the Evidence Without Interpretation

Staff Interviews

   The ten teachers interviewed for this study (three fourth-grade teachers, three fifth-grade teachers, three sixth-grade teachers, and one special education teacher) all had multiple years of teaching experience at various grade levels. Five teachers taught between 2-5 years, two teachers taught between 15-20 years, and three teachers taught 21 or more years of school. All teachers
interviewed were female and taught all core subjects (reading, writing, math, social studies, and science). Also, all the classroom teachers taught a component of social-emotional learning daily during a time of day referenced as the Morning Meeting. During Morning Meeting, students were taught how to be respectful, responsible, and safe through greetings, activities, sharing, and messages.

Over the span of three days, I interviewed all ten teachers. The staff were interviewed one time, each in one sitting. The semi-structured interviews with the staff were recorded and took place face-to-face in my office. The interviews ranged from the shortest time of 5 minutes and 50 seconds to the longest time of 14 minutes and 5 seconds. The average amount of time for the interview was 10 minutes and 30 seconds. Teachers were succinct in their answers and provided a great amount of information and details during the short time of the interview. During the interviews, teachers discussed issues related to being safe, savvy, and social in a digital society. Teachers gave information about their understanding of the student’s perception of appropriate online behavior and what digital citizenship looks like in their room. The innovation lab at Lincoln Intermediate School was also discussed.

Staff Descriptors

Teacher A was born, raised, and attended public school in Hometown, IL. While in college, she earned an associate’s and bachelor’s degree in education. She continued her education and earned a master’s degree in teaching and leadership. Teacher A taught one year in a small school just west of Hometown as a reading specialist in both the primary and junior high settings. She taught fourth and fifth grades and was also a reading specialist in Hometown for 28 years. Teacher A prefers to teach fifth-grade students and uses technology daily with her teaching and assignments.
Teacher B was born and raised in Arkansas, where she received her bachelor's degree in agriculture business. She moved to Illinois and began working in the agriculture industry as a commodities broker. Teacher B decided she wanted a career change and returned to school for her post-graduate teaching license. Initially, Teacher B was hired by Hometown as a learning center paraprofessional and then hired as a substitute teacher, teaching all grades from Kindergarten through eighth grade. Teacher B has been a full-time teacher in Hometown, Illinois for 2.5 years, teaching first and sixth grade at two different schools.

Teacher C was also born, raised, and attended public schools in Hometown, IL. She earned an associate’s, bachelor's, and master’s degree. While doing her student teaching, Teacher C spent most of her time in Hometown Public Schools, teaching in the second-grade, fourth-grade, and eighth-grade classrooms. She has taught for 21 years at Lincoln Intermediate School in Hometown, teaching fifth grade for two years and fourth grade for 19 years. Teacher C also has two sons who attend Hometown Public Schools.

Teacher D was from a town just east of Hometown. She went to college and received her bachelor's degree in social Work. Teacher D was a counselor working with youth services. She helped children ages 11-18 and their families navigate through crises. Then, Teacher D decided to return to school to earn her teaching license and begin a career path in education. After receiving her teaching license, she taught for two years at a public school south of Hometown, teaching second-grade and third-grade. When hired at Lincoln Intermediate School in Hometown, Teacher D taught two years of fourth grade, which she has expressed to be her favorite school year to teach.

Teacher E was from a town about an hour north of Hometown. While in college, she earned an associate's and bachelor's degree in education. She was hired to teach fourth grade at
Lincoln Intermediate School, and this was her only teaching position. Teacher E stated she loves teaching the fourth grade.

Teacher F was from the Hometown area but attended college in Oklahoma and Illinois. She received a bachelor's degree in education and a master's degree with an emphasis in reading. Before teaching, Teacher F worked at a community college in the disability services office as a tutor and also worked in retail for over 20 years. She also ran a bridge program for at-risk teens. Teacher F has worked in multiple schools and multiple roles for a total of 15 years. She was a preschool teacher, a special education teacher for fourth through sixth-grade students, language arts teacher for the seventh grade, and a special education teacher for students with profound disabilities. Teacher F stated one of her favorite teaching positions was at Lincoln Intermediate School.

Teacher G was from a city about three hours north of Hometown. She earned a bachelor's degree in Florida. Teacher G taught in California and Illinois. Her teaching experience included being a special education teacher for multiple programs and a general education teacher for the second, third, fifth, and sixth grades. Teacher G taught for a total of 22 years.

Teacher H was from a town just west of Hometown. She earned a bachelor’s degree in elementary education and a STEM professional master’s degree. Teacher H is an author of two educational publications and is a Level 1 Google for Education Certified Educator. She was a teacher for 17 years in kindergarten, first, fourth, and sixth grade, and as a substitute teacher.

Teacher I grew up and lived north of Hometown. She holds a bachelor's degree in elementary education with an endorsement in reading. Her only teaching experience was at Lincoln Intermediate School, which was also where she completed her student teaching. Teacher I taught one year of fourth grade and four years of fifth grade. Teacher I shared that she loved
Teacher J was born, raised, and attended public school in Hometown, IL. While in college, she earned her bachelor's degree in education with a reading endorsement. She was in graduate school for a master's degree in reading. Teacher J worked at Lincoln Intermediate for four years, all in the fifth grade. She preferred to teach third, fourth, and fifth grades and was interested in becoming an interventionist or reading specialist.

**Student Interviews**

The 12 students who were interviewed were all in the sixth grade. Four of the students were female and eight of the students were male. At the time of the interview, four students were 11 years old and eight students were 12 years old. The race of all students interviewed was white and all students received all general education classes. Ten students come from a single household and two live in multiple homes. Five of the students interviewed were from low-income homes.

All 12 students were interviewed during a total of six days for Student Interview 1. Again, Student Interview 1 was completed prior to receiving instruction on the additional internet safety intervention (Chatting Safely Online). The semi-structured interviews with the students were voice recorded and took place face-to-face in my office. The interviews ranged from the shortest time of 3 minutes and 25 seconds to the longest time of 11 minutes and 45 seconds. The average amount of time for the interview was 7 minutes.

During one school day, I interviewed 11 students for the Student Interview 2. Due to multiple absences, the second interview was not conducted for one student. Student Interview 2 was completed after receiving instruction of the additional internet safety intervention (Chatting Safely Online). The semi-structured interviews with the students were voice recorded and took
place face-to-face in my office. The interviews ranged from the shortest time of 2 minutes and 12 seconds to the longest time of 5 minutes and 43 seconds. The average amount of time for the interview was 3 minutes and 54 seconds.

During the interviews, students discussed issues related to being safe, savvy, and social in a digital society. Students gave varying responses on how they stay safe online and how to teach others to stay safe online. Students also gave information on how they learned about new technology. The length of time of the interviews varied and may seem short for a ten question interview. Sixth-grade students do not always give detailed answers to questions. During the interviews, students gave very straightforward answers to the questions. I probed students to give additional information, expand with details, and provide different examples of their answers. Some students were able to expand their answers to the interview questions and some did not. The information generated from the student interviews was specific.

**Student Descriptors**

Student A was a 12-year-old male who attended school only in Hometown. He enjoys playing baseball and basketball and sometimes shopping. Student A has an iPad and a PlayStation 4. He liked to watch YouTube on his devices.

Student B was an 11-year-old female and began attending Hometown schools during her third-grade year. She enjoyed soccer, coloring, and running. Student B had a phone and liked watching TikTok, watching television, and interacting with others through Snapchat.

Student C was a 12-year-old female who attended school only in Hometown. She enjoyed drawing, gaming, and reading. Student C had a laptop and a tablet. She liked to play games and talk to friends on her devices.

Student D was a 12-year-old male who attended school only in Hometown. He liked to
ride dirt bikes and go to the skate park. Student D had a phone, Oculus VR, and Xbox. He liked to play Gorilla Tag on his Oculus VR.

Student E was an 11-year-old female who attended school only in Hometown. She enjoyed drawing, tumbling, cheerleading, and watching Netflix. Student E had a phone, iPad, and television. She liked to watch shows and talk to friends on her devices.

Student F was a 12-year-old male who attended school only in Hometown. He enjoyed playing video games and hanging out with friends. Student F had a phone, and he liked to play games on his phone.

Student G was an 11-year-old female who attended school only in Hometown. She liked to read, draw, and talk. Student G had a phone and laptop. She liked to play games and watch shows on her devices.

Student H was a 12-year-old male who attended school only in Hometown. He enjoyed art, games, and soccer. Student H owned a personal computer, phone, Nintendo Switch, PlayStation 5, Oculus VR, and a laptop. He liked to play games, draw, and watch videos on his devices.

Student I was a 12-year-old male who attended school only in Hometown. He liked playing soccer, video games, sleeping, and hanging out with friends. Student I had a phone, Xbox, and a personal computer. He liked to play video games and call his friends and parents when needed.

Student J was a 12-year-old male who began attending schools in Hometown during his second-grade school year. He enjoyed playing video games and the subject of math. Student J owns a phone, Xbox, television, and computer. He liked to watch YouTube and talk to friends on his devices.
Student K was a 12-year-old male who attended school only in Hometown. He enjoyed playing baseball and basketball. Student K had a phone, and he liked to talk to his friends on his phone.

