Educators' Perceptions on Digital Citizenship and Secondary Education:

A Basic Qualitative Study

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Abstract

Negative correspondence with online activity has become an increasing challenge within secondary school settings with the rapid increase in technology. The problem is that secondary educators face multiple challenges in digital citizenship, including a lack of professional training and curriculum support. A gap exists in the literature based on the lack of data collection on secondary educators' perceptions of digital citizenship training and curriculum. The purpose of this basic qualitative study was to explore the perspectives of secondary teachers in South Carolina regarding their experiences with the digital citizenship curriculum and how professional training affects their instruction and student learning. The research questions sought to understand the effect digital citizenship training has on instruction and student learning while also understanding the effects of integrating a digital citizenship curriculum on educators based in South Carolina. A basic qualitative study used purposive and snowball sampling to recruit 15 public secondary educators from social media platforms. Data collection occurred through semi-structured virtual interviews and was analyzed using Braun and Clarke's thematic analysis. Results indicated the need for educators to receive supportive professional training to support student learning and instruction with digital citizenship and that most educators incorporate digital citizenship and see the negative impact that improper use of social media can have on students. Secondary educators will benefit from the research, and positive social change can occur by implementing digital citizenship instruction and professional training.

Keywords: instructional technology, digital citizenship, connectivism learning theory, TPACK, current practices

Dedication

This dissertation is dedicated to my family. Your love, support, kindness, and encouragement have kept me going through this incredible journey. My husband has been my unwavering support system through this journey's hardships. My daughters have seen me pursue my dream, and I hope I have shown them that hard work and dedication pay off. My parents have been an immense support, and I would not be where I am today without their love and guidance.

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I want to thank my family, friends, and coworkers for all their support and encouragement throughout my doctoral journey. I want to thank my chair, Dr. Sandra Quiatkowski, and my committee member, Dr. Sophia Lafayette, for providing invaluable feedback and helping keep me on track. In addition, I would like to thank all of my participants in the study for providing your time and expertise. Finally, I would like to thank the faculty and fellow students who have influenced and encouraged me in times of despair.

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Chapter 1: Introduction

A topic for incorporating instructional technology that is utilized to address challenges with technology use in secondary educational settings is digital citizenship education (Martin et al., 2019). The rapid development and implementation of technology within education have increased since 2011 and have posed new challenges for teachers (Piceci et al., 2021). Digital citizenship is under-researched and requires other areas of inquiry based on curriculum development, assessments, instructional delivery, and professional training for teaching students in a post-pandemic, digital world (Buchholz et al., 2020).

Exploring alternative instructional delivery was necessary to abridge education during the pandemic (Piceci et al., 2021). Secondary educators can benefit from the study by understanding perceptions of other secondary teachers' experience with curriculum implementation and professional training on digital citizenship. Classroom application of digital citizenship can directly influence the student's understanding of proper digital etiquette and the safety of the online learning environment (Buchholz et al., 2020). With the continuing increase of social media, online learning platforms, and instructional technology integration, a necessity has arisen for educators to be provided ongoing training in digital citizenship curriculum integration. The introduction includes the following sections: background of the problem, statement of the problem, the purpose of the study, the significance of the study, research questions, theoretical framework, definition of terms, assumptions, scope and delimitations, limitations, and the chapter summary.

Background of the Problem

Educators face challenges today with the increasing development and push for technology in the classroom. The background of the study stems from a gap due to under-researched studies on secondary educators' perceptions of digital citizenship applications. Based

on the gap in the research, there is also underdevelopment of necessary and appropriate

technology training for educators within the secondary education setting (Ince, 2022). Digital

citizenship training and skillsets are crucial for students to learn and be consistent and aware of

the negative and positive impacts they can have with the internet (Farmer, 2011). American teens

face cyberbullying issues, with at least 88% of them witnessing or participating in cruel or

negative online behavior (Phillips & Anderson, 2020). New expectations and challenges for

educators can occur when incorporating technology, understanding the technology, and using

innovative technology best practices in classrooms to meet the needs of digitally driven students

(Ince, 2022). Practical classroom implementation of technology is necessary to provide students

with an understanding and correct application of online safety protocols and technology

proficiencies to be productive members of the digital age (Buchholz et al., 2020).

Digital Citizenship

Varying definitions of digital citizenship have confused educators' understanding of

digital citizenship (Ribble & Park, 2020). A broad concept of digital citizenship correlates with

citizens' right to access an online digital society (Ribble & Park, 2020). Digital citizenship

directly impacts students' and educators' lives because of technology's impact on education in the

21st century (Saputra & Al Siddiq, 2020). The S3 Framework that can aid educators includes

digital access, digital commerce, digital communication and collaboration, digital etiquette,

digital fluency, digital health and welfare, digital law, digital rights and responsibilities, and

digital security and privacy (Ribble & Park, 2020). School technology plans can be organized

based on the S3 Framework to support digital instruction, resources, assessments, and

engagement within digital citizenship education (Piceci et al., 2021).

Digital Citizenship Challenges

Digital content has drastically changed how students perceive and learn new information and how they can effectively navigate the online world (Ghosn-Chelala, 2019). Positive social media is a prevalent challenge for educators to address with students who increasingly are using handheld devices and actively engaged in social media use (Saputra & Al Siddiq, 2020). Teens today use social media and online communication for daily interactions, which impedes their everyday life and education (Phillips & Lee, 2019). These prevalent challenges arise even more when educators do not have adequate or necessary technology training or are underprepared to teach students the essential digital skills to cultivate positive digital citizens (Piceci et al., 2021).

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Statement of the Problem

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The problem is that secondary educators face multiple challenges in digital citizenship, including a lack of professional training and curriculum support. Digital citizenship education addresses the appropriate and responsible use of informational technology (Avci & Durak, 2022). Around 90% of the population have digital skills but lack a digital understanding of the internet's implications (Egresitz, 2020). Challenges for digital citizenship are ongoing and based on the increased use of technology in the classroom (Martin et al., 2019). Teachers need ongoing support for professional training and curriculum in the ever-changing digital world, and teaching in a post-pandemic educational setting has shifted the needs of today's students (Piceci et al., 2021).

Educators should receive appropriate training and properly understand digital engagement and literacy to cultivate positive digital citizenship education for students (Phillips & Lee, 2019). When using technology in the classroom, training students with an established digital citizenship framework should be prioritized (Sanchez et al., 2019). Technology is

essential for today's online, in-person, and hybrid learning environments, and training educators is crucial to increase pedagogy and instructional technology content knowledge (Gazi, 2016). Instructional technology frameworks can provide appropriate training and support technology initiatives for educators (Armfield & Blocher, 2019).

Cyberbullying is a significant challenge for students, and addressing digital citizenship with students can help alleviate this pressing and critical issue (Windisch et al., 2022). There can be a divide between a student's home and academic life, leading to more challenges in students' appropriate use of technology (Baruch & Erstad, 2018). Digital citizenship curricula and training have shown improvement in addressing these challenges across all content areas. Utah is currently the only state with a digital citizenship education requirement (Phillips & Lee, 2019). A gap in the literature is due to a lack of studies exploring secondary educators' perceptions of digital citizenship training and curriculum (Martin et al., 2019). Practical teacher training on the appropriate use of technology is vital for the success of digital citizenship education and for cultivating students' necessary digital skills for student success (Pedersen et al., 2018).

Purpose of the Study

The purpose of this basic qualitative study was to explore the perspectives of secondary teachers in South Carolina regarding their experiences with the digital citizenship curriculum and how professional training affects their instruction and student learning. The study focused on public secondary teachers' experiences with digital citizenship curriculum and professional training and the effects on teaching and student learning through collecting qualitative research. There is a need to provide teachers with adequate training and curriculum integration for digital citizenship. A lack of studies is prevalent for seeking information on educators' perceptions of this field (Martin et al., 2019). Connectivism (Siemens, 2005) and the Technology, Pedagogy,

and Content Knowledge (TPACK) model (Mishra & Koehler, 2006) guided the study.

Understanding secondary South Carolina teachers' experiences with professional training and integration of a digital citizenship curriculum is crucial to the field of education. More insight into the prevalent issues about digital citizenship using open-ended, semi-structured interviews occurred in the study. Educational research and policies are directly influenced by qualitative research that can propose new and necessary changes (Hollands & Escueta, 2020). A basic qualitative methodology supported this study because the research seeks to understand people and their real-world experiences, allowing for a deeper understanding of how people think and make connections (Yin, 2016). Interviews are an effective method to obtain data and use conversations to learn about phenomena within the world and make connections (Naz et al., 2022). The study explored the perspectives of 15 South Carolina secondary teachers recruited through the two private education Facebook groups and LinkedIn.

Significance of the Study

Integrating digital citizenship curricula into public secondary education settings is necessary to advance educational research and ensure students' success as digital natives and productive members of today's digitally driven society (Ghosn-Chelala, 2019). Challenges teachers face in education have increased due to the pandemic. They can be addressed by forming a community, employing open communication, including ethical considerations, digital etiquette, and implementation of digital citizenship frameworks such as the International Society for Technology in Education (ISTE) standards (Buchholz et al., 2020). Social media and cyberbullying are two vital factors influencing this study's significance because they are critical challenges to address to improve students' digital footprints (Saputra & Al Siddiq, 2020). A prevalent need to collect and analyze data on the perspectives of secondary educators'

professional training and integration of digital citizenship curricula is imperative to address the gap in the research.

The study contributes to the existing research and provides information on addressing digital citizenship. Information gathered and analyzed adds to the field of educational technology and encourages future research or policies to be conducted and beneficial for stakeholders such as teachers, students, parents, community leaders, administrators, and district-level personnel. Positive social change can occur through influencing and educating students appropriately on the importance of addressing digital citizenship and technology's impact on students' daily lives. The implications for positive social change can promote policy changes for digital citizenship to become a requirement for all school-wide curricula by offering appropriate professional training for teachers to create positive change for student learning and online etiquette.

Research Questions

Two research questions that focus on the perceptions of digital citizenship with secondary South Carolina educators were developed to align with the study's problem statement, purpose statement, and data collection instruments. Qualitative research provides advantages through flexibility and gives insight to help answer the research questions (Yin, 2016). This research aimed to understand educators' perceptions of digital citizenship professional training and the effects of integrating digital citizenship curriculum within a secondary education setting. The following research questions guided the study:

Research Question 1: What are the professional training experiences of educators on digital citizenship relating to instruction and student learning at public secondary education schools in South Carolina?

Research Question 2: What are the effects of integrating a digital citizenship curriculum

on educators in public secondary education schools in South Carolina?

Theoretical Framework

Siemens' (2005) connectivism learning theory and Mishra and Koehler's (2006) TPACK model guided the study. Connectivism is an alternative learning theory because it focuses on technology and the formation of connections of digital information (Siemens, 2005). Collaboration, communication, and change are essential for technology and education and directly correlate with Siemens' connectivism learning theory (Siemens, 2005). The TPACK model, also identified as a framework, formulates a connection between content, pedagogy, and technology to help educators improve instructional technology teaching strategies (Mishra & Koehler, 2006).

Key elements of the study include digital citizenship training and instructional implementation of technology practices. The TPACK model (Mishra & Koehler, 2006) and the constructivism learning theory (Siemens, 2005) directly aligned with the study's approach, research questions, data instruments, and data analysis that sought to understand secondary educators' integration and professional training on digital citizenship. Educators in a technology-driven society must understand how to appropriately learn and incorporate technology into instructional practices (Mishra & Koehler, 2006). Many teachers feel unprepared or inadequate when integrating technology within the classroom (Voithofer & Nelson, 2021). Connectivism supports educators' technology integration by training educators and students to identify, access, and make informed, appropriate decisions based on consumed information from the internet (Cleary, 2021). The alignment from the theoretical framework guided the study to use basic qualitative research and data analysis to identify secondary educators' perspectives of digital citizenship integration through instruction and professional training based on secondary

education curriculum. Braun and Clarke's (2006) six-phase thematic qualitative approach facilitated thematic data analysis supporting the theoretical framework. The literature review provided a more in-depth analysis of the two theories.

Definitions of Terms

Defining terms in research is vital to help understand concepts that are used and essential to the study but are rare knowledge. Grounded research comes from using peer-reviewed articles that clarify the understanding of a concept or term to support the analysis (Smaldone et al., 2019). The following definitions that emerged from the literature review can help readers better understand the significance of the critical terms utilized throughout the study.

Citizenship is defined as "the relationship between people and the nation-state" (Pangrazio & Sefton-Green, 2021, p. 18).

Cyberbullying is defined as "bullying that takes place over digital devices such as cellphones, computers, and tablets" (Martin et al., 2019, p. 241).

Digital citizen is defined as "exhibiting appropriate and responsible behavior with digital technology use, is an essential component of technology education" (Martin et al., 2019, p. 238).