Student L was a 12-year-old male who attended school only in Hometown. He enjoyed playing baseball and basketball. Student L has a phone and a Play Station 4. He liked to play games on his devices.

**Student Pre- and Post-Assessment**

The sixth-grade class at Lincoln Intermediate School consisted of six general education classrooms with 140 students enrolled. The student population in each classroom ranged from 22 to 24 students. There were a total of 75 male students and 65 female students. Sixty-four students were from low-income homes. For the purposes of this study, data from 97 students was collected using the pre- and post-assessment.

On December 9, 2022, sixth-grade students were given the pre-assessment in their classrooms by their teacher. The pre-assessment questions and answers were created by Common Sense Education, based on the information presented in the instruction of the additional internet safety intervention (Chatting Safely Online). After the pre-assessment, the sixth-grade teachers began the instruction of the additional internet safety intervention (Chatting Safely Online).

According to Common Sense Education (2020), there were three learning goals for the additional internet safety intervention (Chatting Safely Online). The goals were:

1. Analyze how well students know the people they interact with online.
2. Reflect on what information is safe to share with different types of online friends.
3. Learn to recognize red flag feelings and use the Feelings & Options thinking routine to
respond to them.

Teachers began the lesson by showing the slide show to the students and taught from the lesson plan. The lesson plan can be found in Appendix A and the slide show can be found in Appendix B.

During the lesson, students were instructed to discuss some of the benefits and risks of talking with people online after watching a video. Key vocabulary was given by the teachers and talked about among the class. Multiple scenarios were presented to students to discuss the safe choices to make. Finally, the idea of a red flag feeling was given along with how to respond.

After the lesson, on December 9, 2022, students were given the post-assessment in their sixth-grade classrooms by their teacher. The post-assessment questions and answers were created by Common Sense Education, based on the information presented in the instruction of the additional internet safety intervention (Chatting Safely Online), and were exactly the same as the pre-assessment questions.
Team Findings Developed Thematically

The intervention administration team reviewed and discussed the information gathered from the teacher interviews, student interviews, and assessment scores. In this section, I present and discuss the findings from the data analyses. The research questions and how they are answered are also in this section.

Findings From the Teacher Interviews

The data from the teacher interviews were analyzed and placed into themes and patterns. The themes and patterns were grouped into sections. One section is safe and social. The other section is savvy. More detailed information about the themes from the student interviews can be found in Appendix G.

Themes of Being Safe and Social Presented by Teachers

Throughout the interviews, teachers explained how the intervention helped students be safe and social with technology. To be a safe and social digital citizen, one must protect and respect themself and others (Ribble & Park, 2019). The following five themes about being safe and social online were generated: teachers believe students know how to be safe, teachers believe students use safe online resources, teachers believe students need to understand the long-term effects of online use, teachers believe students are respectful on and with technology, and teachers believe students are excited about technology.

Teachers believe students know how to be safe. This theme was stated at least seven times throughout the interviews. Teachers believed that students know what is safe to share online. Teacher A explained her knowledge of student safety:

I feel they have gotten this a lot so I think what they feel is appropriate is not sharing the
passwords, which is well perceived to them. As well as not giving out their own personal information, like name, address and things they use all the time, maybe even their name they are not as cautious with this because they are kids and they kind of just throw it out there. I think they have been told enough to watch this.

Teacher B talked about digital citizenship and how she believes it may differ between school and home. She models expectations in her classroom at school and holds students accountable for their actions online. Teacher B stated:

We know that digital citizenship in the classroom is different from digital citizenship at home, with their personal devices, depending on what the parents allow them to do. We remind them that they are able to use the safe search engines instead of accidentally clicking on something that might take them somewhere that’s unsafe for them. So first, making sure that students know what resources are available to them and then modeling how to use those resources for the students and then holding them accountable to using those resources whether it's walking around the room and looking, looking things up with them or even just monitoring what they are doing using GoGuardian.

Teachers believe students use safe online resources. Teachers spoke more than 10 times about students knowing to only use the pre-approved sites that teachers or the school district approved for them. Research using safe search engines was talked about at least six times, with the emphasis placed on citing sources appropriately when directly quoting a source or paraphrasing. Teachers also spoke about being safe with online resources. Teacher J spoke about the S3 Framework during the interview and how it relates to using safe online resources. Teacher J stated:

The social, savvy, safe statement was easy to remember and I thought it was good so that
I could remember to teach my students how to be safe and use online resources in a safe way as well. It can also make a connection to digital literacy. We do things where we comment on students' work which helps to learn how to communicate in a digital way properly.

**Teachers believe students need to understand the long-term effects of online activity.**

During the interviews, the topic of digital footprints was mentioned at least four times. Other comments such as the longevity of an action was also used to describe a digital footprint. Teachers believed that students often click the technology and sometimes fail to see the effect of their actions. Teacher E described her understanding of students’ need to learn the long-term effects of digital activity. Teacher E stated:

I don’t think kids are very aware of how long-lasting their digital footprint is. The internet to kids is kind of like a toy box because they just want to get to the fun games but what they don't know is what they could run into or if they posted too much stuff online, the negative impact that could have on them as well.

Teacher H also spoke about the digital footprint and needing to be aware of their actions:

Be aware and be appropriate and responsible with your digital footprint and I try to make sure that they adhere to that and everything we do digitally needs to be done in the most appropriate fashion.

Teachers spoke seven times about how students do not know why they need to be aware of their actions. Teacher B gave an example of this happening in her class. Teacher B stated, “I don’t think that they are always aware. It’s not that they are purposefully trying to be where they're not supposed to be, but they are just not aware of the potential harm that could be there.”
Teachers believe students are respectful on and with technology. The Chromebook care training given to students at the beginning of the year was discussed at least six times throughout the teacher interviews. Students know how to be respectful with the devices provided. Teachers also spoke five times about students being kind on technology. Interactions in the classrooms show that students are kind in an online environment. Teacher C and Teacher H both spoke about students being respectful on and with technology. Teacher C stated:

How to care for their Chromebook, protect their identity, what sites would be appropriate, and how things that we expect here might be different at home and that the computer that we give them is the school districts and that you have to follow the rules that we have and not your family’s rules. We’ve talked about safe sites and I’ve taught them that sometimes there are unsafe things on the internet and not everything is appropriate or true. I try to use technology as much as I can.

And Teacher H also spoke about students being respectful online. Teacher H stated, “Students have a good sense of knowledge of what online bullying is and social expectations of using social media and how their words can affect others. I do think they have a good understanding of what is appropriate online.”

Teachers believe students are excited about technology. The teachers show excitement about technology and share that students are also excited about technology. The innovation lab brings much excitement to the students at Lincoln Intermediate School, according to at least seven teachers. Students explore, collaborate, and use a variety of technology in the innovation lab and this is exciting to students. Teacher E believed the innovation lab is very important in her classroom. Teacher E stated:

The innovation lab is awesome! First of all, I think it is very helpful to have the support
of the district technology coach to guide us. I think it brings up a level of conversation and explains strategies of math. Students are so excited to be there. One time we were doing a stop motion project, and by doing so, I feel like that really cemented their understanding on the subject. I also love the communication aspect of it and how students are able to work together. In the end, I feel it allows for students to have more tools to have a more concrete understanding of the material.

Teacher H also talked about how the innovation lab allows for student choice in regard to the product a student would make to show their understanding of their learning. Teacher H stated:

It has allowed students to make their own choices which I think is good. It provides students with additional opportunities to take their learning and transform it into something much more currently relevant in utilizing their skills that is a much more 21st-century classroom experience.

**Themes of Being Savvy Presented by Teachers**

Throughout the interviews, teachers were able to explain how they as teachers are savvy with technology. To be a savvy digital citizen, one must educate themself and others (Ribble & Park, 2019). The intervention administration team discovered four main themes about savvy from the interviews. The themes were: teachers learn from others, teachers integrate technology into the curriculum in many ways, teachers believe ongoing professional development is helpful, and teachers want support for families.

**Teachers learn from others.** All teachers stated that they learn about technology from their colleagues. Some teachers (three) learn from their students. Teacher B talked about her interests with technology and how she tries to use her knowledge in the classroom. Teacher B stated:
The older I’ve gotten the less interested I am so I learn a lot about new technology from the kids or other adults. In my personal life, I try to minimize technology. I also learn about technology through professional development and I grab little things here and there that would help me in the classroom and I apply them and use them.

Teachers also learn from the technology coach, which was stated more than ten times. On their own through websites and social media is another way teachers learn from others (as stated nine times). Teacher J uses social media and other educational websites. Teacher J likes to see what other teachers are doing in their classrooms and by using social media she is able to do that. The district technology coach has also been a great resource for Teacher J. Teacher F talked about how she learned about technology. Teacher F stated:

> Trial and error. If I hear about it, I try it out and if I can’t get it, I’ll look to a colleague. If I can’t figure something out, I will ask somebody who has figured it out and ask them for help. I also ask our district technology coach for help.