Digital etiquette is defined as "the electronic standards of conduct or procedure. Digital citizens use technology in ways that are contextually appropriate" (Hui & Campbell, 2018, p. 120).

Digital law is defined as "the electronic responsibility for actions and deeds. Digital citizens are aware of laws related to technology use and distinguish between legal and illegal use" (Hui & Campbell, 2018, p. 120).

Digital literacy is defined as "the ability to read, write, and interact on/across screens to engage with diverse online communities" (Buchholz et al., 2020, p. 12).

Digital privacy is defined as "the privacy of the digital information shared as well as the privacy of the individuals sharing it" (Martin et al., 2019, p. 242).

Digital rights are defined as "rights that simply pertain to activities that are solely digital such as with reference to signing the terms and conditions when using new software" (Pangrazio & Sefton-Green, 2021, p. 16).

Professional development is defined as *"*an important role in teachers' professional lives, providing pathways for teachers to improve their knowledge, skills, capabilities, and confidence" (Perry, 2023, p. 2).

Secondary education is defined as "ages 11 or 12 through 18 or 19 and is divided into two levels: lower and upper secondary. For the purposes of statistical comparability, the United States has defined lower secondary education as grades 7 through 9 and upper secondary as grades 10 through 12" (Matheson, 1996, p. 19).

Assumptions

Qualitative assumptions are defined as trying to understand an objective versus a singular reality (Yin, 2016). Seeking to understand the social acceptability or legitimacy of the understanding of knowledge and if it is objective or interpretive are the assumptions of qualitative research (Rose & Johnson, 2020). Assumptions in qualitative research are necessary and can directly impact the study's validity, reliability, and generalizations (Hays & McKibben, 2021). The nature of assumptions is unavoidable and necessary to the research. In the study, the first assumption was that participants would openly communicate and be truthful during the interview process. The second assumption was that the participants were knowledgeable and had experience with digital citizenship education.

Scope and Delimitations

The definition of scope related to qualitative research is having complete research from start to finish built on a foundation of previously published sources (Yin, 2016). Research was explored based on the perceptions and perceived experiences of secondary South Carolina educators (Coker, 2022). Delimitations within qualitative research narrow the scope and make the research, data collection, and analysis more manageable by guiding focus to address the research questions (Coker, 2022). The study's delimitations were made to include the problem, research questions, subjects, location, objectives, theories, and methods. Objectives of the study aimed to provide the experiences of secondary educators with the digital citizenship curriculum and how professional training affects instruction and student learning. Subjects and location of the study included collecting data through the purposive sampling and snowball sampling of 15 public secondary South Carolina educators from two private education Facebook groups and LinkedIn through virtual, semi-structured interviews.

Data were collected through transcripts and analyzed using the NVivo software. Braun and Clarke's (2006) six-phase thematic qualitative approach was used to identify significant themes. Siemens' (2005) connectivism learning theory and Mishra and Koehler's (2006) TPACK model were the study's two adopted theories. Transferability is the expansion of the study's findings to other contexts or situations (Yin, 2016). The potential effect of the scope and delimitations on the transferability of the results was the use of a smaller sample size that might not be generalized for a larger population.

Limitations

Limitations in research can constrain the research and affect generalizations (Yin, 2016). A limitation of qualitative research is the difficulty of extending findings to a broader population.

The basic qualitative methodology and research design address transferability, dependability, validity, and biases to help control limitations in qualitative research. Validity must be consistent within the study (Williams & Moser, 2019). Verification of the research can be used to support the study's validity (Rose & Johnson, 2020). Transferability can be ensured through systematic sampling, document audits, and constant comparisons (Stahl & King, 2020). Constant comparison was accomplished using NVivo software to code data (Dhakal, 2022). The study's dependability was assured through member checks and audit trials (Stahl & King, 2020).

Researcher bias was addressed to control limitations. Bracketing occurred to set aside personal beliefs if any participants were previously known (Emiliussen et al., 2021). Ethical procedures were required to address the legal research methods while conducting research with human participants. Use of the U.S. Department of Health, Education, and Welfare (1979) *Belmont Report* was critical to reduce researcher bias and address respect for persons, beneficence, and justice. A letter of informed consent and communication remained professional and confidential to reduce bias (Collins & Stockton, 2022).

Chapter Summary

An expansion of technology integration is prevalent in today's 21st-century educational settings (Piceci et al., 2021). Understanding technology, teaching with technology, and using best practices in the classroom are imperative to reach today's technology-savvy students (Ince, 2022). Since 2020, the global pandemic exacerbated the need to address alternative instructional methods through technology (Piceci et al., 2021). The purpose of this basic qualitative study was to explore the perspectives of secondary teachers in South Carolina regarding their experiences with the digital citizenship curriculum and how professional training affects their instruction and student learning. Technology proficiencies and understanding online safety are two prevalent

skillsets for today's youth and can be addressed through digital citizenship curricula (Buchholz et al., 2020). Few studies have explored the perspectives of secondary teachers' experiences with digital citizenship curriculum and how professional training affects instruction and student learning, presenting a gap in the literature. The assumptions of the study were valid and plausible. Limitations were outlined, while the scope and delimitations addressed the study's boundaries. Siemens' (2005) connectivism learning theory and Mishra and Koehler's (2006) TPACK model are the two theoretical frameworks that guided the study and provided alignment. The following Chapter 2 presents an in-depth, comprehensive literature review to provide background knowledge on digital citizenship education.

Chapter 2: Literature Review

An increase in immediate access to the internet through handheld devices has amplified the risk of online bullying and negative correspondences in the online setting and is a significant issue with students (Saputra & Al Siddiq, 2020). Technology is rapidly present in daily life and has increased substantially over the past 20 years (Piceci et al., 2021). More recently, the COVID-19 global pandemic increased instructional technology use more drastically in schools (Piceci et al., 2021). The study expanded on the necessity for schools to use alternative instruction methods through technology to keep schools open during the pandemic. The problem is that secondary educators face multiple challenges in digital citizenship, including a lack of professional training and curriculum support. The background of the problem stems from a gap in providing and continuing appropriate technology training in the educational setting (Ince, 2022). The purpose of this basic qualitative study was to explore the perspectives of secondary teachers in South Carolina regarding their experiences with the digital citizenship curriculum and how professional training affects their instruction and student learning.

Teachers should be able to understand technology, integrate technology, and use innovative methods within a classroom setting to reach today's digitally driven students (Ince, 2022). Students process and gather information using technological devices in the 21st-century digital age and tend to lack a basic understanding of safe and ethical online usage (Buchholz et al., 2020). Providing teachers with training for computers, technology, software, technology curricula, and technology resources is essential to solidifying understanding of the importance of technology integration (Ince, 2022). Educating students on digital citizenship skills is crucial because students should understand the importance of cultivating a positive digital reputation and be aware of all interactions and behaviors on the internet (Farmer, 2011). Technology integration is vital to an effective learning environment (Ince, 2022). Practical classroom implications of

using a digital citizenship curriculum should result in having technological proficiencies and an understanding of online safety (Buchholz et al., 2020). A necessity has arisen for instructors to be provided with appropriate and ongoing training on digital citizenship curriculum training and integration.

Two significant theories correlating to digital citizenship are the Technology, Pedagogy, and Content Knowledge (TPACK) model and the connectivism learning theory (Aslam et al., 2021; Siemens, 2005). Common themes and ideas in the literature review correlating with digital citizenship are education, ethics, practice, and pedagogy. A gap in the literature shows that digital citizenship is an essential issue of instructional technology requiring more research and understanding in secondary education because of an increased need for students to understand emerging technologies and necessary skillsets in today's digitally driven workforce. The TPACK framework is needed for teachers to effectively instruct with technology (Koehler et al., 2013). The literature review included the following sections: a literature search strategy, the theoretical framework, a review of current literature, and a summary.

Literature Search Strategy

Library databases and search engines used for finding relevant theoretical and empirical articles for this dissertation were the ACE OneSearch, ERIC, ProQuest Education Database, JSTOR, and SAGE journals. When using library search engines, presets such as *peer-reviewed* and *year published* were marked to ensure scholarly sources were found. The database searches provided the means to locate relevant and current articles while using the key terms in the searches helped shape the study's flow.

Broadened key terms focused on two significant aspects of the literature review: the theoretical framework and the current literature review. The broadened critical terms for the

theoretical framework search included *connectivism learning theory, technology, current practices, and TPACK.* The literature search strategy broadened keywords were *digital citizenship, instructional technology, and education.* Using the broadened concepts with combinations of other keywords included *definitions, citizenship, integration, implications, challenges, training, ethics, gaps in the literature, and social media use.* The literature search strategy used a wide variety of keyword combinations of the search terms to narrow the collection of relevant articles, including *educators' perspectives on digital citizenship, digital citizenship and social media, digital citizenship and the global pandemic, digital citizenship and ethics, digital etiquette, digital privacy and security, digital law, digital responsibilities, digital literacy digital citizenship pedagogy, digital citizenship practices, digital citizenship challenges, digital citizenship integration, digital citizenship implications, gaps in digital citizenship education, digital citizenship curriculum, and digital citizenship professional training.*

Theoretical Framework

The application of the dimensions of the connectivism learning theory and the dimensions of the TPACK model supported the purpose of the basic qualitative study (Mishra & Koehler, 2006; Siemens, 2005). The theoretical framework supported the study because the aim was to understand educators' overall perspectives on professional training and the integration of digital citizenship in the secondary education curriculum. The TPACK model and the connectivism learning theory support teacher technology training and understanding of the importance of digital citizenship integration within the secondary curriculum (Aslam et al., 2021; Siemens, 2005). Educators must first be knowledgeable about the relationship between technology, pedagogy, and content, and both theories blended to support the purpose and problem of the study (Mishra & Koehler, 2006; Siemens, 2005).

The TPACK model can support teachers who train and integrate a digital citizenship curriculum into the secondary education setting (Mishra & Koehler, 2006). Instructors gain technical skills and necessary knowledge through technology use with students and facilitation of student learning when implementing the TPACK model (Baturay et al., 2017). Connectivism learning theory provides support to teachers when using technology to process information and engage with peers in an online setting (Lang, 2016). Digital citizenship's primary focus is for citizens to have a right to engage in an online community or society (Pangrazio & Sefton-Green, 2021). Connecting with others in an online setting is a common theme in both digital citizenship and the connectivism learning theory, allowing for alignment of the theoretical framework to the study (Siemens, 2005).

Technology devices and the internet are more widespread in educational settings, but providing students and teachers with technology does not automatically equate to improved student achievement (Baturay et al., 2017). A theoretically grounded theory built upon Shulman's pedagogical content knowledge (PCK) is the TPACK conceptual framework (Mishra & Koehler, 2006). The Technology, Pedagogy, and Content Knowledge (TPACK) was cultivated to address challenges faced in instructional technology (Mishra & Koehler, 2006). More recent studies show the necessity to continue using the TPACK framework, especially in teacher education training programs (Voithofer & Nelson, 2021). Ultimately, the TPACK model focuses on the pedagogical use of technology integration through three main components in the learning environment: content, pedagogy, and technology (Mishra & Koehler, 2006).

Technology is present in the 21st century educational world from K-12 and continues through ongoing academic pursuits (Baturay et al., 2017). Integrating technology in education results from studying what teachers should know to successfully and appropriately incorporate

technology into instruction (Mishra & Koehler, 2006). The PCK learning theory identifies

interest in knowledge of teaching through blending content and pedagogy and understanding

how various topics and issues are presented to address learners' diverse needs through varying

instruction (Shulman, 1986). Mishra and Koehler (2006) found difficulties in developing a

theoretical framework based on educational technology because technology integration can vary

from school to school.

When Shulman created the PCK framework, technology was not as abundant and readily

available as it is in the 21st-century digital age (Mishra & Koehler, 2006). With the abundance of

technology in education, the TPACK framework formulates a connection between content,

pedagogy, and technology to further develop better teaching strategies and ultimately help

teachers improve instruction. Educators should use specific pedagogical methods and practices

based on a specified content area in correlation with the TPACK framework (Voithofer &

Nelson, 2021). The heart of the TPACK framework stemmed from the interaction and

relationship between content, pedagogy, and technology, which increases technology integration

in an educational setting (Koehler et al., 2013).

Newer teachers feel inadequately prepared for technology integration and how to support

student learning (Voithofer & Nelson, 2021). Educators' perspectives at the pre-service level are

directly influenced, either positive or negative, towards technology integration based on the

training they received or did not receive in their pre-service program. Utilizing appropriate

pedagogical strategies, providing necessary teacher training, and applying practical technological

tools can help implement technology through the TPACK framework, thus increasing student

learning and technology competencies (Baturay et al., 2017). The International Society for

Technology in Education (ISTE) standards can help address the necessary technical training for

pre-service educators by providing guidelines for appropriate technology-specific competencies teachers should possess and apply to increase student learning (Voithofer & Nelson, 2021).