**Technology is integrated into the curriculum in many ways.** Teacher A stated outright that she knows there is a direct link between what she does with technology and what she does with academics. Teachers recognized and learned through the digital citizenship professional development three-part badging series there are specific technology skills and standards that need to be implemented into the curriculum (as stated 12 times). Teacher G found the standards very helpful. Teacher G stated:

> The fact that there are specific standards now that we need to follow I think is beneficial. Now there are laws and guidelines we have to follow that we aren’t always aware of and I think they are good to reach our ultimate goal.

Nine of the teachers interviewed tried to implement technology into the curriculum by using the
innovation lab. Teacher J explained how she looks at the audience to determine the technology to use. Teacher J stated:

I look at how I want the information to be communicated so if we are doing an information project with a larger audience we will create a website, therefore, more people can see it and it will reach a broader audience. If it's something in just our classroom, we will just have a chat or something like that.

Teacher C talked about how she started small with technology implementation into the curriculum. She takes the professional development she attends and finds at least one thing to apply and implement in her classroom. Teacher C also talked about the district technology coach helping her and giving her more confidence.

**Teachers believe ongoing professional development is helpful.** All teachers stated the reminders through the digital citizenship training were helpful and they want more reminders of digital citizenship or what needs to be taught to the students. Teacher D stated:

I think the reminders were good. I think it’s pretty common sense but I think it was a good reminder for me to know what I need in order to teach and remind my students. I needed to know the important things to teach my students.

Some staff (seven) want specifics of what to teach the students and how to teach the students about technology and digital citizenship. Teacher E stated:

I think our technology coach's professional development on what kind of technology we have and how to implement it has been really helpful but I work with my colleagues in the other school as well which is really helpful. When we are able to practice using the technology I find it helpful.

Teacher I was similar to Teacher E in her response about professional development. Teacher I
stated, “I would like to know more ways to teach the students safety on the internet and the research skills they need to be successful with using search engines and how to use different technology in our innovation lab.”

**Teachers want support for families.** Two teachers spoke about the partnership with families and how important it is to keep the communication lines moving between families and the school. Teacher H stated, “I think helping families to learn about digital citizenship and how information can be dispersed to families so they can know about the parameters of digital citizenship would be helpful.” Teacher F talked about how she wants to help students at home. Teacher F stated:

> I think figuring out a way to teach them how to be safe on sites that we don't allow them to work on, especially Google. I really wish we could show them a way to be safe on sites they use at home like Google, TikTok, and YouTube.

**Findings From the Student Interviews**

Eleven of the 12 students were interviewed twice. One interview was administered before the additional internet safety intervention (Chatting Safely Online) was administered and the second interview was administered after the additional internet safety intervention (Chatting Safely Online) was administered. Due to multiple absences, one student was only interviewed once. In general, many students answered similarly during both interviews, however, some students’ responses changed after learning information from the additional internet safety intervention (Chatting Safely Online). More detailed information about the themes from the student interviews can be found in Appendix H.
Themes of Being Safe Presented by Students

Throughout the interviews, students were able to explain how they are safe with technology. To be a safe digital citizen, one must protect themselves and others (Ribble & Park, 2019). Three main themes about safety were generated from the interviews: keep private information to yourself, only talk online with the people you know, and use adult-approved websites. Other information was also shared about safety.

Keep private information to yourself. Students talked about not sharing private information in every interview and some students stated this multiple times. Students know that private information includes their name, address, phone number, and passwords. Some students gave more information about what they believe needs to be kept private (credit card numbers, social security numbers, name of school).

Only talk online with the people you know. Students shared in 12 interviews that a person should only talk online with the people they know in real life. Students believed this is a safe way to interact online. Student B stays safe online and stated, “By not talking to random people, by having my private account and by keeping my personal information to myself.”

Use adult-approved websites. During the interviews, every student talked about asking an adult if they are ever unsure about their safety online or if they are unsure of what to do in a situation that brings questions to their mind. In at least ten interviews, students mentioned only going to adult (parent or teacher) approved websites. The approved sites will be the safe sites. Student D shared information on how to stay safe. Student D stated, “By going on verified websites by teachers. Also, by not texting people you don’t know and making sure you’re not doing anything you’re not supposed to.”
Other information presented about safety. When asked how students stay safe online, Student I responded by stating, “By just doing what you're supposed to do.” This is a very simple answer and gives a strong message of making good choices. Student K talked about choices online and face-to-face. Student K stated, “Don’t act differently online to how you would interact face-to-face. Don’t go to unblocked websites at home that are blocked at school because they are probably blocked for a reason.” Students need to know and understand their choices and behavior online should not be different from their choices and behavior face-to-face.

Themes of Being Social And Safe Presented by Students

Throughout the interviews, students were able to explain how they are social and safe with technology. Social and safe are grouped together in this section because the study was focused on internet safety and socializing online. To be a social digital citizen, one must respect themself and others (Ribble & Park, 2019). Three main themes and other information about being social and safe online were generated from the interviews: talk to an adult, be kind, and only share general personal information.

Talk to an adult. Students brought up talking to an adult more than 20 times during the interviews in regard to being safe and social online. Student C stated:

Unfriend and block them as well as giving them a warning first hand to stop doing what they are doing. If they do it again, tell an adult to make sure they can’t be in contact with you or access your account ever again. You should talk to an adult about it and they can confirm if you're allowed to do it. Also, if you ever come in contact with someone online and you don’t trust them, tell a parent or an adult about them and they would be able to see why you don’t trust them and see if there is anything they can do to keep them away.
**Be kind.** Students talked about being kind online eight times in the interviews. When asked how to keep online friendships safe, Student A responded with “By being kind and safe and nice.” Student J responded with “By not being mean or by not letting them be mean to you.”

**Only share general personal information.** The theme of only sharing general personal information was evident in multiple student's answers to the questions of what is OK and what is not OK to share online.

Student D was unsure of the information that could be shared online, but during the second interview, Student D shared “You can share who you are if you know the person like if they are a friend. You should not share anything online with people you don’t know.” Student E shared information that is not appropriate to share online and stated “Your full name and address. You also probably shouldn't share your family or perhaps where you work because there can be some creepy people out there.” Student G was thinking of others when the student stated that other people’s information should not be shared. Student K limits the chatting to only people Student K knows in real life. Student K stated:

> By not saying anything on a screen that you wouldn't say face to face. If it’s a random person, I would definitely limit chatting a lot. I personally wouldn't chat with anyone I haven’t met face to face, but I know some other people that do but I would just keep it to a minimum of what you say.

**Themes of Being Savvy Presented by Students**

Throughout the interviews, students were able to explain how they are savvy with technology. To be a savvy digital citizen, one must educate themself and others (Ribble & Park, 2019). Three main themes about savvy were generated from the interviews: educate others about technology, learn about new technology, and determine what technology to use.
**Educate others about technology.** Students understand that educating others about technology with safe online interactions is an important piece to being a savvy digital citizen. This theme was mentioned more than 15 times during the interviews. Student L talked about what is important to educate others about by stating, “Sharing with them that you are not to share passwords or private information and just telling them like red flags and things they need to know.” Student I would educate others by “teaching them what sites are safe and not safe and by telling them that they can't do certain things online on certain sites.”

**Learn about new technology.** Students understood that learning about new technology is important to be a savvy digital citizen. More than ten students learn from their teachers. Seven students also learn from their friends. Student B stated, “By exploring it and by asking my friends, parents or teachers.” Some students (nine) stated they learn about new technology by reading about it, watching a video about it, or exploring it on their own. Student E stated, “You could honestly just go on YouTube or something and people will tell you how to use all different types of technology and stuff like that.”

**Determine what technology to use.** Students recognized that to be a savvy digital citizen, they must determine what technology to use for a specific situation. During 17 interviews, students gave examples of how they would determine the technology to use in a specific situation or stated that the technology use depends on what the assignment is asking them to do.

Students also stated in eight interviews that they would talk to a teacher for support in selecting the technology to use. Student E stated the teacher might tell the students what to use by stating, “Your teacher might tell you what to use like your Chromebook or use the iPads or she might say you can't use certain devices like possibly iPads or robots.” Student H stated it
depends on the situation and also stated the teacher can help:

If you know what the situation is then you could pick stuff that goes well with that situation. If you have a friend online and they ask you for something then you need to ask them what they need from it. I will ask my teacher what to use and make sure I don't do anything bad with what she tells me to use.

Student J expanded the staff support beyond the teacher and stated, “You could go ask the learning center or a teacher and/or ask the principal or vice principal.”

**Findings from Student Pre- and Post-assessment**

The pre-assessment and post-assessment data were also discussed and analyzed by the intervention administration team. The percentages of students scoring assessment questions correctly on the pre-and post-assessment were high (ranging from 86.2% to 100% on the pre-assessment to 90.7% to 100% on the post-assessment), and the student percentages improved from the pre-assessment to the post-assessment on two out of five questions. Table 4 shows the percentage of students who answered each question correctly for the pre-assessment and post-assessment.