Behaviorism, constructivism, and cognitivism are often considered when researching educational learning theories. However, they lack an essential aspect of education that is increasingly predominant in today's digital society, and that is technology (Siemens, 2005). The development of an alternative learning theory that focused on technology and forming connections resulted in the formation of connectivism, allowing learning to focus on the ability to recognize and decipher between important and unimportant information (Siemens, 2005). More recent studies have shown the connection between connectivism and the development of Massive Open Online Courses (MOOCs; Downes, 2019). Understanding the ability to access, identify, understand, and make decisions based on digital information is a critical component of connectivism (Cleary, 2021).

Connectivism learning theory is relevant to digital citizenship because it balances processing information online with engagement and interactions with others (Lang, 2016). Online engagement is important to digital citizenship and connectivism (Siemens, 2005). The nine principles developed in the connectivism learning theory are essential in understanding that learning, unlearning, and relearning information are imperative for learning and processing data in the technological and educational world (Utecht & Keller, 2019). Technology provides the necessity for change, collaboration, communication, and research that can be directed back to Siemens' connectivism learning theory (Siemens, 2005).

The TPACK framework focuses on technology integration through pedagogical practices (Voithofer & Nelson, 2021), while the connectivism learning theory is utilized to describe digital learning and online connections (Downes, 2019). Both theories strongly correlate with digital

citizenship skills and curriculum, focusing on instructional technology and how it impacts student learning (Mishra & Koehler, 2006; Siemens, 2005). Connectivism has been transitioned into classroom environments by researchers through highlighting classroom interactions, sharing knowledge, and learning independently with technology integration (Downes, 2019). Other classroom applications of connectivism correlate with the development of MOOCs with the main idea of providing network learning opportunities (Downes, 2019). Connectivism learning theory and the TPACK framework are aligned to the study's problem and purpose statement. The alignment to the framework guided the analysis to capture educators' perspectives of professional training and integration of digital citizenship in their secondary education curriculum. The framework also supports further research for the gap presented in the literature review.

Research Literature Review

Students are growing up in a digital childhood that varies significantly from previous generations' upbringing (Baruch & Erstad, 2018). Technology is more prevalent today, and the amount of content and information processed daily has increased, causing the necessity to teach digital citizenship skills in education (Farmer, 2011). The influx of technology and one-to-one devices in schools has caused more exposure to digital content for younger children (Baruch & Erstad, 2018). COVID-19 drastically increased students' time on devices, increasing the need to address information technology within education (Avci & Durak, 2022). Digital content changes how children learn, process information, and communicate with others (Baruch & Erstad, 2018). Educators should understand the significance of the digital citizenship curriculum and receive the appropriate training (Ince, 2022). A digital citizenship curriculum is beneficial for supporting student achievement in the digital age because of the influx in technology integration in education.

Digital citizenship can be viewed as individuals using digital technology while exhibiting appropriate and responsible behavior (Martin et al., 2019). The ISTE standards address the crucial aspect of digital citizenship for educational technology and educators teaching students these critical skills (ISTE, 2019). Creating best practices with digital citizenship to allow students to cultivate ethical and practical norms is essential to instructional technology (Zembylas, 2021). The review of current literature presents various researchers who have approached the topic of digital citizenship through both quantitative and qualitative research analysis.

The literature review narrows the broad topic of digital citizenship to how specifically the digital citizenship curriculum is perceived in the educational setting. Topics included in the current literature review are digital citizenship defined, integration of digital citizenship, implications, challenges, and gaps in the literature. The review summarizes the importance of implementing a digital citizenship curriculum and providing educators with appropriate and ongoing professional learning.

Digital Citizenship Defined

Digital citizenship can be hard to define because researchers have varying opinions on what digital citizenship entails (Ribble & Park, 2020). Pangrazio and Sefton-Green (2021) stated that citizenship is the relationship between an individual and the nation. In comparison, digital citizenship provides the right to access digital society online. A broad concept of digital citizenship centers around individuals who effectively participate in online communities (Ghosn-Chelala, 2019). Digital technology's impact on citizens' daily lives is another core concept related to digital citizenship (Saputra & Al Siddiq, 2020). Individuals who interact with social media or other forms of electronic communication are a newer concept used to define digital

citizenship (Brandau et al., 2022). Civilians actively engage in society, commerce, politics, and online culture through communication technology which is emphasized in defining digital citizenship (Yue & Beta, 2022). Interaction and communication are critical elements in the connectivism learning theory (Utecht & Keller, 2019).

An issue with digital citizenship has arisen in Asia based on the need to address new behaviors and norms concerning technology use related to increased online participation with digital media and political understanding and awareness for youth (Yue & Beta, 2022). Established norms or behaviors correlated with technology use cultivated nine elements associated with addressing the need to teach digital citizenship (Hui & Campbell, 2018). Ribble and Park (2020) established criteria that show the appropriate, empowered, and responsible way to use technology in digital citizenship. In assisting in reaching the goal outlined in defining digital citizenship, a framework was provided that included three principles: safe, savvy, and social (S3 framework).

Individuals having the ability to protect themselves and others in an online environment by using technology safely is significant in the S3 framework (Ribble & Park, 2020). People should be educated on technology use and seek to educate others to achieve savvy. In direct correlation, the TPACK framework's goal supports educators' development of technology knowledge and the ability to implement instructional technology (Koehler et al., 2013). Being effectively social in a technology setting and respectful to others in the online community is essential for digital citizenship. Nine total elements of digital citizenship are used in support of the S3 Framework (Ribble & Park, 2020).

Elements included in supporting the S3 Framework are digital access, digital commerce, digital communication and collaboration, digital etiquette, digital fluency, digital health and

welfare, digital law, digital rights and responsibilities, and digital security and privacy (Ribble & Park, 2020). Along with understanding the nine elements, students must also have motivating factors to help them know how to use technology safely and appropriately (Hui & Campbell, 2018). The three areas of the S3 Framework and the nine elements of digital citizenship are meant to be used to cultivate school technology plans. School instructional technology plans should include training teachers on competencies for using digital resources, instruction, engagement, and assessments for digital citizenship (Piceci et al., 2021). Creating a foundation of knowledge and digital skillsets that can be carried into other facets of life for the students is vital in today's digitally driven classrooms (Ribble & Park, 2020).

Understanding proper online actions versus simply knowing how to use technological tools is of the most importance when considering why digital citizenship should be embedded into the school curriculum (Ribble & Park, 2020). Various wording and phrasing are used to highlight different aspects of digital citizenship. Still, as a collective, there is a common tone in defining digital citizenship and the necessity to address digital law, digital rights and responsibilities, etiquette, and the responsible use of technology through digital citizenship curricula (Egresitz, 2020).

Citizenship

Concepts of digital citizenship are expanded from the definition of citizenship. Citizenship is defined as the status of community member who has established rights and duties (Pedersen et al., 2018). However, a new option to view citizenship in the digital context is necessary for individuals involved in social media. Redefining citizenship should consider including life practices in a working definition of citizenship for today's youth (Zhang et al., 2022). Education is central to cultivating a citizen based on civil, political, and social rights

(Pedersen et al., 2018). Education must coincide with helping shape the adult into a citizen to become a productive community member. Contributing to a global community through engagement, connection, and communication, along with positive engagement in the local community, is essential in today's digital world (Monteiro et al., 2022). Through globalization and technological advancements, a new definition of citizenship education should be evaluated based on active participation and a critical understanding of global communities (Zhang et al., 2022). The connectivism learning theory supports the concept of citizenship education because communication is an essential aspect of engaging on the web in an online community, and having the ability to maintain communications is a necessity for continual learning (Utecht & Keller, 2019).

Digital citizenship is derived from a strong focus promoted by using technology initiatives with participation from citizens (Sanchez et al., 2019). Digital inclusion is essential to being a citizen in today's digital age and is described as using technology to enhance the quality of societal life (Gazi, 2016). Social media plays a substantial role in re-evaluating what constitutes a good citizen in an online setting based on established norms (Gagrčin et al., 2022). A digital divide exposed deficiencies in societal infrastructures and connectivity (Sanchez et al., 2019). Research shows that addressing digital citizenship education is vital for today's youth who must have opportunities to actively and appropriately learn to participate in civic actions in social media settings to address underlying social issues (Zhang et al., 2022).

Digital Etiquette

Digital etiquette can be described as having a specified code of conduct or standards to abide by when using technology. Technology rules should be understood and used appropriately (Hui & Campbell, 2018). Digital etiquette is pivotal when using technology to communicate and

network positively with others and avoid participating in hateful actions (Ghosn-Chelala, 2019). Instant access and available technological devices have driven an increase in hate speech and the improper use of digital etiquette (Windisch et al., 2022). Connectivism learning theory supports the necessity for understanding and accepting diverse opinions in the digital community (Siemens, 2005).

Knowledge and application of digital etiquette are necessary because digital natives' social lives have changed with the increasing use of technology (Sanchez et al., 2019). Digital skillsets are imperative for today's youth, pushing for the need to address the proper understanding of communicating and contributing online and fostering social change (Smith & Sevensma, 2020). Teens and youth actively participate in online discussion boards, video games, social media, and digital content (Phillips & Anderson, 2020). Social media plays an essential role in digital etiquette and combines communication environments with participation tools, requiring the evaluation of new standards to set boundaries for acceptable social media use (Gagrčin et al., 2022). Cyberbullying, sexual harassment, cyber-attacks, online theft, viruses, fraud, or grooming are much more prevalent online (Sanchez et al., 2019). Cyberbullying is a daily occurrence for teenagers and often comes in the format of online harassment (Monteiro et al., 2022).

Digital etiquette is an essential factor in defining digital citizenship, and the consensus among researchers is that digital etiquette is imperative to students in the digital world (Egresitz, 2020). Learning the appropriate digital etiquette is fundamental for students using the internet to communicate responsibly and can be monitored using a code of conduct (Windisch et al., 2022). Digital citizenship education can be seen as an active intervention to education on the dangers of cyber-risks and is often used to promote anti-cyberbullying interventions (Wang et al., 2022).

Digital Privacy and Security

Digital privacy can be defined as an individual's private digital information and the privacy of sharing others' digital information (Martin et al., 2019). Maintaining a certain level of digital security and privacy through managing and tracking data use is an essential aspect of the ISTE standards (ISTE, 2019). Students should be taught how to be aware of the persistent data-tracking technology and how it can affect their privacy and security in the digital world. Addressing safety concerns with students is imperative when students use chatrooms and emails, and school districts have addressed these concerns by filtering inappropriate searches and websites (Martin et al., 2019). Youth are more at risk for safety issues due to technology and unwanted exposure to digital content, which can jeopardize a child's well-being and safety (Harris & Johns, 2021). Students are the most at risk for a security breach because they cannot discern and critically process higher-quality scams (Egresitz, 2020). Threats are prevalent for youth in the digital setting, and cyber-safety challenges need to be addressed accordingly to prevent these risks with technology use (Harris & Johns, 2021).

Protocols need to be set at the district level using specialized hardware to understand what information is collected from the student and if that website poses a digital threat to the student's privacy or security (Martin et al., 2019). Rules and regulations should be added to digital citizenship frameworks to help address the concept of responsible and appropriate technology usage based on students' digital privacy and security (Öztürk, 2021). Teachers should understand the importance of digital privacy and how students' digital information is being shared (Martin et al., 2019). A mixed-methods research study analyzed and compared 80 computer education and instructional technology teacher candidates' (CEIT) and preschool teacher candidates' perceptions of three aspects of digital citizenship, including digital security

(Elmali et al., 2020). The study concluded that the CEIT candidates better understood digital citizenship and the necessity for more technology integration and training to support digital citizenship in preschool teacher preparation programs.

Digital Rights and Responsibilities

Connectivism learning theory addresses the need to understand how technology is reshaping our ability to process digital content (Siemens, 2005). A factor of using technology stems from having digital rights. Digital rights are the fundamental human rights and the ability to be a digital user, creator, or publisher of digital content using technological devices and online community spaces freely (Pangrazio & Sefton-Green, 2021). Individuals should be aware of the responsibility of using digital environments in a responsible manner (Elmali et al., 2020).

Digital citizenship should focus on two essential concepts that teach an understanding of how to disseminate the truth from false information while also being an ethical and responsible contributor to digital society (Smith & Sevensma, 2020). Digital rights are woven into fundamental human rights and have the right to privacy online. It is nearly impossible to ensure complete digital privacy online with the required sharing of information with many websites that track and collect user data (Pangrazio & Sefton-Green, 2021).