**Table 4**

*Percentage of Students Who Answered Each Item Correctly*

<table>
<thead>
<tr>
<th>Assessment Question</th>
<th>Pre-Assessment: % of Students Scoring Correctly</th>
<th>Post-Assessment: % of Students Scoring Correctly</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100</td>
<td>95.3</td>
</tr>
<tr>
<td>2</td>
<td>99.1</td>
<td>99.1</td>
</tr>
</tbody>
</table>

(Table Continues)
Five questions were presented on the pre- and post-assessment. Students scored a 5/5, a 4/5, or 3/5 on the pre-assessment. Students scored a 5/5, a 4/5, 3/5, or 2/5 on the post-assessment.

Information presented in Table 5 shows the number of students and percentage of students who received each score. The percentage of students who scored 100% (5 out of 5) was higher on the post-assessment (87.63%) compared to the pre-assessment (83.5%).

Table 5

Pre-Assessment and Post-Assessment Data

<table>
<thead>
<tr>
<th>student score</th>
<th>Pre-Assessment Data</th>
<th>Post-Assessment Data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5/5</td>
<td>4/5</td>
</tr>
<tr>
<td># of students</td>
<td>81</td>
<td>14</td>
</tr>
<tr>
<td>% of students</td>
<td>83.50</td>
<td>14.43</td>
</tr>
</tbody>
</table>

Of the data from the 97 students (see Appendix F), some students received the same score on the pre-assessment and the post-assessment. Seventy-five students (77.32% of students) scored a 5/5 (100%) on the pre-assessment and post-assessment. Three students (3.09% of students)
students) scored 4/5 on the pre-assessment and post-assessment.

Twelve students (12.37% of students) increased their scores from the pre-assessment to the post-assessment. Of those 12 students, ten students scored 4/5 on the pre-assessment and 5/5 on the post-assessment and two students scored 3/5 on the pre-assessment and 4/5 on the post-assessment. Seven students (7.22% of students) decreased in score from the pre-assessment to the post-assessment. Of the seven students, four students scored 5/5 on the pre-assessment and 4/5 on the post-assessment; one student scored 5/5 on the pre-assessment and 3/5 on the post-assessment; one student scored 5/5 on the pre-assessment and 2/5 on the post-assessment; and one student scored 4/5 on the pre-assessment and 3/5 on the post-assessment. Overall, 87 (89.69%) students either scored a 5/5 on both the pre-assessment and post-assessment or increased their score from the pre-assessment to the post-assessment.

The pre-assessment data was arranged and computed to find the mean and the standard deviation. The pre-assessment mean was 4.81 with the standard deviation being 0.44. The post-assessment data was also arranged and computed to find the mean and standard deviation. The post-assessment mean was 4.84 and the standard deviation was 0.49. A t-test for dependent samples was computed. The t-value calculated was 0.36. The statistical outcomes from the assessments are found in Table 6.

Table 6

Statistical Data from Assessments

<table>
<thead>
<tr>
<th></th>
<th>Pre-Assessment</th>
<th>Post-Assessment</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4.81</td>
<td>4.84</td>
<td></td>
</tr>
</tbody>
</table>

(Table Continues)
Evaluating/Interpreting the Intervention Findings

The intervention administration team analyzed the themes presented from the teacher interviews and student interviews. Both the teachers and students described specific ways they display safe, savvy, and social choices. Teachers go to great lengths to ensure a positive digital environment for their students.

Through the analysis of the themes, the intervention administration team found the teachers appreciated the digital citizenship training, supported students in understanding technology in their classrooms and encouraged safe online behavior. The team also found that students know how to make safe decisions online, based on the information learned in the two trainings, district's original student internet safety training and the additional internet safety intervention (Chatting Safely Online).

There are similarities and differences between the teacher and student interviews. Both the teachers and the students know that personal information is to be kept private for the safety of the student. They both also know that to choose a technology device (being a savvy digital citizen), one must first understand the task and recognize what the product will be before determining the technology.

Based on the student interview answers, students know to talk to an adult if they are unsure of what to do in a situation online. However, teachers stated they believe students are unaware of the long-lasting effect of their digital choices. These two statements go together but are contradictory to one another. If a student were unaware of the long-lasting effect of their
choices, then the student would make the choice, even if unsure of what to do in a situation. However, since the student is aware of the long-lasting effects of their digital choices, the student will ask an adult for help in a situation where they are unsure of what to do in hopes they make the right choice to have the lasting effect.

The intervention administration team also analyzed the student pre-assessment and post-assessment scores. The research hypothesis stated that the students’ post-assessment scores would be greater than the students’ pre-assessment scores, due to the instruction of the additional internet safety intervention (Chatting Safely Online). The level of risk associated with no change in scores (the null hypothesis) was set at 0.1 due to the few amounts of different scores a student could receive on the assessments, making the critical value for the degrees of freedom (96) set at 1.29. The obtained t-value of 0.36 is less than the critical value, therefore rejecting the research hypothesis.

The difference between the pre-assessment and the post-assessment occurred due to something other than the intervention. Based on the pre-assessment and post-assessment scores, sixth-grade students know how to be safe online. The additional internet safety intervention (Chatting Safely Online) was not necessarily the teaching factor for the sixth-grade students on internet safety, however, the students do understand the safe choices to make online.

Making Decisions About the Design Process

A Convergent Mixed Methods design (Creswell & Creswell, 2018) was used for this study, through which I collected both quantitative and qualitative data, analyzed the data separately and then compared the results. Through a mixed methods design, I compared different perspectives and developed a more complete understanding of each intervention and evaluated the outcomes of the interventions.
Teachers at Lincoln Intermediate School who were employed by Hometown District 1 during the 2021-2022 school year were eligible to participate in the data collection for my study. I believe staff willingly took their time and shared honest information when asked to participate.

This study was limited to sixth-grade students since the sixth grade is the final grade before leaving the school. Many sixth-grade students also had their own personal devices and apps on their phones that required a person to be the age of a sixth-grade student or older. All students in grade six of Lincoln Intermediate School participated in the additional intervention (Chatting Safely Online). I also interviewed students from the sixth grade.

There were limitations to this study. Interview questions about choosing technology and teaching others about technology were difficult for students to answer. The sample size of 97 students was a small amount of student assessment scores to interpret. The pre-assessment and post-assessment contained only five questions. Finally, it was difficult to get permission slips from students’ families.

We also do not know what answer the student gave (multiple choice) for each question on the pre-assessment and post-assessment. Therefore, I was not able to give teachers any information about what question each student missed. Students did not receive additional instruction after the post-assessment. Students were not able to retake the post-assessment for their own benefit. The retake would have only been for the student’s benefit since we were not to use any retake scores of the post-assessment in this study.

Feedback Loop: Back to Theory of Action

My problem of practice was focused on students inappropriately using technology tools and staff lacking the necessary technology skills and therefore underprepared to support students with their development of the appropriate digital citizenry skills. The intervention administration
team believed that when this problem was addressed with the additional internet safety intervention of digital citizenship, the students would understand how to behave appropriately online and have the digital literacy skills needed. This was the theory of action I implemented. Once I designed the additional internet safety intervention (Chatting Safely Online), implemented the intervention, collected data on the intervention, and evaluated the intervention and design principles, I revised the theory of action for future studies.

This study examined the following research questions:

1. In what ways has the internet safety training of digital citizenship supported students' perceptions of behavior with technology?
2. In what ways has the internet safety training of digital citizenship supported students' digital skills with technology?
3. How have students grown as Safe, Savvy, and Social members of the digital world?
4. In what ways has the digital citizenship training for staff supported staff’s understanding of digital citizenship in the classroom?

All research questions were answered with the data collected through teacher interviews, student interviews and student pre- and post-assessments. Each research question was aligned with the data analysis and presentation of findings. The specific ways in which the items on the interviews and pre- and post-assessments were connected to the research questions and have been placed in Appendix I.

Research questions one and two were answered based on descriptive statistics (percentages, means, and standard deviations) and repeated measures (t-test for dependent samples) of the student pre-assessment and post-assessment scores, along with coding and thematically organizing the results from the student interviews.
In response to Research Questions 1 and 2, with the mean 4.81 for the pre-assessment and 4.84 for the post-assessment, the standard deviation 0.44 for the pre-assessment and 0.49 for the post-assessment, and the t-value (0.36) being less than the critical value (1.29), I interpreted the answer to research questions one and two to be that the internet safety training did not statistically support the students’ perceptions of behavior with technology and digital skills with technology. However, the practical significance of the students’ pre- and post-assessment scores will show that although the null hypothesis was accepted and the research hypothesis was rejected, the additional internet safety training validated what the students already knew about internet safety, therefore supporting their understanding and perceptions. The student interview themes and patterns also suggested practical significance. Students were more certain of their answers to the questions and gave specific examples from the additional internet safety intervention, which were not known until after participating in the additional internet safety intervention (Chatting Safely Online).

Research question three was answered based on a triangulation of data between the staff interviews, student interviews after the additional intervention (Chatting Safely Online), and growth shown between the student pre-assessment and post-assessment scores. Based on the themes of the data and the increase in average scores from the pre-assessment to the post-assessment, I interpreted the answer to research question 3 to be students are a more safe, savvy and social member of the digital world. Whether this is a result of the ongoing teaching of internet safety or the additional internet safety intervention (Chatting Safely Online), students are more safe, savvy, and social in a digital citizenship manner. Teachers gave their interpretations of the students’ perceptions, students showed growth in themes and patterns as answers to the
interview questions and students were validated in their understanding of internet safety based on the pre-assessment and post-assessment scores.