Students should be able to recognize their rights and responsibilities as digital natives and respect those rights when using or sharing any digital content as expressed in the ISTE standards (ISTE, 2019). Vital characteristics associated with the ISTE standards on students' rights and responsibilities highlight a need to assess students' digital identity and reputation online (Ghosn-Chelala, 2019). Parent support plays a significant role in understanding rights and responsibilities and offers children opportunities to support autonomy in the digital setting (Wang et al., 2022). Digital rights and responsibilities are a vital component of digital citizenship. Being able to

express oneself freely online is essential for fundamental human rights, but individuals must also be acutely aware of the responsibilities that come with that freedom (Elmali et al., 2020).

Digital Law

Digital law is included in the nine elements of digital citizenship (Ribble & Park, 2020). Digital law focuses on technology's legal and illegal use and reasonable actions and deeds (Egresitz, 2020). Individuals must have an understanding and are legally bound to follow all copyright and legislation rules, policies, and laws of technology use (Elmali et al., 2020). Online users should not infringe upon anyone else's rights when using technology (Hui & Campbell, 2018). Students are often unfamiliar with how to ethically navigate and legally find sources using the open online environment (Avci & Durak, 2022).

Due to the increased time spent in an online environment since the pandemic, educating students on information technologies associated with digital law is integral to addressing information literacy (Avci & Durak, 2022). Teachers have a responsibility to integrate technology legally and ethically into the classroom. Many teachers do not feel adequately prepared to integrate technology. The TPACK framework was created to help educators face technology integration challenges and support digital laws (Koehler et al., 2013). The integration of teaching information literacy addresses the skillsets needed for students to abide by digital law and identify, use, evaluate, and access sources online in a practical, efficient, and, most importantly, ethical manner (Avci & Durak, 2022).

Digital Literacy

Digital literacy is an essential aspect of digital citizenship. It has a strong connotation within the field of education because it focuses on instruction and student learning of technology use that directly impact social and emotional learning (SEL; Brandau et al., 2022; Egresitz, 2020;

Pangrazio & Sefton-Green, 2021). The way people communicate in today's digital age is vastly different and needs to be supported through digital literacy (Brandau et al., 2022). Collecting, processing, and analyzing information are key characteristics of digital literacy (Pangrazio & Sefton-Green, 2021). Linking digital literacies with SEL is essential when addressing students' abilities to have social and self-awareness while also understanding the management of their internet use (Brandau et al., 2022). Students should know their digital legacy will live on based on their digital footprints and the creation of digital information, pushing the necessity to address digital literacy in K-12 and higher education (Moorefield-Lang, 2020). Digital legacy can be challenging to discuss with younger students because it is described as what a person leaves behind in the digital world after death. Still, digital legacy is an important topic to address in the scheme of digital citizenship (Dawkins, 2020).

New themes have emerged that reveal the necessity to further research data literacy as a part of digital literacies. Top-tier technology companies' regulations can set rules to promote digital literacy and citizenship (Pangrazio & Sefton-Green, 2021). Digital literacy is described as having the ability to read, write, and communicate within online communities while addressing social justice (Buchholz et al., 2020). In contrast, other researchers discovered that digital literacies should require the assessment, collection, and understanding of the dissemination of information through technological devices (Saputra & Al Siddiq, 2020). Instructional strategies such as deeper thinking through reading, writing, and communicating productively and responsibly online are used to promote students' digital literacy skills (Buchholz et al., 2020).

Pedagogical content knowledge is a component of the TPACK framework. It can support educators in the ability to teach specific content, such as digital literacy (Koehler et al., 2013). Understanding the lasting effects of digital legacies and helping students understand the

permanence of content created in the digital environment is vital for digital literacy (Moorefield-Lang, 2020). Digital literacy provides individuals with an understanding of the appropriate use of technology (Saputra & Al Siddiq, 2020). Today's digital learners must be educated on more than simple technological skills. The digital age has evolved the need to address digital citizenship and not just digital literacies due to COVID 19's impact on education and student learning (Buchholz et al., 2020).

Integrating Digital Citizenship Education

Educators should understand the importance of integrating digital citizenship into a curriculum and its positive effect on students' digital footprints. After the impact of COVID-19, it is essential for schools to integrate digital citizenship into the educational setting after many classrooms have been required to digitize (Tangül & Soykan, 2021). Many challenges still arise with the push for the incorporation of instructional technology and digital citizenship into the curriculum.

Narrowing subject matters can provide structural support for technology integration using the TPACK framework (Koehler et al., 2013). The COVID-19 pandemic significantly impacted education, causing many aspects of life to be wholly utilized online through shopping, communication, and education (Tangül & Soykan, 2021). Socioeconomic status directly impacts a student's digital citizenship. Educators can provide a robust digital citizenship curriculum that integrates competency-based instruction and highlights ethical values (Ghosn-Chelala, 2019).

Martin et al. (2019) found that students need more instructional integration of digital citizenship concepts to help increase their understanding. Grade levels did not impact the type of digital citizenship practices. The strongest correlation was that the educators' experience and expertise with digital citizenship directly influenced the students' digital citizenship practices.

Teaching digital skillsets can be difficult for teachers who face technology integration challenges (Egresitz, 2020). More training is needed for educators to successfully implement all aspects of digital citizenship integration in the classroom (Martin et al., 2019).

Educators' opinions versus students' opinions on the integration of digital citizenship integration in an educational setting were compared (Tangül & Soykan, 2021). Tangül and Soykan (2021) indicated that classroom teachers scored higher on their understanding and usage of digital citizenship than the teacher candidates, indicating a need for more training in teacher candidate programs. Integrating digital citizenship curricula should move beyond simply addressing digital literacies and can achieve this goal by implementing ISTE's digital framework (Buchholz et al., 2020). ISTE's framework compares the differences between a good citizen versus a good digital citizen to address citizenship in the digital age and increase students' digital skillsets (Öztürk, 2021).

There is a need to address current digital citizenship curricula as an essential component of instructional technology, and teachers have a responsibility for teaching students' digital skillsets (Martin et al., 2019). Buchholz et al. (2020) explained a new ISTE campaign that can be used to identify ethical questions to help educators integrate and establish online communities with students that promote civility. Students should be engaged in the process of learning, and teachers can assess inequalities that were present during the pandemic. COVID-19 also increased the importance of understanding the correlation between informational search strategies and developing appropriate digital citizenship awareness for students (Avci & Durak, 2022).

Digital Citizenship Curriculum

The digital citizenship curriculum should be student-centered to create a foundational knowledge of lasting digital skills for all technology users (Ribble & Park, 2020). Digital

learning is essential for today's 21st-century learners through digital technologies (Scheel et al., 2022). Buy-ins from parents, staff, and administration are crucial for the success or longevity of a digital citizenship curriculum (Ribble & Park, 2020). Students should be able to communicate, collaborate, and reach specified learning outcomes needed for digital and media literacy (Scheel et al., 2022). Three common issues affect the implementation of a digital citizenship curriculum: knowledge, time, and support (Ribble & Park, 2020). Digital learning environments must address social injustices and how they affect user engagement online (Lucey & Lin, 2020). The TPACK framework can support any technology curriculum integration by building a relationship between content, pedagogy, and technology (Koehler et al., 2013).

Circular learning processes involve student awareness, guided practice, modeling and demonstration, and feedback and analysis in an educational program using the DigicompEDU teaching model (Weinstein & James, 2021). Cross-curriculum is an essential aspect of teaching digital citizenship and can be taught alongside any subject matter through working on specific digital citizenship skills (Farmer, 2011). Educators can utilize a digital citizenship curriculum to include support for understanding the use of technology and the ability to show students how to apply these standards inside and outside the classroom (Ribble & Park, 2020). A digital citizenship curriculum cannot be a one-time lesson; every level should reteach and build upon prior knowledge to be effective for students (Ribble & Park, 2020).

Assessing students' digital competencies is also essential to effective digital citizenship curricula (Tzafilkou et al., 2022). Very few studies measure whether a digital citizenship curriculum and digital learning indicate student success (Scheel et al., 2022). The learning modules in Hui and Campbell's (2018) study were unsuccessful because they only provided students with hypothetical scenarios. Suggestions to improve the study include using experiential

learning components such as a computer simulation for the digital citizenship curriculum and yielding a better understanding from the participants of the dangers of disregarding online safety and other characteristics of digital citizenship. In comparison, Scheel et al. (2022) analyzed the influence of self-organization and independent learning on the ability to accept the change from traditional in-person learning to digital learning, which resulted in an overall positive impact.

Digital Citizenship Professional Training

Digital tools are an everyday utilization in today's post-pandemic schools calling for the necessity to safely train teachers and students to communicate and collaborate online (Öztürk, 2021). The TPACK framework denoted the challenges educators face in integrating instructional technology with inadequate experience and training for teaching and facilitating learning with technological devices (Koehler et al., 2013). The switch to online and hybrid learning produced a need to re-assess the use of technology tools and difficulties teachers can encounter (Ince, 2022). Instructors should understand and apply appropriate teaching methods using technology, which stem from receiving qualified training to integrate technology in the classroom effectively (Ince, 2022). Training educators is a crucial component of digital citizenship, and technology is essential for educators to enhance pedagogy and content knowledge (Gazi, 2016).

Implications of Digital Citizenship Education

Digital citizenship education should be more than handouts or worksheets (Phillips & Lee, 2019). Implications of digital citizenship education can offer educators varying initiatives, frameworks, and standards that can be used to facilitate continual learning (Armfield & Blocher, 2019). Appropriate training and understanding of digital literacies in online engagement are required for successful digital citizenship education (Phillips & Lee, 2019). The connectivism learning theory and the TPACK framework offer educators insights into technology integration

and curriculum in the educational setting (Mishra & Koehler, 2006; Siemens, 2005).

The ISTE framework can be used to address the educational crisis we face today after the effects of COVID-19 in education (Buchholz et al., 2020). Training students using a digital citizenship framework should be prioritized when using any technology (Sanchez et al., 2019). Collaboration is vital to improving digital citizenship education and should include input from teachers, librarians, and administration (Phillips & Lee, 2019).

Hybrid education could foster and add value to digital citizenship curricula through the themes of becoming, belonging, and capabilities (Pangrazio & Sefton-Green, 2021). Educators should understand that every student does not have equal access to technology outside the school setting. A prevalent digital divide is evident and should be considered by teachers when assigning at-home work (Armfield & Blocher, 2019). Many students do not have access to the internet at home. Ensuring the success and representation of every student is vital due to students' varying home lives, stressing the importance of offering equal access to technology with hybrid and online education (Buchholz et al., 2020). Hybrid education offers new and inventive ways to implement digital citizenship in an educational setting and broader, value-based concepts related to digital citizenship (Pangrazio & Sefton-Green, 2021). Having support from the community can provide additional technology resources to all students (Buchholz et al., 2020).

Digital Citizenship Challenges

Using technology in the classroom can be complicated for educators and pose constant and ever-changing challenges (Koehler et al., 2013). Social media has posed a significant challenge for educators in today's digitally interconnected world, and students are increasingly using social media daily (Saputra & Al Siddiq, 2020). Online communication and social

interactions are significant aspects of youth's daily lives (Phillips & Lee, 2019). The spread of misinformation through social media and online bullying are just a few digital citizenship challenges that must be addressed in digital citizenship frameworks (Dunaway & Macharía, 2021). The concern stems from the question of who should teach digital citizenship curricula to students (Phillips & Lee, 2019).

Educators are increasingly seeing more challenges with students that can impede their learning without having the appropriate digital citizenship skillsets (Saputra & Al Siddiq, 2020). Students have a general knowledge of digital citizenship elements but have difficulty applying them to real-world scenarios, specifically digital etiquette (Hui & Campbell, 2018). Challenges arise when educators are not prepared to use innovative instructional methodologies to teach students digital skills to prepare them as digital citizens (Dunaway & Macharía, 2021).

Current digital citizenship curricula and frameworks can help educators face challenges when teaching in a digitally driven society (Buchholz et al., 2020). A digital citizenship curriculum should be introduced across all content areas, but there is no nationwide requirement to teach digital citizenship in K-12 education, except in Utah (Phillips & Lee, 2019). The TPACK framework supports the challenges educators face with technology and curriculum integration based on understanding connections and concepts specific to educators' technology knowledge (Koehler et al., 2013).

The connectivism learning theory can support educators' challenges by encouraging connectivity as a significant component of the ISTE standards (ISTE, 2019; Utecht & Keller, 2019). The International Society for Technology in Education (ISTE) provides free curricula with lessons and activities focused on integrating digital citizenship into educational curricula and real-world applications for students based on addressing ethical concerns (Buchholz et al.,

2020). A connection can be made between the ISTE standards for students and the TPACK framework (Voithofer & Nelson, 2021). A digital citizenship section describing students' ability to recognize digital rights and responsibilities and work safely, ethically, and legally in the interconnected digital world is found in ISTE's standards (ISTE, 2019). Digital citizenship is an important skillset for students to be productive digital citizens (Hui & Campbell, 2018). Further research needs to be conducted to analyze if the ISTE framework successfully increases students' digital citizenship.