Research question four was answered by analyzing the data from interviewing staff by coding the data and then converting it into themes. I interpreted the answer to research question 4, based on the staff answers of digital citizenship in their classroom, to be that the training was beneficial for understanding and implementation. Staff understand what digital citizenship is and how to support students with being a safe, savvy, and social digital citizen.

The data presented allows me to ask more questions. With the cycle of inquiry complete, I move back in the Mintrop (2018) model to developing a theory of action using the information from the teacher interviews, student interviews, and student assessment scores as my data source. The intervention administration team and I will meet to define and frame a new problem of practice, make theories of action explicit, and understand the change process of the problem (Mintrop, 2018).
CHAPTER VIII: NEXT STEPS

Implications and Recommendations for a New Cycle of Inquiry

The conclusion drawn from this study, based on the findings presented in Chapter 7, is that students know the right or safe answer when asked how to be safe online. Students know what to do and how to be safe. Students know what they should and should not do and say online to stay safe. Students know how to be a safe, savvy, and social digital citizen. Teachers understand that digital citizenship and internet safety is an important component of technology in education. Teachers want to use the technology standards (including the S3 Framework) and align the standards to the curriculum of the general education curriculum standards.

All students in Hometown Public School District 1 took part in the original student internet safety training during the beginning days of the 2022-2023 school year. The first student interviews and student pre-assessment data were collected prior to the sixth-grade students at Lincoln Intermediate School taking part in the additional internet safety training (Chatting Safely Online). The data from the pre-assessment showed us that students did well on the pre-assessment. On four of the five questions, the percentage of students scoring correctly was 96.3% or higher. During the student interviews, I learned that students were able to give multiple examples of how to be safe online. This tells me that the understanding of being safe online was already established in students.

After the implementation of the additional internet safety intervention (Chatting Safely Online), the post-assessment was given to the students and the second student interviews were conducted. The data collected from the post-assessment showed us that students did well on the post-assessment also. On four of the five questions, the percentage of students scoring correctly was 95.3% or higher. During the student’s second interviews, I learned that students were able to
give additional information on how to be safe online, using some of the language from the additional internet safety intervention (Chatting Safely Online). Few changes were made to the students' perceptions or understanding of how to be safe online.

During the teacher interviews I learned that the teachers were able to explain how they as teachers were safe, savvy, and social with technology and online. I learned that the digital citizenship training was beneficial for the teachers. The teachers know more because of the digital citizenship training and are validated in their understanding of the skills and knowledge students need to be safe, savvy, and social online. Teachers see themselves as having the skills to guide their students concerning their behavior when using technology. Based on this information, we believe the digital citizenship training for staff was necessary and should continue for new staff employed in Hometown Public Schools. We also learned from the teachers that additional reminders for staff who have already completed the training would be helpful.

The findings told me there were no statistical or significant differences between student the pre- and post-assessment data or between the two student interviews. Based on this data, students did not change in their perceptions of being a digital citizen. The data collected told me that the additional internet safety intervention was not an intervention that we need to continue to use for students who already know how to be safe online. The additional internet safety intervention (Chatting Safely Online) is not an intervention we will continue to pursue at Hometown Public Schools.

The data that created the problem of practice showed us that students were not being kind or safe online. Our intentions with the intervention were to give the students and staff the tools and skills needed to be safe online. We learned through the data collected during this cycle of inquiry that students know how to be kind and safe online, based on the pre- and post-assessment
high percentages. The data confirms for Lincoln Intermediate School and me that our students are knowledgeable in the area of how to be safe and kind online. Now that we know students have the understanding of how to be kind and safe online, this leads me to believe they are not using, applying or transferring the knowledge in the real moment. The problem of children being unkind and unsafe online due to the lack of the use, application, and transfer of knowledge and skills will be the new problem of practice.

The data collected during this cycle of inquiry told me the problem of children being unsafe and unkind online was not due to students lacking skills for proper social interactions. We now believe the problem of students being unsafe and unkind online was due to students not using, applying, or transferring the skills (knowledge of how to be safe, savvy, and social online) when making decisions with technology. When students were not using their skills, students were not being safe and kind online, which needs to be addressed. Our goal is that students will use their knowledge and understanding of how to be kind and safe online, just as a safe, savvy, and social digital citizen would do, in all situations involving technology.

Based on what I have learned from the data presentations, I will recommend that during the next cycle of inquiry we research, design and implement a different intervention to address the problem of students knowing how to be safe, savvy, and social in a digital world, but not always using or applying that knowledge in the moment. The new intervention must also allow for further instruction after assessments are given and scores are received. Figure 1 shows a draft driver diagram that I will propose to the intervention administration team. The diagram provides us with ideas to research and brainstorm around to determine an intervention needed to address the problem of students being unsafe and unkind online and not using, applying, or transferring the skills they have when making decisions with technology and to reach our goal. After
discussion with the intervention administration team, we will take our findings to the District Technology Steering Committee to determine final steps needed to create and implement the intervention.

**Figure 1**

*Internet Safety Driver Diagram*

<table>
<thead>
<tr>
<th>Problem</th>
<th>Change Drivers</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students are unsafe and unkind online.</td>
<td>Students recognize prior knowledge of how to be safe and kind online</td>
<td>Students use and apply their knowledge and understanding of how to be kind and safe online.</td>
</tr>
<tr>
<td></td>
<td>Students use problem-solving skills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students understand the effects of one’s choices</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students support other students</td>
<td></td>
</tr>
</tbody>
</table>

To address this problem, we must research, design and implement a different intervention, possibly created by the intervention administration team or small team derived from the District Technology Steering Committee. The intervention used to address all change drivers (see Figure 1) may consist of students receiving direct whole class instruction and direct small group instruction. The intervention may also include students in the classrooms watching pre-made videos of other students using problem solving skills, understanding the effects of one’s
choices, and students supporting other students as a model for the students in the classroom to refer back to in the moment when making a decision regarding being a safe, savvy, or social digital citizen. For students to have a solid understanding, teachers must know how the student performed on any assessment to allow the teacher to provide additional instruction to support a clearer understanding of the content.

Data will be collected to determine the effects of the intervention. I will recommend we collect data from a larger sample size, including multiple grade levels and multiple schools. A larger sample size will give more data to interpret and possibly a more accurate account of the information.

We will also need to use alternative methods of data collection to allow students to share their understanding and knowledge in a more effective manner. The interviews were quite short and did not allow for discussion or student work to be analyzed. Intervention data collection will focus on students recognizing prior knowledge of how to be safe and kind online, using problem solving skills, understanding the effects of one’s choices, and supporting other students. Data collection tools may consist of observations of students using technology, surveys from students about using their understanding of making safe choices in the moment, written student answers on assessments, students role playing scenarios followed by discussions with the class, student’s determination of how to address a realistic-fiction situation and with a partner, or student’s creation of a product to show their understanding after instruction. Rubrics may be used for fidelity of scoring and teachers may reteach as necessary.

**Preliminary Plans for the Next Cycle of Inquiry on this Problem of Practice**

Based on the implications and recommendations for the study, I plan to collaborate with my intervention administration team (which consists of myself, our district Assistant
Superintendent, our district Director of Technology, and our district technology coach) to finalize the next steps. I will then speak to the District Technology Steering Committee about the study, the results, and information discovered from the discussion with the intervention administration team. I plan to seek their input and recommendations on the implementation of a cycle of inquiry district wide.

Our research for the problem of students being unsafe and unkind online will focus on how to support students in transferring the knowledge of how to be safe and kind online in the real moment. We will research ways to incorporate the teaching of application and transfer of knowledge of safety and kindness in a real-life setting because online life is real life. We will also research other districts who have a similar problem (lack of transfer and application of knowledge) and determine if their solutions for interventions can also support our students.

In the next cycle of inquiry, I will recommend teachers and students of other grade levels in the intermediate buildings take part in the study. I will speak with the administration at the other intermediate school in Hometown to determine a plan for implementing the study. This study will focus on the problem of students being unsafe and unkind online by not using, applying, or transferring the skills (knowledge of how to be safe, savvy, and social online) when making decisions with technology. We will therefore use a different intervention to support a change in students. When more students and staff are involved, more data will be collected for us to analyze. This can give a deeper understanding if students are being kind and safe online.

Conclusion

Our children are navigating this ever-moving and changing digital world in the real world. We need to determine how we will address this situation. “Should we teach our children as though they have two lives, or one?” (Ohler, 2011). Schools can also take another approach.
Schools can establish a proactive character education program tuned to digital youth, placing
digital activities within the classroom or school context (Ohler, 2011). It is important to
remember “when students are allowed to use authentic resources to apply what they have learned
to demonstrate conceptual mastery and solve real-world problems, their experiences in school
become more relevant and meaningful” (Scheninger, 2019, p. 111).