Cyberbullying and hate speech are prevalent challenges when addressing digital citizenship for students, and interventions could address these challenges (Windisch et al., 2022). Digital citizenship directly correlates with the need to address critical issues like cyberbullying (Dunaway & Macharía, 2021). Students' upbringing can directly affect their understanding of digital citizenship in today's digital era (Baruch & Erstad, 2018). Parents play a crucial role in a student's growth and ability to adapt and learn in new environments, which correlates with the development of appropriate social media use and the ability to communicate online (Wang et al., 2022). A necessity to bridge the divide between technology use and understanding in students' personal and academic lives is prevalent (Baruch & Erstad, 2018). Sustaining open communication between schools and the community in the post-pandemic world is critical for the success of students' ethical engagement and participation online (Buchholz et al., 2020).

Gap in the Literature

A gap in the literature exists for studies that focus on collecting data on secondary educators' lived experiences of digital curriculum and training (Martin et al., 2019). Key concepts from a synthesis of the literature pose that digital citizenship is under-researched and is an area of focus that needs further inquiries, specifically for instruction, assessments, and

training to address the many challenges educators face with teaching students in a digital-age, post-pandemic world (Buchholz et al., 2020). Training digitally aware citizens is a clear necessity for digital citizenship, as many schools are primary agencies for educating and developing students' social skills (Piceci et al., 2021).

The need to provide educators with appropriate and ongoing instructional training was prevalent across multiple studies (Gazi, 2016; Ince, 2022). What is unclear is if any of the current digital citizenship curricula available for educators successfully increase student digital skills and educators' lived experiences with integrating digital citizenship (Hui & Campbell, 2018). There is a lack of research on secondary educators' perceptions of integrating digital citizenship. Research should be conducted to close the gap to identify successful training and application of digital citizenship curricula. This study attempts to help close the gap presented in the literature.

Chapter Summary

Finding a precise general definition of digital citizenship still poses challenges with varying research reports in the literature. An overarching consensus can conclude the necessity for research in the field of digital citizenship and integration of digital citizenship to benefit and set up students as digital natives (Ghosn-Chelala, 2019). Teacher training and the appropriate use of technology integration across grade levels are essential for student success (Pedersen et al., 2018).

The research implications can be synthesized for digital citizenship education by forming a community with students and parents, ethical considerations, and instructing and making digital etiquette applicable for students using a framework such as the ISTE standards (Buchholz et al., 2020). Challenges are prevalent across the literature synthesis, with a significant focal

point of the negative impact of social media and cyberbullying while increasing the necessity to address these challenges and improve students' digital footprints (Saputra & Al Siddiq, 2020).

Summarizing, comparing, contrasting findings, and synthesis of the literature have provided insight into the limitations of the research of secondary educators and their perceptions and lived experiences of digital citizenship training and curriculum integration. No article in the current literature review provided secondary educators' perceptions of the digital citizenship curriculum. An analysis of limitations in the existing literature revealed a prevalent need to collect and analyze data on secondary educators' lived experiences of integrating digital citizenship curricula and the training they receive.

A review of scholarly research relating to the necessity to include a digital citizenship curriculum in education while highlighting the challenges many educators face with receiving appropriate training and curriculum (Ince, 2022) was presented in the literature review. The themes identified in the research included defining digital citizenship, integration of digital citizenship, implications of digital citizenship, digital citizenship challenges, and gaps found in the literature. The theoretical framework posed using the TPACK model and the connectivism learning theory support the study's necessity. The framework was utilized to help close the gap presented in the literature review. The literature review exposed background information on the importance of digital citizenship while providing varying studies, approaches, and data collection that provided a foundation for the chosen methodology of the current study. The following Chapter 3 included an in-depth methodological approach to understanding the secondary educators' perceptions of digital citizenship using a qualitative phenomenological study.

Chapter 3: Methodology

Digital citizenship is a component of educational technology (Martin et al., 2019). A broadened term of digital citizenship can be defined as the appropriate and responsible use of digital and informational technologies (Avci & Durak, 2022). With the expansive increase in using digital technology in the classroom, the need to address digital citizenship challenges has arisen to improve the educational use of technology (Martin et al., 2019). COVID-19 led to an even further expansion of the necessity to teach digital education and citizenship, and teachers need support for curriculum development and professional training (Piceci et al., 2021).

The problem is that secondary educators face multiple challenges in digital citizenship, including a lack of professional training and curriculum support. The purpose of this basic qualitative study was to explore the perspectives of secondary teachers in South Carolina regarding their experiences with the digital citizenship curriculum and how professional training affects their instruction and student learning. The following research questions guided the study:

Research Question 1: What are the professional training experiences of educators on digital citizenship relating to instruction and student learning at public secondary education schools in South Carolina?

Research Question 2: What are the effects of integrating a digital citizenship curriculum on educators in public secondary education schools in South Carolina?

South Carolina secondary educators' shared perceptions and experiences were collected and documented. Semi-structured interviews were used to collect data. Braun and Clarke's (2006) six-phase thematic analysis approach facilitated the identification of patterns and significant themes. Coding guided the alignment and categorization of themes for review to understand South Carolina secondary educators' experiences. The following sections provide more details and outline the methodology of the study. The methodology included the following

areas: research design, the role of the researcher, research procedures, data analysis, reliability and validity, ethical procedures, and chapter summary.

Research Methodology, Design, and Rationale

The research study methodology focused on collecting basic qualitative research. The rationale for choosing this methodology was qualitative research aims to explore the meaning of a participant's perceived experience (Bhangu et al., 2023). This methodology and design were best suited for the study since it enabled the identification of educators' current perceptions and knowledge on the topic. The study focused on understanding South Carolina educators' experiences with digital citizenship curriculum professional development and the effect that curriculum integration has on public secondary education schools. Specific categories and themes were identified from the interviews.

Methodology

The research methodology focused on collecting qualitative data. The rationale for choosing this methodology was qualitative research aims to collect and analyze data on how people interpret, construct, or make meaning of an experience, concept, or understanding (Bhangu et al., 2023). The qualitative methodology seeks to understand how people make distinctions based on their personal opinions and is rooted in answering the questions of what and why (Barnham, 2015). Educational research can be influential in policymaking and educational reform based on qualitative education research (Hollands & Escueta, 2020). Quantitative methodologies were not appropriate for this study because this approach derives from the physical sciences and seeks to find a generalization or representation of what consumers think based on numerical data forms (Barnham, 2015). A quantitative design did not align with the research purpose and problem statement based on educators' perceptions.

Design

A basic qualitative study was the research design utilized to research educators'

perceptions of digital citizenship training and curriculum integration. The purpose of the study

aligned best with a basic qualitative study (Mulisa, 2022). Prior knowledge of digital citizenship

research exists, but further research can provide an exploration of secondary educators'

perceptions of digital citizenship curriculum and professional training. The advantages of using a

basic qualitative design include having more flexibility through a blend of established

methodologies to help answer the research questions (Bhangu et al., 2023). Qualitative design

was beneficial for this study because it provided an opportunity to give insight into educational

environments and teacher perspectives (Stahl & King, 2020).

Role of the Researcher

Qualitative researchers seek to answer questions posed by the problem statement

(Bhangu et al., 2023). Answering the questions of who, what, and why can help develop the

research questions and set the tone for the study (Yin, 2016). Established criteria were utilized to

determine participants based on certification, years of experience, subject matter, and age.

Participants were peers who worked for public secondary schools in South Carolina and were

recruited through the South Carolina for Education private Facebook group, the Upstate Teacher

Connections private Facebook group, and a LinkedIn post. The role of the researcher was that of

the instrument based on the premise that other participants were being researched, requiring

boundaries and parameters to be set for the study (Collins & Stockton, 2022). Remaining

objective and reflexive was essential in the role of the researcher to reduce bias (Yin, 2016). If I

knew a participant, bracketing assumptions were necessary to suspend any judgments during the

interview process. Hence, the focus remained on keeping the responses honest and accurate

without any bias or influence from me. Ethics played an important role in the study and was addressed through using an informed consent form and keeping any communication between participant and researcher unbiased and confidential (Collins & Stockton, 2022).

A basic qualitative approach was used to conduct semi-structured, virtual interviews (Dunn & Moore, 2020). It was vital that I took myself out of the interview, remained unbiased, and kept boundaries in place, so participants felt comfortable sharing honestly and openly (Collins & Stockton, 2022). Interview questions were formulated based on the ability to prompt open-ended responses and give respondents the ability to provide more detailed answers (Yoon & Uliassi, 2022). Effective communication was essential during the interview process by establishing trust, stating questions clearly, following the script, and encouraging open communication (Collins & Stockton, 2022).

Research Procedures

Qualitative research seeks to find the how and why of research (Williams & Moser, 2019). This study followed research protocols to answer the questions. Social interactions influence qualitative research by studying participants' beliefs or opinions (Arghode, 2012). A basic qualitative study design was used to create the research study, select and interview participants using semi-structured interviews, review and analyze data, and report findings. The structure is vital when establishing procedures corresponding with the research and should start with developing the research questions and with all subsequent steps seeking to answer the questions based on the problem or topic (Yin, 2016). The research followed all ethical procedures and guidelines set forth by the American College of Education (ACE) Institutional Review Board (IRB) and *The Belmont Report*.

Population and Sample Selection

The target population was identified through purposive sampling to recruit 15 to 20 public secondary South Carolina educators who were members of the private Facebook South Carolina for Education group, the Upstate Teacher Connections Facebook group, and LinkedIn. Purposive and snowball sampling helped narrow the sample by using the inclusion criteria to align with the study's purpose and objectives. The South Carolina for Education Facebook group had 34,400 members, but there was not a division of certification level within the group. The Upstate Teacher Connection group had a population of 8,200 members. Site permission was obtained through email correspondence with the South Carolina for Education and the Upstate Teacher Connections Facebook group managers. A permission site email correspondence and messenger screenshot show the permissions received from the group administrator of the South Carolina for Education Facebook group and the Upstate Teacher Connection group administrators approving the sites for the study (see Appendix A).

The study used the South Carolina for Education Facebook group and the Upstate Teacher Connections Facebook group as an appropriate target population and sites for the research study because the groups serve diverse locations and educators across the state of South Carolina, providing a consensus. The personal LinkedIn post provided snowball sampling to reach the sample population of 15 participants.

Inclusion criteria included the age requirement of participants over 21, two years of teaching experience, secondary education certification, experience with digital citizenship training and curriculum, and employed as a 9th-12th grade high school teacher in South Carolina. Exclusion criteria consisted of retired teachers, teachers outside South Carolina, and K-8 certified teachers. Two year of teaching experience was part of the inclusion criteria in order to

recruit teachers with more experience in the classroom. Procedures used to recruit and contact potential participants stemmed from an initial Facebook post in the groups, including specifications to gauge participant interest through a recruitment letter. Participants did not receive any type of incentive for their participation in the study.

A research proposal was submitted to the ACE Institutional Review Board (IRB) for approval. Informed consent was an essential legal requirement met by keeping the participants' confidentiality, privacy, and safety secure. Participants were free of endangerment or mistreatment during the study. The informed consent process included soliciting signed consent from the participants through an initial Facebook post invitation, where contact information was exchanged via a secure ACE email address. The managers of the two Facebook groups approved a post including a recruitment letter to solicit consent which provided a description of the study, the criteria for participation, and dissertation chair contact information (see Appendix B).

The participants were also emailed the informed consent form that included contact information, date of ACE IRB approval, an introduction, purpose of the research, participant selection, voluntary participation, right to refuse or withdraw, procedures, duration, risks, benefits, confidentiality, sharing of the results, questions on the study, and the certificate of informed consent (see Appendix C). Participants downloaded the informed consent form and signed electronically and returned the document to the provided American College of Education (ACE) email address. A statement on the informed consent form described that participation was voluntary, and participants could end their participation in the research study at any time without any repercussions. Participants were informed of their rights through email and in the informed letter of consent, which included the researcher's contact information to answer any concerns or issues from participants. All participants were allowed to withdraw from the study at any point,

and all personal data were excluded by assigning participants a number. Data were stored using secured methods through a password-protected laptop, USB drive, and password-protected desktop files and physical data stored in a locked cabinet. Digital and physical data will be destroyed and shredded after 3 years.

Semi-Structured Interviews: Data Instrument

Research instruments are tools used to collect and analyze data. Instruments should be formulated based on the research questions and seek to explore the meaning and understanding of the study participants (Arghode, 2012). The study must align data instrumentation and research questions (Rose & Johnson, 2020). The data instrument used for this methodology design was a 45-to-60-minute, semi-structured, virtual interview. Interviews are an effective research instrument because the conversation enables learning about phenomena in the world (Yoon & Uliassi, 2022). The necessary participant criteria were posted, allowing the researcher to define, identify, and recruit participants from the South Carolina for Education Facebook group, the Upstate Teacher Connections Facebook group, and a personal LinkedIn post. Using a virtual interview was justified and aligned with the research questions because it allowed for informal and interactive responses and used open-ended questions that gave participants more freedom in their responses (Naz et al., 2022). By completing the interviews, South Carolina educators provided an account of receiving professional digital citizenship curriculum training and the effects of integrating a digital citizenship curriculum on educators in public secondary education.

Subject Matter Experts: Instrument Validation

A researcher-created instrument was used to collect data for this study. The data collection instrument relied on 20 open-ended questions for semi-structured interviews (see

Appendix D). Open-ended questions help participants provide more in-depth and elaborate

responses (Yoon & Uliassi, 2022). Semi-structured interviews are often used in qualitative

research because they allow researchers to conduct in-depth interviews with preset open-ended

questions (Jamshed, 2014). The interview topics were demographics, teaching experiences,

experiences with digital citizenship professional training, effects of integrating digital citizenship

curriculum, and recommendations (see Appendix D). The interview format and questions were

created following the semi-structured interview guide (Naz et al., 2022). Steps to establish

validity, field testing, and revisions included reaching out to three subject matter experts (SMEs)

in the field of instructional technology. Three SMEs received an email (see Appendix E) with the

proposed instrument containing a brief explanation of the purpose of the research and an

attachment of the researcher-created tool. SME credentials included two secondary instructional

coaches and one secondary technology teacher. Recommendations from the SMEs were

implemented to improve the 20 open-ended questions. The SMEs were not participants in the

study.

Data Collection

Data collection occurred after IRB approval between June and September of 2023. The

data collection duration occurred over 4 months while enrolled in an American College of

Education (ACE) research class and immediately after IRB approval, as noted in the informed

consent document (see Appendix C). A soliciting post was published on the South Carolina for

Education Facebook group, the Upstate Teacher Connections Facebook group, and a LinkedIn

post with a recruitment letter. Any teachers who were interested in the study and potentially met

the inclusion criteria emailed the research candidate. Teachers who qualified were selected to

meet the study's required number of 15 participants. Information about the interview and formal

procedures that occurred during the interview process were included in the email to the selected teachers. An electronic signed letter of the consent form (see Appendix C) was collected before the interview, and participants' identities was kept confidential by assigning each a number as interviews were scheduled. The numbers were assigned in the order that participants scheduled the interview.

In-depth, semi-structured interviews were conducted and recorded using the video conferencing tool Microsoft Teams. The interviews were held virtually allowing participants to use a location of choice where they felt comfortable and at ease. The interview portion of the research study took approximately 45 to 60 minutes to complete. Semi-structured interviews facilitate exchanges of an idea between the participant and interviewer while also using prepared questions to guide the interview and provide structure allowing for data collection to yield similar or comparable results (Naz et al., 2022). Participants were informed that the interview was transcribed and recorded for data collection and analysis purposes. Recording interviews facilitates a more in-depth interview analysis (Yoon & Uliassi, 2022).

The interviews used open-ended questions to enable participants to provide a descriptive perception based on their digital citizenship training and integration of the curriculum. Open-ended questions allowed participants to respond based on personal feelings, thoughts, and experiences and the interviewer to prompt more descriptive answers with who, what, why, how, or where follow-up questions (Naz et al., 2022). Interview transcriptions were automatically downloaded as Word document files using Microsoft Teams built-in transcription software. Transcripts were also checked manually for accuracy against the recording. The transcription was uploaded into NVivo software, a text-based program to form a narrative. Accurate data were preserved through the data collection process by recording and transcribing the interviews.

Proper procedures and protocols were followed while conducting the research. Site permission was obtained from the administrators of the South Carolina for Education private Facebook group and the Upstate Teacher Connections Facebook group before beginning data collection (see Appendix A). Both groups' administrators approved a post including the recruitment letter (see Appendix B). Once initial acceptance to the study occurred, participants were emailed an informed consent letter (see Appendix C), and an interview schedule was created based on participant availability. Interview questions were created using the semi-structured interview guide (see Appendix D) and validated by SMEs (see Appendix E) who field-tested the research instrument items (Naz et al., 2022). When the data were analyzed and a narrative was formed based on the findings, a member check occurred with the participants. Participants were given 5 business days to respond as the time frame for member checking. The member check gave participants an overall understanding of their contribution to the study to ensure the accuracy and clarity of the findings.

Data Analysis

Thematizing, designing, interviewing, analyzing, verifying, and reporting are six stages supporting qualitative research (Bhangu et al., 2023). A thematic analysis was used to identify patterns and significant themes. This study used Braun and Clarke's (2006) six-phase thematic qualitative approach of familiarizing the data, generating initial codes, searching themes, reviewing themes, defining and naming the themes, and producing a report of the analysis. An in-depth, semi-structured interview was used to collect data through transcripts and observation to provide descriptive, lived experiences of the participants based on their digital citizenship training and integration of the curriculum. NVivo was the statistical software used to analyze the research. NVivo facilitated the coding process by collecting, organizing, analyzing, visualizing,

and helping report the data analysis (Dhakal, 2022).

The first phase of Braun and Clarke's (2006) six-phase thematic analysis included transcribing data, which was conducted using the Microsoft Teams transcription program and downloaded as a Word document. Reading and re-reading the transcripts helped familiarize the data. Transcripts were checked manually for accuracy against the recording. Coding was essential for data analysis through the NVivo program to help search and collate familiar or relatively significant themes (Dhakal, 2022). An ongoing analysis provided more clarity to name and define the themes as they emerged from the coding process. The final step involved reporting the findings related to the research questions. Results of the data analysis were presented through tables to supplement the description, inform the coding analysis, and give a scholarly report of the analysis (Braun & Clarke, 2006).

Data Preparation

Data preparation is a component of the data analysis and includes transcription and member checking. Once collected to prepare for analysis, data were transcribed. Transcribing data is crucial in Braun and Clarke's (2006) six-phase thematic qualitative analysis approach. Transcriptions were automatically captured using the Microsoft Teams software and downloaded in a Word document. Recording and transcriptions aided in the accuracy of the data preparation. Transcripts in a Word document format were then uploaded to the NVivo software program, allowing easier data preparation for the data analysis, display, and final reporting (Dhakal, 2022). Transcripts and member-check requests were emailed to participants after initial data collection to provide a summary of the findings. Participants member checked the transcripts to confirm, reflect on, or modify data collected during the interview (Stahl & King, 2020).

Reliability and Validity

Consistency helps maintain reliability, while validity is supported through alignment and using the study's appropriate research questions, methodology, process, and data collection (Stahl & King, 2020). A study's reliability and validity can be addressed by establishing credibility, dependability, transferability, and confirmability. Verification of research is a necessary process that can also ensure the reliability and validity of the study (Rose & Johnson, 2020). Being a responsive investigator and using the verification strategies for the alignment of methodological coherence, appropriate sampling, consistent data collection and analysis, theoretical frameworks, and theory development support the reliability and validity of the study (Rose & Johnson, 2020).

Credibility

The study was verified by aligning the methodology, data collection, and analysis to answer the basic qualitative research questions (Yin, 2016). Credibility is critical to validity and reliability because it ensures the data collection, analysis, and reports are accurate to the source and reality of the participants' experiences (Williams & Moser, 2019). The basic qualitative data were collected using semi-structured interviews that were unbiased, free of the interviewer's influence, and remained objective. Using an instrument of prepared and validated open-ended questions can help with the consistency and stability of the interviews to provide structure and credibility of the data collection (Naz et al., 2022). Recording the interviews to portray authentic and credible data collection was essential to the validity and reliability of the study (Collins & Stockton, 2022). Prolonged engagement, peer reviews, and persisting observations also provided credibility (Rose & Johnson, 2020).

Dependability

Consistency within the study was crucial to dependability (Janis, 2022). Dependability included using well-documented audit trails and member checks (Stahl & King, 2020). Detailed audit trails ensured dependability and were utilized by thoroughly describing the research process (Rose & Johnson, 2020). Coding and using meaningful saturation through the NVivo software provided common themes and interpretations contributing to the study's dependability (Janis, 2022). Bracketing occurred to support dependability if any of the participants knew the researcher (Stahl & King, 2020). Any judgments were suspended during the data collection and analysis to reduce researcher bias and increase dependability.

Transferability

The ability to transfer findings to other studies, contexts, or settings relates to the transferability of a study (Stahl & King, 2020). Providing opportunities for reflection and synthesis through member checks provided a better understanding of experiences that could lead to transferability to broader communities (Yin, 2016). Thick descriptions of the research allowed the reader to assess transferability (Rose & Johnson, 2020). Transferability was also addressed using systematic sampling, constant comparison, and audits of documentation (Yin, 2016). Systematic sampling was utilized to provide a variety of participant selections. Constant comparison was implemented with the NVivo software to code data with other data (Williams & Moser, 2019).

Confirmability

Building trust with the participants allowed participants to freely and safely express their experiences to establish credibility. Participants were informed of their rights consistently throughout the data collection process and understood that the study was voluntary, and all

information was kept confidential. Audit trails, prolonged engagement, persisting observations, and member checks provided trustworthiness to the study (Rose & Johnson, 2020). Prolonged engagement with the participants during the interviews gave trustworthiness to the data collection and analysis stages. Member checking during the data preparation stage contributed to the study's trustworthiness and reduced the potential for researcher bias (Stahl & King, 2020).

Ethical Procedures

Ethical procedures were necessary when conducting legal research methods and the design of this study. Research using human studies required ethical conduct. Application of the U.S. Department of Health, Education, and Welfare's (1979) *Belmont Report* minimized the potential risks based on respect for persons, beneficence, and justice. Ethical issues were handled through an informed consent form, and communication between the participant and researcher was professional and confidential (Collins & Stockton, 2022). Any potential risks were minimized by following ethical procedures.

All data collection instruments, forms, letters, or emails were pertinent to IRB approval. No data collection occurred until after IRB approval of the research proposal. Informed consent was an essential legal requirement met by keeping the participants' confidentiality, privacy, and safety secure. Participants were free of endangerment or mistreatment during the study. After IRB approval, an email from an American College of Education two-factor authenticated, password-protected student email address was used to distribute a digital informed consent form to all study participants. Participants downloaded the informed consent form and electronically signed and returned the document to the provided American College of Education (ACE) password-secured email address. Participants were informed of their rights through email and in the informed letter of consent, which included the researcher's contact information to answer any

concerns or issues. All participants were allowed to withdraw from the study, and all personal data were excluded. If a participant knew the researcher, bracketing assumptions were necessary to suspend any judgments during the interview process. Hence, the focus remained on keeping the responses honest and genuine without bias or influence. All data were stored and maintained using two-factor authentication secured, password-protected One Drive files on a personal laptop computer that will be locked in a cabinet only the researcher can access for 3 years. At the end of the 3-year window, all digital data will be destroyed using double deletion by deleting One Drive files and files from the recycle bin. All physical printed data will be shredded.

Chapter Summary

The problem is that secondary educators face multiple challenges in digital citizenship, including a lack of professional training and curriculum support. The purpose of this basic qualitative study was to explore the perspectives of secondary teachers in South Carolina regarding their experiences with the digital citizenship curriculum and how professional training affects their instruction and student learning. Research methodology, design, rationale, the role of the researcher, research procedures, reliability and validity, and ethical procedures for a basic qualitative study were discussed. The goal was to have 15 South Carolina teachers form the sample of participants. Data collection occurred by using a semi-structured interview format with open-ended questions. Coding and analyzing the data occurred through the NVivo program with transcripts that allowed identification of emerging themes in the data. Reliability and validity helped establish credibility, dependability, transferability, and trustworthiness. Research findings and the data analysis results of the study were discussed in Chapter 4.

Chapter 4: Research Findings and Data Analysis Results

A shift in education to online teaching due to the pandemic and the push for the use of technology have created many challenges for educators. The background of the study was based on a gap in the research that stems from under-researched studies on secondary educators' perceptions of digital citizenship. Based on the gap, the underdevelopment of technology training for digital citizenship curriculum within the secondary setting is apparent (Ince, 2022). New expectations for technology within the classroom present challenges for educators when incorporating emerging technologies, understanding the technology, and implementing best practices for innovative technologies to meet students' needs in the digital age (Ince, 2022).