Students inappropriately using technology tools and staff lacking the necessary
technology skills and therefore underprepared to support students with their development of the
appropriate digital citizenry skills comprised the problem of practice for my study. We now
recognize that our students understand how to be kind and safe online, but are not transferring
the knowledge and skills in the moment. Our students are trying to navigate this ever-changing
digital world. I believe with a consistent message to all of our students with internet safety
training, our students will be able to be curious, safe, and appropriate when using technology. I
believe our technology initiative is sustainable, good and necessary for the students and
community of Hometown.

I look forward to continuing the communication and collaboration about digital
citizenship with the staff and students of Lincoln Intermediate School in Hometown District 1. I
want to continue to build positive relationships and make a positive difference in the lives of
students, staff, families, and our community with digital citizenship. The possibilities that come
from implementing digital citizenship are endless. And to think, this all started with a text
message.
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APPENDIX A: TEACHER LESSON PLAN

GRADE 6

Chatting Safely Online

How do you chat safely with people you meet online?

OVERVIEW

Games, social media, and other online spaces give kids opportunities to meet and chat with others outside the confines of their real-life communities. But how well do kids actually know the people they're meeting and interacting with? Help students consider whom they're talking to and the types of information they're sharing online.

See the U.K. version of this lesson plan

Students will be able to:

- Analyze how well they know the people they interact with online.
- Reflect on what information is safe to share with different types of online friends.
- Learn to recognize red flag feelings and use the Feelings & Options thinking routine to respond to them.

Key Vocabulary:

inappropriate
not acceptable in the situation; not okay

private information
information about you that can be used to identify you because it is unique to you (e.g. your full name or your address)

red flag feeling
when something happens on digital media that makes you feel uncomfortable, worried, sad, or anxious

risky
potentially harmful to one's well-being
Key Standards Supported

COMMON CORE

CASEL
1a, 1b, 1c, 1d, 1e, 3a, 3d, 4a, 4b, 4c, 4d, 5a, 5b, 5c, 5d, 5e, 5f

AASL
I.A.1, I.A.2, I.B.1, I.B.3, I.D.1, I.D.2, I.D.3, I.D.4, II.A.2, II.B.1, II.B.2, II.C.1, II.C.2, II.D.1, II.D.2, II.D.3, III.A.1, III.A.2, III.B.1, III.B.2, III.C.1, III.C.2, III.D.1, III.D.2, VA.2, VA.3, VC.1, VD.1

ISTE
1d, 2a, 2b, 2d, 3d, 6a

What You'll Need

Some resources below are available in Spanish

Classroom resources
- Blank paper
- Lesson Slides
- Video: Teen Voices: Who You’re Talking to Online
- Risky Chat Dilemma
  Handout Teacher Version
- Lesson Quiz

Take-home resources
- Family Activity
- Family Tips
- SEL Conversation Starter

Don't have time for a full lesson? 15 mins.

Use this quick activity to engage students around key learning outcomes. Get the quick activity
Lesson Plan

Warm Up: Who You're Talking to Online 10 mins.

1. Ask: By a show of hands, how many people use texting to communicate with their friends? Allow students to raise hands. Then ask: How about using other apps, like games, WhatsApp, YouTube, or something else? Raise your hand if you use one of those to message with friends.

2. Say: Today we're going to talk about your online community and the different people you message with online or through your phone. To begin, we're going to watch a brief video.

Project Slide 4 and ask students to consider the reflection questions as they watch the video.

3. Show the Teen Voices: Who You're Talking to Online video and have students take notes on their responses to the questions.

4. Pair up students and have them share their responses to the video questions. You can also invite students to share responses with the class.

Evaluate: Two Online Chats 15 mins.

1. Ask: Why should you consider how well you know someone before sharing something with them? Take turns sharing your ideas with your partner.

After students pair-share, call on volunteers to share out.

If students respond with reasons and examples that don't involve devices or online interactions, ask: What if it was through a text or online message? How would that affect your thinking?

Help students understand that sharing online with someone you don't know in person can be risky, which is potentially harmful to one's emotional or physical well-being (Slide 5). It's harder to predict what someone might do with the information you share — whom they might share it with or how they might use it. And it may be easier for them to do something harmful with it because it's harder to hold them accountable.

For that reason, you should never share private information without the permission of a trusted adult. Private information is information about you that can be used to identify you because it is unique to you (like your full name, your student ID, your phone number, or your physical address). (Slide 6)
2. Explain to students that they are going to look at two different online chats involving a girl named Sara. 

First, project Slide 7 (Sara and Asseal's chat) and invite one or more students to read it aloud.

Next, project Slide 8 (Sara and alex_eastwest13's chat) and invite one or more students to read it aloud.

3. Ask: Which of these online chats is more risky: the one with Asseal or with alex_eastwest13? Why?

Call on students to respond. Clarify that the alex_eastwest13 friendship would be more risky because she doesn't know him in person. She doesn't know anything about who this person is or how they interact with others.

4. Ask: What types of information did Sara share or get asked to share in each of these scenarios?

Call on students to share out and ask whether they think it was OK that she shared what she did. Sample responses:

- Asseal's chat: Sara felt comfortable sharing some information with Asseal because they were connected by her coach, an adult Sara trusts.
- Alex_eastwest13's chat: Sara should be really careful about what she shares with alex_eastwest13. She doesn't know anything about this person. She doesn't know what this person's intentions are and if they are truly who they appear to be. If students make statements about alex_eastwest13's gender or age, make sure to clarify that Sara has not seen or met alex_eastwest13 and doesn't really know those details.

5. Say: You should be careful when sharing information online, especially if it is with someone you don't have any real-life connection to or have just met randomly. And private information should never be shared unless you first get the permission of a trusted adult.

In addition to considering how well you know an online friend, you also need to be alert any time you are communicating in an online setting. Have you ever had an uncomfortable or awkward interaction with someone online?

Call on volunteers to share their experiences. Point out that these types of interactions are often the result of someone doing or saying something inappropriate, which is not acceptable or not OK. (Slide 9)
6. Project Slide 10 and say: Inappropriate behavior and speech online can lead to risky and unsafe situations. These types of situations may raise red flag feelings for you. A red flag feeling is when something happens on digital media that makes you feel uncomfortable, worried, sad, or anxious.

It is a warning of a possible problem. It is often a feeling in your stomach that something is wrong -- for example, that this person shouldn't be asking me this, or this feels like something I shouldn't be doing. Can anyone give an example of a situation that might cause a red flag feeling?

Call on students to provide examples. They may include someone:

- Asking you to keep information secret
- Flirting with you
- Asking you about anything private (phone number, address, school you attend)
- Making you feel pressured to do anything
- Causing you to feel untrue to yourself or your values
- Asking you to meet in person
- Asking you to send pictures of yourself
- Inviting you to chat but telling you not to tell anyone else

Analyze: Red Flag Feeling

1. Distribute the Risky Chat Dilemma Student Handout to each student. Tell students they're going to be taking a close look at the chat they saw before with alex_eastwest13. They will be using steps of the Feelings & Options thinking routine for handling this dilemma. Feelings & Options is a thinking routine that supports social skills and thoughtful decision-making for digital dilemmas.

Use the Teacher Version of the handout for guidance, and learn more about teaching with digital dilemmas and thinking routines.

Project Slide 11 with the Feelings & Options steps (also in the student handout).

Have students complete the worksheet individually.

2. Arrange students into groups of three to four, and have them discuss their responses together. Give groups two minutes to discuss each of the four sections. Use a timer if necessary and have them move on.

3. Invite each group to summarize their responses to the Feelings & Options steps. Use the teacher version of the handout for guidance.

Record student responses to the "Say" step of the worksheet on (Slide 12).
4. **Project Slide 13** and say: *When you have a red flag feeling, it's important to slow down, pause, and think about how you're feeling. Taking these steps will help you think through the options you have for handling the situation.*

5. **Optional:** If you have extra time, have students discuss the "Complicate" questions on Part 2 of the worksheet in groups. Have students share responses with each other or with the whole class.

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**Wrap Up: Exit Ticket**  

1. **Say:** When you are chatting online and something doesn't feel right, pay attention. Be sure to slow down, pause, and think about what might be causing the red flag feeling. Then you can decide on the best action to take to improve your situation.

2. **Project Slide 14.** On a piece of paper, have students take three minutes to respond to the questions. Invite volunteers to share their responses, if time allows.

3. **Have students complete the Lesson Quiz.** Send home the Family Activity and the Family Tips.

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**Additional Resources:**

1. **Extend the lesson:** Have students apply what they have learned by completing the "Is It Private Information?" activity on TestDrive, a social media simulator co-developed by the Cornell Social Media Lab and Common Sense Education. Students go through a self-guided activity to reinforce key concepts and practice managing online identities. For more information, download the Social Media TestDrive Educator Guide.

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Lesson last updated: December 2022
APPENDIX B: SLIDESHOW FOR PRESENTATION

DIGITAL CITIZENSHIP | GRADE 6

Chatting Safely Online

☑️ common sense education
Essential Question

How do you chat safely with people you meet online?
Learning Objectives

1. Analyze how well we know the people we interact with online.

2. Reflect on what information is safe to share with different types of online friends.

3. Learn to recognize red flag feelings and use the Feelings & Options thinking routine to respond to them.
WATCH + DISCUSS

Discuss:

- What are some of the benefits -- and risks -- of talking with people online that you don't know face-to-face?
- What's one comment in the video you agree with, and why?