Safety protocols, technology proficiencies, and the correct application and understanding of technology are essential for students to be productive members of the digital society (Buchholz et al., 2020). Today's American teenagers face the harsh realities of cyberbullying, where at least 88% of them have personally experienced or participated in negative online behavior (Phillips & Anderson, 2020). The problem is that secondary educators face multiple challenges in digital citizenship, including a lack of professional training and curriculum support. The purpose of this basic qualitative study was to explore the perspectives of secondary teachers in South Carolina regarding their experiences with the digital citizenship curriculum and how professional training affects their instruction and student learning.

Data collection, data analysis, and the results are included in the following sections. Reliability and validity are addressed by including discussions on credibility, transferability, dependability, and confirmability. A review of the findings of the research questions and a transition to the final chapter are provided in the summary.

Data Collection

Informed consent was collected by soliciting participants through an initial Facebook and LinkedIn posts, where contact information was exchanged to email the letter of informed consent to potential participants. Participants downloaded the informed consent (see Appendix C) and electronically signed and returned the letter of informed consent to the provided email. The informed consent process began after ACE IRB approval between June 6, 2023, and July 17, 2023 (see Appendix F) from participants who met the following criteria: over 21 years old, two years of teaching experience, secondary education certification, experience with digital citizenship training and curriculum, and employed as a 9th-12th grade high school teacher in South Carolina. A total of 18 participants initially agreed to participate in the study, but only 15 returned the letter of informed consent. Once the participant expressed willingness to participate, the informed consent letter was emailed, signed digitally, and then returned.

Semi-structured interviews were used to collect data from June 2023 to July 2023. The target population was identified using purposive sampling to recruit 15 to 20 participants who were secondary South Carolina educators. Research sites to recruit participants included members of the private Facebook South Carolina for Education group, the Upstate Teacher Connections Facebook group, and LinkedIn. The private South Carolina for Education group comprised 34,400 members, while the Upstate Teacher Connection Facebook group included 8,200 members. A permission site email and a messenger screenshot show the approval received from both group administrators (see Appendix A). Along with posting a recruitment post to both private Facebook groups, a LinkedIn personal recruitment post was included to provide snowball sampling to reach the sample population of 15 participants (see Appendix B). The participants included South Carolina teachers from various content areas, the years taught in South Carolina,

and regions. The two regions represented include the Lowcountry located on the coast and the

Upstate, located in the western part of South Carolina (see Table 1).

Table 1

Demographics of the Study Sample

Characteristic	Interview
	n
Content Areas	
Math	1
Visual and Performing Arts	4
Social Studies	1
Science	1
English	5
Spanish	2
ESOL	1
Years taught in SC	
2-4	2
5-9	5
10-19	5
20 or more years	3
Region	
Upstate	13
Lowcountry	2

Note. Interview sample – N=15

Deviations from the original data collection plan included a resubmission to the ACE

IRB. Initial ACE IRB approval was received on June 6, 2023. Still, due to limited responses to a

call for participants, a resubmission was necessary to expand the use of other social media research sites. The re-approval received on June 15, 2023, included using another private Facebook group, Upstate Teacher Connection, along with a public personal LinkedIn post to reach the required 15 participants. Receiving a second approval from ACE IRB allowed the participant-completed response rate to change from the previous 20% to the 100% goal of recruiting and receiving letters of informed consent from 15 participants who met the study's criteria.

Another deviation from the original proposal included the time frame of recruitment to the end of data collection, which was initially slated to last from June 2023 to September 2023 but was concluded from June 2023 to July 2023. Significant circumstances encountered during data collection included some technical challenges with the internet while using Microsoft Teams. Three of the interviews had technical challenges with the internet resetting, causing the video to freeze occasionally. Still, the issue was resolved relatively quickly and did not affect the integrity of any of the interviews. One of the interviews was rescheduled due to internet issues, but after the second try, it was completed successfully.

Data Analysis and Results

Seeking the how and the why is essential in utilizing qualitative research for the study (Williams & Moser, 2019). A basic qualitative study helped answer the research questions based on the participants' opinions and beliefs (Arghode, 2012). The focus of the data collection and analysis was to understand the experiences of public secondary South Carolina educators regarding the digital citizenship curriculum and training based on student learning.

Braun and Clarke's (2006) six-phase thematic analysis approach was used to become familiar with the data, generate initial codes, search themes, review themes, define and name

themes, and produce a report of the analysis. NVivo was used during the coding process to collect, organize, analyze, visualize, and report findings for the data analysis. Familiarizing the data began Phase 1 of the thematic analysis through the initial review of the Microsoft Teams' generated transcripts. Recording of initial codes of the data set started during Phase 2 using the NVivo coding software. Once the initial codes were manually reviewed, the NVivo software allowed for the process and refinement to generate codes based on the study's two guiding research questions. Generating codes evolved into a search for themes from reviewing transcripts for important ideas to emerge from the data set during Phase 3 of the analysis. Following Braun and Clarke's (2006) thematic analysis, Phases 4 through 5 allowed for generating themes based on emerging ideas, searching, reviewing, defining, and naming the significant themes (see Table 2).

Table 2

Theme Development-Thematic Analysis

Important Ideas	Major Themes
"Training all teachers who will be using tech tools in the classroom is beneficial to the students and the teachers."	Need for Ongoing Professional Training on Digital Citizenship
"It's very difficult for teachers and staff to fully appreciate and trust a school leader who promotes digital citizenship but doesn't also practice digital citizenship."	Leadership Support and Accountability
"My district provides us with these curriculum guides, which are awesome and there's a lot of options of ways to do this. You know, for every standard, there are provisions for that, but they're not required."	Curriculum Integration

Important Ideas	Major Themes
"Students need to know how to behave and ethically and morally make the right choices in whatever data or security or social media or whatever it presents itself as."	Online Safety
"I really feel like students need to be aware of the good and the bad that are available digitally and how to use them to their advantage without using them inappropriately because that's what's preparing them for whatever they go into when they leave us."	Future Impact

Phase 6 involved producing the report based on naming and defining five significant themes: The need for ongoing professional training on digital citizenship, leadership support and accountability, curriculum integration, online safety, and future impact. Reviewing, naming, and defining the five significant themes provided structure and support for the data analysis.

Theme 1: Need for Ongoing Professional Training on Digital Citizenship

Theme 1 emerged from participants providing professional training experiences for technology and digital citizenship. Many participants (14 out of 15) described required technology proficiency training, while one participant was not provided with any needed training. Some participants (2 out of 15) mentioned attending training for digital citizenship due to the pandemic. Participant 10 stated, "Besides that first year of COVID, the 2020 year where we did some digital citizenship work, I haven't attended anything else."

The pandemic created a new dynamic within the educational technology system, which pushed for teaching digital citizenship. Since the subsiding of online teaching and hybrid education in public schools has returned to brick and mortar, digital citizenship training has also decreased. Participant 11 expressed, "It would be great to get more on it because I'm sure, I feel like a lot of us probably address some of the same things in all our classrooms." Initial

professional development training is vital to help educators address digital citizenship with students, but providing follow-up training sessions would offer more support as many educators continue to integrate digital citizenship lessons into their content areas. Participants expressed that more training for digital citizenship is needed and would benefit all stakeholders involved in the school.

Theme 2: Leadership Support and Accountability

Participants of the study were asked to share perspectives and advice for school leaders to support professional digital citizenship training. All participants (15 out of 15) unanimously agreed that leaders must provide support and teachers with digital citizenship training. Participant 6 stated, "I think that is something that needs to happen and not just assume that your teachers know what to do or how to teach students how to be good digital citizens." Educators need appropriate training to support student learning. Students' learning can suffer if educators are not trained properly on digital citizenship. On the other hand, some participants (4 out of 15) expressed a lack of differentiation regarding technology training and expressed the need for leaders to offer professional development for digital citizenship that can be adaptable to all content areas. Participant 9 said, "Have it be relevant to what the teachers in your building need."

When teachers are presented with professional training that does not apply to their classroom, frustration can occur for teachers and students. Teachers want to participate in hands-on professional training that they can immediately use to make an impact on their instruction and support student understanding and retention of content. Participants' overall responses exposed a gap in training opportunities available to support digital citizenship instruction and student learning. Accountability was another factor that influenced educators' advice on digital citizenship for leaders and making professional training opportunities relevant to all content

areas.

Theme 3: Curriculum Integration

Theme 3 emerged from participants sharing their methods of integrating digital citizenship lessons within their content area and classroom to support student learning. Most participants (13 out of 15) mentioned incorporating some components of digital citizenship, such as addressing social media use, email etiquette, finding credible sources, and safety. Participant 12 stated, "I would say I incorporate it with the lesson. We do have some curriculum in the upper levels of Spanish, specifically related to teen issues and in the use of social media." Social media use is a crucial component of addressing students' digital citizenship. Students are attached to their phones, and teachers need support in influencing positive and appropriate social media use for students in the classroom.

Contrasting participants (2 out of 15) mentioned a direct tie-in of digital citizenship components with social-emotional learning. Participant 15 said that an element of digital citizenship is "cyberbullying is addressed when we are doing social-emotional learning." Social-emotional learning has become a component for some educators to teach within their school setting, and digital citizenship can be included in these lessons. The pandemic has pushed for the necessity to address students' social-emotional learning and digital citizenship skills. Participants' responses clarify that many educators from various content areas teach more informal lessons to digital citizens. On the other hand, educators are combining digital citizenship components such as mental health and cyberbullying with social-emotional learning.

Theme 4: Online Safety

Participants of the study were asked to share their thoughts on how the safe use of digital tools and technology can impact a student's digital footprint. All participants (15 out of 15)

expressed concern for students' understanding of safety, ethics, and legal ramifications of improper use of the online world. Participant 10 explained, "Ethically and legally, I don't think students, because of their mental growth, always understand the ramifications of what they do, what they're sending, what they respond to, or what's posted." Teenagers have a more challenging time realizing that there are consequences to their actions. Incorporating digital citizenship education can help support students' legal and ethical use of the digital world. Educators are seeking methods to help students understand that their digital footprint matters as it can directly impact their future.

Some participants (6 out of 15) expressed the need for community support to uphold students' ethical, safe, and legal use of the digital world. Participant 5 stated,

Teachers are in this weird space that they have to manage what's happening in the students' hands, on their Chromebooks, and in the classroom and the world. So just with digital citizenship education for teachers, I think there needs to be this focus on more of a community aspect.

Educators need support from parents, school leaders, and the community to reach students from all aspects of their lives. Without the support of the community, educators can struggle with upholding students' responsible use of the internet. Participants agreed that online safety is a critical concern for education. Online safety should be a topic of discussion and alignment among all stakeholders in the community.

Theme 5: Future Implications

Theme 5 is the idea of future implications for students after they graduate high school. Many participants (11 out of 15) agreed that educators need to be aware of how they can teach students digital citizenship skillsets that they will need to be productive members of society in

both future academic and career scenarios. For example, Participant 4 mentioned,

> Most jobs are going to require good computer skills. We are preparing the students for
> their futures, so it is important that we teach them digital citizenship along with their
> other subjects. Students also need to recognize phishing scams, emails with questionable
> downloaded programs, and basic internet safety.

Students would benefit from having appropriate digital citizenship skills before they enter future career opportunities. Participant 5 stated, "Many, if not most, of the jobs that will be available by the time they graduate and the classrooms they will encounter in college and universities, will require those digital citizenship skills." Secondary students need to understand the ramifications of breaking a digital law and how that can affect any future endeavors they pursue. Students' daily interactions with the digital world and social media are prevalent in today's society. Educators see the need to support and prepare students for future success in academics and careers by implementing digital citizenship curricula into their content areas.

Findings Related to Research Question 1

Research Question 1 focused on the professional experiences of South Carolina educators' digital citizenship training as it pertained to instruction and student learning. The overall professional training experiences stem from a foundation based on earning technology proficiency as mandated by the state of South Carolina. Most educators (13 out of 15) believe that digital citizenship is a minor component of the initial technology training that educators must attend after their formal evaluation year. However, all teachers (15 out of 15) voiced concern that ongoing or more current training should be provided to address digital citizenship across all secondary classroom content areas, specifically social media and cyberbullying. Teachers are witnessing the effects of cyberbullying on students and their social-emotional well-

being, which directly impacts student learning. Educators cannot teach students who are in a heightened state of emotional trauma. Many educators are unaware of how to address this ongoing issue in the classroom to support student learning. Providing ongoing, hands-on, and meaningful digital citizenship training for all educators at the secondary level can be a starting point to address the issues teenagers face in today's digitally driven society.