To watch this video on the Common Sense Education site, click here.
Risky

Potentially harmful to one's emotional or physical well-being
Private information

Information about you that can be used to identify you because it is unique to you (e.g., your full name or your address)
Sara's soccer coach connected her with Asseal, a player he coaches from a nearby town. Sara and Asseal both play goalie and have other common interests, like playing in band.

They have been chatting off and on for about a month through a social media messenger app. They talk about games and problems they are having at school with friends. They have shared when and where they will be playing soccer. They have also told each other their team names, logos, and favorite soccer fields in the area.

Last week, Asseal sent her some memes of soccer players that included some bad language and inappropriate images. Asseal mentioned that she should probably make sure her parents don't see it.
Sara loves taking pictures and posting them to Instagram. A few months ago, she noticed alex_eastwest13 liked several of her photos and commented "you are so talented!" Sara was flattered.

Then she received a private message from alex_eastwest13 asking if she was a professional photographer or if she wanted to be one someday. Sara responded that it was her dream to be one when she grew up. Now they talk a lot through private messaging.

Sara also posts comments on alex_eastwest13’s photos, which are mostly of random objects and nature scenes. Last week, alex_eastwest13 asked if she would post more selfies because "i think u r beautiful." Alex_eastwest13 also messaged her a cell number so she could send more personal pictures. "Just don’t tell anyone I gave you this," alex_eastwest13 commented.
KEY VOCABULARY

Inappropriate

Not acceptable in the situation; not OK
Red flag feeling

When something happens that makes you feel uncomfortable, worried, sad, or anxious
ANALYZE: RED FLAG FEELINGS

Feelings & Options

**Identify.** Who are the different people involved in the scenario? What dilemma or challenge are they facing?

**Feel.** What do you think Sara is feeling? Why might the situation be hard or challenging for her?

**Imagine.** Imagine options for how the situation could be handled. Come up with as many ideas as possible. Then, choose which option might lead to the most positive outcome.

**Say.** Thinking more about the idea you chose for handling the situation, what could Sara do or say? Be as specific as possible.
What Should Sara Say?

1. [Capture student responses here.]
Ways to Respond

- Change the subject, make a joke, or say, "I don't want to talk about this."
- Log off or quit.
- Unfriend the person or block them; create a new account, or report the other user.
- Never plan a face-to-face meeting with someone you do not know unless you take along a parent or guardian.
- Ask a trusted adult for advice or help if you feel unsure or uncomfortable in any situation.
1. How will you use what you learned today in your own friendships online?

2. If you could give Sara one piece of advice for her online friendships, what would it be?
We know the power of words & actions.
APPENDIX C: IN CLASS ACTIVITY – STUDENT VERSION

common sense education
GRADE 6: CHATTING SAFELY ONLINE
Risky Chat Dilemma 🤔

Directions
Reread the dilemma below and then complete the Feelings & Options steps.

Risky Chat

Sara loves taking pictures and posting them to Instagram. A few months ago, she noticed alex_eastwest13 liked several of her photos and commented “you are so talented!” Sara was flattered. Then she received a private message from alex_eastwest13 asking if she was a professional photographer or if she wanted to be one someday. Sara responded that it was her dream to be one when she grew up. Now they talk a lot through private messaging. Sara also posts comments on alex_eastwest13’s photos, which are mostly of random objects and nature scenes. Last week, alex_eastwest13 asked if she would post more selfies because “I think u r beautiful.” Alex_eastwest13 also messaged her a cell number so she could send more personal pictures. “Just don’t tell anyone I gave you this,” alex_eastwest13 commented.

Identify: Who are the different people involved in the scenario? What dilemma or challenge are they facing?

Feel: What do you think Sara is feeling? Why might the situation be hard or challenging for her?
Imagine: Imagine how Sara could handle the situation. Come up with as many ideas as possible: There's no "right" answer! Then, circle which option might lead to the most positive outcome.

Say: Thinking more about the idea you chose for handling the situation, what could Sara say or do?

First: What could Sara say or do?

Second: How would Sara say it?

☐ In person
☐ Call or FaceTime
☐ Text
☐ Direct/private message
☐ Email
☐ Other: _______________________

Third: What would Sara say? Write out the conversation.

Part 2 - Complicate (optional): Discuss these questions in your group, and share responses. Be sure to hear all perspectives -- the more perspectives, the better!

- What if Sara tries ignoring alex_eastwest13 but alex_eastwest13 keeps finding ways to communicate with Sara?
- What if Sara politely says no to alex_eastwest13's request and alex_eastwest13 gets upset?
- What if alex_eastwest13 says he has met some of Sara's friends before?
APPENDIX D: IN CLASS ACTIVITY – TEACHER VERSION

common sense education
GRADE 6: CHATTING SAFELY ONLINE
Risky Chat Dilemma

Directions
Reread the dilemma below and then complete the Feelings & Options steps.

Risky Chat

Sara loves taking pictures and posting them to Instagram. A few months ago, she noticed alex_eastwest13 liked several of her photos and commented "you are so talented!" Sara was flattered. Then she received a private message from alex_eastwest13 asking if she was a professional photographer or if she wanted to be one someday. Sara responded that it was her dream to be one when she grew up. Now they talk a lot through private messaging. Sara also posts comments on alex_eastwest13's photos, which are mostly of random objects and nature scenes. Last week, alex_eastwest13 asked if she would post more selfies because "I think u r beautiful." Alex_eastwest13 also messaged her a cell number so she could send more personal pictures. "Just don't tell anyone I gave you this," alex_eastwest13 commented.

Identify: Who are the different people involved in the scenario? What dilemma or challenge are they facing?

- alex_eastwest13 and Sara are the people involved in this scenario.
- alex_eastwest13 flirted with Sara, asked for her cellphone number, and told her not to tell anyone.

Feel: What do you think Sara is feeling? Why might the situation be hard or challenging for her?

Answers will vary.
- Sara might feel anxious or uncomfortable.
- She doesn't know alex_eastwest13 well and questions the level of trust.
- If she does share pictures, alex_eastwest13 could continue asking for more or might share the pics with people. Sara doesn't know alex_eastwest13 and could also give her number to someone she doesn't know.
- If she doesn't share more pictures, alex_eastwest13 may stop talking to her, could get upset, or could publicly embarrass her.
**Imagine:** Imagine how Sara could handle the situation. Come up with as many ideas as possible. There’s no "right" answer! Then, circle which option might lead to the most positive outcome.

- Sara could send and/or post more selfies.
- Sara could ignore or block alek_eastwest.
- Sara could change the subject.
- Sara could ask a trusted adult for advice.

**Say:** Thinking more about the idea you chose for handling the situation, what could Sara say or do?

**First:** What could Sara say or do?

- She could say no and "I don't share photos privately."
- She could ignore or block alek_eastwest.
- She could tell a trusted adult.

**Second:** How would Sara say it?

- In person
- Call or FaceTime
- Text
- Direct/private message
- Email
- Other: ________________

**Third:** What would Sara say? Write out the conversation.

- "No, I don't share photos privately."
- "No, I don't know you."
- "You are silly! Why would I do that?"

She could say to a trusted adult:

- "I was chatting online with someone I don't know in person, but it's making me uncomfortable. What should I do?"
- "I was chatting online with someone I don't know in person, and I shared some stuff with them, but now I'm not so sure. What should I do?"
- "I was chatting online with someone I don't know in person and they gave me their phone number."
Risky Chat Dilemma

what should I do?

Encourage students to consider whether they would really say the words they have come up with. Ask "Do you think Sara would really say that?" or "Could you see yourself actually saying/sending a message like this, if you were the person in the scenario? Why or why not?" Help develop students' thinking and planning with questions that play out the scenario, such as, "What if alex_eastwest13 responds by saying he/she thought you were friends and now feels hurt?"

Part 2 - Complicate (optional): Discuss these questions in your group, and share responses. Be sure to hear all perspectives -- the more perspectives, the better!

- What if Sara tries ignoring alex_eastwest13 but alex_eastwest13 keeps finding ways to communicate with Sara?
- What if Sara politely says no to alex_eastwest13’s request and alex_eastwest13 gets upset?
- What if alex_eastwest13 says he has met some of Sara’s friends before?
APPENDIX E: FAMILY CONVERSATION STARTER

GRADES 6–8 FAMILY CONVERSATIONS

RESPONSIBLE DECISION-MAKING IN DIGITAL LIFE

Talk About How Your Child Can Stay Safe When Chatting with Others Online

Your child is learning strategies to help them make responsible decisions when they’re online. Use these questions to talk with them about the benefits and risks of chatting with people online.

Ask these three questions:

1. I hear you were talking in class about how you can be safe when talking to people online. What are some of the risks of talking with people you don’t know well?
   - Listen for (or suggest if needed):
     - You don’t fully know who you’re talking to, so you can’t completely trust them.
     - You don’t know whether they have bad intentions.

2. What are red flag feelings?
   - Listen for (or suggest if needed):
     - A red flag feeling is when something happens on digital media that makes you feel uncomfortable, worried, sad, or anxious. It’s often a feeling in your stomach that something is wrong and a warning of a possible problem.

3. What can you do if you ever have a red flag feeling when chatting with someone online?
   - Listen for (or suggest if needed):
     - Slow down, pause, and think about how you’re feeling and what might be causing it.
     - Decide on the best action to take to improve the situation (maybe ignore or block the person, log off, or tell a trusted adult).

Learn more about how to communicate online at commonsense.org/online-relationships-tips-for-families!

Family-handout for grade 6 lesson Chatting Safely Online, or 6–8 classroom activity Who Are You Talking to Online?
APPENDIX F: PRE-ASSESSMENT AND POST-ASSESSMENT SCORES

Table F-1

Pre-Assessment and Post-Assessment Scores

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<th>Student</th>
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<th>Post-Assessment Grade; #/5 points possible</th>
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<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>22</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>23-97</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>
APPENDIX G: TEACHER INTERVIEW THEMES/PATTERNS

Table G-1

Teacher Interview Themes/Patterns

<table>
<thead>
<tr>
<th>Interview Question</th>
<th>Themes/Patterns</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What information from the digital citizenship training was beneficial to you? (savvy)</td>
<td>Reminders are good and beneficial</td>
</tr>
<tr>
<td></td>
<td>Common sense</td>
</tr>
<tr>
<td></td>
<td>Staff appreciates the specific standards</td>
</tr>
<tr>
<td></td>
<td>Link between technology and academics</td>
</tr>
<tr>
<td>2. Describe the student's perceptions of appropriate online behavior. (safe, savvy, social)</td>
<td>Students are aware and know not to share anything personal</td>
</tr>
<tr>
<td></td>
<td>Students do not quite understand the importance or long-term effects</td>
</tr>
<tr>
<td>3. What digital skills have students learned from you? (safe, savvy, social)</td>
<td>Students may have more knowledge than staff do on how to use technology</td>
</tr>
<tr>
<td></td>
<td>Research safety and reliability</td>
</tr>
<tr>
<td></td>
<td>Technology shortcuts</td>
</tr>
<tr>
<td>4. What does digital citizenship look like in your classroom? (safe, savvy, social)</td>
<td>Safety is stressed in the classroom setting</td>
</tr>
<tr>
<td></td>
<td>Students are respectful</td>
</tr>
<tr>
<td></td>
<td>Use safe online resources provided by the teacher</td>
</tr>
<tr>
<td></td>
<td>Students are responsible and safe while online</td>
</tr>
<tr>
<td></td>
<td>Staff model and provide appropriate opportunities to practice</td>
</tr>
<tr>
<td>5. How has the introduction of the Innovation Lab supported your students? (safe, savvy, social)</td>
<td>Integration into the curriculum is difficult, but it extends the thinking and learning of the student when connected to the unit of study</td>
</tr>
<tr>
<td></td>
<td>Staff expressed fear/reluctance</td>
</tr>
<tr>
<td></td>
<td>District technology coach is helpful</td>
</tr>
<tr>
<td></td>
<td>Kids are excited about the lab and believe it is fun</td>
</tr>
<tr>
<td></td>
<td>Collaboration among staff and among students</td>
</tr>
<tr>
<td>6. We have many technology options. How do you know what technology to use in a specific situation? (savvy)</td>
<td>Colleagues share ideas</td>
</tr>
<tr>
<td></td>
<td>District technology coach</td>
</tr>
<tr>
<td></td>
<td>Professional development provided by the school or district</td>
</tr>
<tr>
<td></td>
<td>Research it myself</td>
</tr>
</tbody>
</table>
| 7. How do you learn about new technologies? (savvy) | District or school professional development  
District technology coach  
Colleagues  
Students  
Research it myself |
|---|---|
| 8. What else do you need to learn about digital citizenship? (savvy) | Reminders and refreshers  
Continued learning  
Staff expressed interest in how to support online safety outside of school |
## APPENDIX H: STUDENT INTERVIEW THEMES/PATTERNS

### Table H-1

*Student Interview Themes/Pat terns*

<table>
<thead>
<tr>
<th>Interview Questions</th>
<th>Themes/Patterns</th>
<th>Interview 1</th>
<th>Interview 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How do you stay safe online? (safe)</td>
<td>Keep private information private</td>
<td>Keep private information private</td>
<td>Keep private information private</td>
</tr>
<tr>
<td></td>
<td>Only use school approved safe search engines</td>
<td>Only use school approved safe search engines</td>
<td>Only use school approved safe search engines</td>
</tr>
<tr>
<td></td>
<td>Only go to school approved websites</td>
<td>Only go to school approved websites</td>
<td>Only go to school approved websites</td>
</tr>
<tr>
<td></td>
<td>Be cautious of what you say and do online</td>
<td>Be cautious of what you say and do online</td>
<td>Be cautious of what you say and do online</td>
</tr>
<tr>
<td>2. What types of information about you is OK to share online? (safe, social)</td>
<td>Uncertain</td>
<td>More certain of what can be shared</td>
<td>Likes and descriptive info</td>
</tr>
<tr>
<td></td>
<td>Likes and descriptive info</td>
<td>Likes and descriptive info</td>
<td>First names</td>
</tr>
<tr>
<td></td>
<td>First names</td>
<td>Limited information - nothing personal</td>
<td>Limited information - nothing personal</td>
</tr>
<tr>
<td></td>
<td>Limited information - nothing personal</td>
<td>If a trusted adult says it’s OK</td>
<td>If a trusted adult says it’s OK</td>
</tr>
<tr>
<td></td>
<td>If a trusted adult says it’s OK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. What types of information about you is not OK to share online? (safe, social)</td>
<td>Address</td>
<td>Address</td>
<td>Address</td>
</tr>
<tr>
<td></td>
<td>Password</td>
<td>Password</td>
<td>Password</td>
</tr>
<tr>
<td></td>
<td>Details about your life</td>
<td>Details about your life</td>
<td>Details about your life</td>
</tr>
<tr>
<td></td>
<td>Private identifying information</td>
<td>Private identifying information</td>
<td>Private identifying information</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phone number</td>
<td></td>
</tr>
<tr>
<td>4. How do you keep online friendships safe? (safe, social)</td>
<td>Know the people you are chatting with</td>
<td>Know the people you are chatting with</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Don’t share personal information</td>
<td>Don’t share personal information</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Being kind with words</td>
<td>Being kind with words</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Being respectful</td>
<td>Being respectful</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Protect yourself and your friends</td>
<td>Protect yourself and your friends</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Never meet people you don’t already know</td>
<td>Never meet people you don’t already know</td>
<td></td>
</tr>
<tr>
<td>5. How do you chat</td>
<td>Don’t share personal</td>
<td>Don’t share personal</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td><strong>safely with people you meet online? (safe, social)</strong></td>
<td><strong>information</strong> By using the username, not a real name Only chat with people you know Talking with the person as you would in real life</td>
<td><strong>information</strong> Talking with the person as you would in real life</td>
<td></td>
</tr>
<tr>
<td><strong>6. Have you ever felt unsafe while chatting online? (safe, social)</strong></td>
<td>Most answered no Yes, chats Yes, games</td>
<td>(no new experiences from the first interview to the second)</td>
<td></td>
</tr>
<tr>
<td><strong>7. What are you to do if you feel unsafe while chatting online? (safe, social)</strong></td>
<td>Tell an adult Unfriend them Block them</td>
<td>Tell an adult Unfriend them Block them</td>
<td></td>
</tr>
<tr>
<td><strong>8. How can you educate others to be safe online? (savvy)</strong></td>
<td>Tell them it’s unsafe Help friends/classmates Teach others by showing and telling them how to be safe Teach others by creating videos or documents on online safety</td>
<td>Model appropriate behavior Help friends/classmates Teach others by showing and telling them how to be safe Teach others by creating videos or documents about online safety</td>
<td></td>
</tr>
<tr>
<td><strong>9. We have many technology options. How do you know what technology to use in a specific situation? (savvy)</strong></td>
<td>Research for yourself Ask your teacher or a trusted adult Safe Sites Depends on the Assignment</td>
<td>Teacher assigns it Experience Use your Chromebook</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX I: RESEARCH QUESTIONS ANSWERED BY ITEM TYPE

The items on the teacher interviews, student interviews, and student pre- and post-assessment scores were connected specifically to the research questions.

1. In what ways has the internet safety training of digital citizenship supported students' perceptions of behavior with technology?
   
   Data analysis on:
   
   a. Teacher interview question 2
   b. Student interviews
   c. Student pre- and post-assessment comparison

2. In what ways has the internet safety training of digital citizenship supported students' digital skills with technology?
   
   Data analysis on:
   
   a. Teacher interview question 3
   b. Student interviews
   c. Student pre- and post-assessment comparison

3. How have students grown as Safe, Savvy, and Social members of the digital world?
   
   Data analysis on:
   
   a. Teacher interview question 5
   b. Student interviews
   c. Student pre- and post-assessment comparison

4. In what ways has the digital citizenship training for staff supported staff’s understanding of digital citizenship in the classroom?
   
   Data analysis on:
a. Teacher interview question 1
b. Teacher interview question 4
c. Teacher interview question 6
d. Teacher interview question 7
e. Teacher interview question 8