Findings Related to Research Question 2

Research Question 2 focused on the effects of integrating a digital citizenship curriculum on educators in public secondary-education schools in South Carolina. The findings of the data analysis showed that most South Carolina educators incorporate a form of digital citizenship lessons integrated into their content's curriculum. Online safety, social-emotional learning, understanding credible sources, email etiquette, digital literacy, digital law, ethics, and social media use are among the topics that educators address when integrating digital citizenship curricula. Educators also seek to address how improper or illegal use of social media and the internet can ultimately impact any future endeavors the students pursue. Digital skills are essential for students to acquire, and having digital citizenship curricula integrated across multiple content areas supports the sense of community and promotes a cohesive learning environment for teachers and students. Integrating a digital citizenship curriculum in the secondary classroom can have a positive and lasting effect on a student's current and future life. Preparing students to become law-abiding, digital citizens is an essential issue for educators and all stakeholders to address within secondary education.

Reliability and Validity

The success of maintaining reliability within the study depended on the consistency and alignment of the research questions, methodology, data collection, and analysis (Stahl & King,

2020). Documenting each step of the data collection and analysis process helped establish credible research findings that were accurate depictions of the participants' views. Research protocols and procedures were explained and followed explicitly in the data collection and analysis sections to support the integrity of the findings. Saturation was achieved in the study by reaching the sample size of 15 participants. Common codes, themes, and patterns arose during the data analysis process to achieve saturation for the qualitative study. Credibility, dependability, transferability, and confirmability were established to ensure the study's validity and verification of the research (Rose & Johnson, 2020).

Credibility

The data collection and analysis credibility occurred by accurately reporting the experiences and the reality of the participants' interviews (Williams & Moser, 2019). The results of the study were obtained through a semi-structured interview with the participants. Virtual interviews were recorded and transcribed. Member checking and triangulation validated the data. Member checking occurred after the final virtual interview was conducted and the transcripts were manually checked for accuracy against the video interview recordings. Participants were emailed a transcript to provide the opportunity to member check and reflect on truthful accounts or to revise the transcripts. Member checks allowed for an increase in the trustworthiness of the data. Triangulation was used to compare and cross-examine the 15 participants' interviews. The 15 participants ranged in various content areas across the state of South Carolina, which provided a variety of responses and experiences.

Dependability

Well-documented audit trails were used to ensure dependability by describing the research process (Stahl & King, 2020). An audit trail was used to illustrate an in-depth narrative

of the participants' experiences. Using an audit trail supported the study's dependability by

clearly stating the methods and decisions made during the data collection and analysis section in

a transparent manner. The NVivo software was used to code and provide common themes among

the data. Bracketing was used to support dependability if any participants knew the interviewer.

All judgments were suspended during the data collection to reduce researcher biases and increase

dependability.

Transferability

Systematic sampling, constant comparison, data collection audits, and member checks

were used to support the transferability of the study. Participants' content areas ranged from fine

arts, English, Spanish, math, history, and ESOL, allowing for a variety of secondary educators'

experiences to be represented. The study's findings are potentially transferable to other contexts

or settings in schools and states similar to South Carolina. Accurately describing the participants'

experiences helped convey accurate results during data collection and analysis, potentially

allowing the reader to transfer the findings to other contexts. Systematic sampling allowed for a

variety of selections for participants. Pairing the NVivo software with constant comparison

helped create codes for the data analysis. Member checks allowed participants to reflect and

synthesize to transfer the research to more expansive communities (Yin, 2016).

Confirmability

Building and maintaining trust with the participants was crucial to establish

confirmability during the data collection. All participants felt safe and were allowed to express

their experiences during the interviews freely and safely. Participants were informed of their

rights and understood that their participation was voluntary and that all their information was

kept private. Member checks, audit trails, prolonged engagement, and persisting observations

allowed for the development of trustworthiness (Rose & Johnson, 2020).

Chapter Summary

This basic qualitative study was implemented to understand South Carolina public secondary educators' experiences of digital citizenship training and curriculum integration concerning student learning and instruction. Themes emerged and developed based on the data collection using open-ended, virtual interviews allowing for a deep analysis of the participants' experiences. Figures, tables, and participant quotations were used to support the five central themes of the study. Research Question 1 found that educators see the gap in professional development opportunities for digital citizenship. A consensus of the data showed that ongoing supportive professional training for educators to support student learning and instruction is necessary to address the needs of today's digitally driven students. Research Question 2 provided experiences and opinions on the effect of online safety, addressing students' future implications regarding integrating digital citizenship lessons.

Further discussions of findings, interpretations, and conclusions are presented in Chapter 5 and will make connections to the theoretical framework and draw meaningful conclusions. Limitations are also addressed in the following chapter by explaining the results' applications to other settings. Recommendations and implications for leadership for positive social change are presented in Chapter 5.

Chapter 5: Discussion and Conclusions

The purpose of this basic qualitative study was to explore the perspectives of secondary teachers in South Carolina regarding their experiences with the digital citizenship curriculum and how professional training affects their instruction and student learning. Underdevelopment of technology training and leadership support on digital citizenship for educators is apparent within the secondary classroom. New expectations placed on educators teaching in post-pandemic classrooms present unexpected challenges that directly impact student learning. This study identified secondary educators' perceived experiences with digital citizenship training and curriculum integration, which could assist policymakers and stakeholders in improving and supporting teachers' instruction and students' learning for appropriate use of technology.

Key findings of the study related to Research Question 1 included teachers witnessing the effects of cyberbullying and social media use and their direct impact on students' social-emotional well-being. Based on the findings, South Carolina educators' perceptions of digital citizenship training are that it is necessary, should be meaningful, and should be provided with adequate training for addressing the issues teenagers face in the digital world. Research Question 2 presented critical findings based on South Carolina educators' perceptions of integrating the digital citizenship curriculum. The study revealed that teachers incorporate various forms of digital citizenship curriculum across different content areas, even though it is not mandated in South Carolina. Digital skills are essential for teenagers to acquire and understand the importance of online safety, credible sources, email etiquette, digital literacy, digital law, and social media use. Incorporating a digital citizenship curriculum across all content areas can support students' learning and directly impact their future endeavors.

Findings, interpretations, and conclusions are presented in the following section. Limitations, recommendations, and implications for leadership are also addressed. The critical

outcomes of the study are summarized in a brief conclusion.

Findings, Interpretations, and Conclusions

Teachers' perspectives on digital citizenship training and curriculum integration were revealed in the study. Secondary South Carolina educators' digital citizenship training as it pertained to instruction and student learning was the focus of Research Question 1. Two themes emerged from Research Question 1. The two themes included the need for ongoing professional training on digital citizenship and leadership support and accountability. The study found that the pandemic's virtual and hybrid learning models pushed teachers to incorporate digital citizenship lessons. Data from the research showed that all participants (15 out of 15) agreed that digital citizenship training is necessary to address the needs of students and should be supported by leadership. In further support of the need to include ongoing professional training, participants believe that digital citizenship training should offer differentiation to support the inclusion of digital citizenship curriculum across all content areas and integrated competency-based instruction.

Since schools have returned to brick and mortar, a significant decrease in digital citizenship training has occurred. Educators recognize that providing initial digital citizenship training is critical for technology integration. However, ongoing support from leadership and follow-up training sessions are necessary to address the needs of today's technology-driven students. Leadership accountability can also directly impact teachers' frustration when professional technology training is not relevant or adaptable to their content areas. Data from the study showed that all participants agreed that leaders within the school must support and provide digital citizenship training. Community buy-in and support from parents, students, administration, and staff can provide longevity for digital citizenship curriculum integration

(Phillips & Lee, 2019; Ribble & Park, 2020).

The aim of Research Question 2 was to understand the effects of integrating a digital citizenship curriculum by secondary South Carolina educators. Three themes related to Research Question 2 were curriculum integration, online safety, and future implications. Educators agreed that in the secondary setting, email etiquette, social media use, safety, and credibility of sources are essential factors of a digital citizenship curriculum to impact students positively. Online safety is a concern for secondary students as they are unaware of the dangers and ramifications of improper, illegal, or unethical internet use. Digital footprints are essential for students to understand and can impact future implications after graduating high school. Teaching students the importance of digital citizenship with the support and collaboration of leadership, parents, and the community is critical for impacting student learning. Many jobs today require employees to have good digital citizenship skillsets and basic internet safety.

Findings Comparison to Literature

The study's findings confirm and extend the information presented in Chapter 2. Emerging themes from the data analysis were compared to the supported research found in the body of the peer-reviewed literature and the context of the theoretical framework. The research questions focused on secondary educators' perceptions of digital citizenship training and curriculum integration regarding instruction and student learning.

Professional Training Experiences With Digital Citizenship

Data analysis presented secondary educators' perceptions of the necessity for ongoing digital citizenship as an emerging theme related to Research Question 1. Most participants (14 out of 15) received initial digital citizenship training through required technology proficiency training or during virtual instruction at the height of the pandemic. Ince (2022) had similar

findings from the literature that switching from in-person to online instruction required a re-assessment for technology training. Since the return to brick-and-mortar schools, digital citizenship training has subsided. Findings from the data analysis showed that educators agreed that ongoing training would be more beneficial when integrating a digital citizenship curriculum directly impacting student learning and instruction. Öztürk (2021) also found that digital tools in a post-pandemic school setting require retraining teachers for online safety and communication, supporting the data analysis findings.

Leadership support and accountability formed the second significant theme from the data analysis related to digital citizenship training and Research Question 1. A belief shared among every participant is that students' learning can suffer if digital citizenship is not addressed appropriately by teachers who have proper professional training. The literature supported these findings because more challenges arise with using social media and preparing students to be good digital citizens (Dunaway & Macharía, 2021; Piceci et al., 2021). Challenges occur when there is no support or accountability for teachers' professional training on digital citizenship, and leadership plays a role in these challenges. The data analysis showed that a small number of participants (4 out of 15) expressed concern about the lack of differentiation in professional training and that the training should be adaptable to any content area. According to the literature, appropriate training is necessary for educators to enhance their pedagogy, content, and knowledge (Gazi, 2016).

Integration of Digital Citizenship Curriculum

Emerging themes from the data analysis related to Research Question 2 involved curriculum integration, online safety, and future implications supported by the literature (Buchholz et al., 2020; Martin et al., 2019; Phillips & Lee, 2019; Ribble & Park, 2020). The

findings showed that most participants (13 out of 15) incorporated various aspects of digital

citizenship curricula but were not required to include digital citizenship in their curriculum. All

participants agreed that digital citizenship is essential for students, especially with increased

social media use and the need to address students' online safety. Teenagers have difficulty

understanding that their online actions can have severe consequences. The literature showed that

students need to be aware of their surroundings online and youth are at high risk for

inappropriate internet use or being exposed to scams and threats (Egresitz, 2020; Harris & Johns,

2021). Educators expressed an understanding of incorporating aspects of digital citizenship

frameworks to address these challenges and help students understand internet safety.

Future implications from the data analysis showed the participants' (11 out of 15) beliefs

that understanding digital citizenship components needs to be supported by all stakeholders,

including parents, teachers, administration, district personnel, and students. Phillips and Lee

(2019) found the key to improving digital citizenship involves collaboration and input from

administrations, librarians, and teachers supporting the study's findings. For future implications,

students need appropriate digital citizenship skills, such as colleges and careers. The literature

found that students have difficulty applying digital citizenship skills to real-world scenarios.

Teachers can help support these skills by addressing students' digital etiquette and using

innovative technologies in the classroom (Hui & Campbell, 2018).

Findings in the Context of the Theoretical Framework

Siemens' (2005) connectivism learning theory and Mishra and Koehler's (2006) TPACK

model were used to analyze, interpret, and clarify the meaning of the findings. The theoretical

framework aimed to help better understand educators' perceptions of professional digital

citizenship training and curriculum integration within the secondary classroom setting. The

principles of the connectivism learning theory promote change, collaboration, and communication while using technology (Siemens, 2005). Siemens' (2005) connectivism learning theory supported research on digital citizenship training and curriculum because the theory focuses on providing educators with an understanding of how to process and communicate online, which are critical components of digital citizenship integration.

The TPACK model (Mishra & Koehler, 2006) directly correlates with helping instructors gain knowledge of using technology to support student learning and address the challenges that educators will face with technology integration. Connecting content, pedagogy, and technology can help educators face the challenges expressed through the study's findings. Teachers feel unprepared when they are not adequately trained to use technology integration to support student learning, which can directly affect their perspectives towards technology integration (Voithofer & Nelson, 2021).

The theoretical framework provided context showing a necessity to equip educators with appropriate and ongoing professional training and support for curriculum integration as it impacts student learning and future implications for students. A teacher's digital citizenship training, understanding of technology, support from leadership, and addressing online safety can directly affect future implications for students' digital citizenship skills.

Conclusions

Several conclusions are supported in the study's findings when compared to the theoretical framework and existing literature. Educators' perceptions of digital citizenship training should address social media and cyberbullying issues as they can directly impact a student's learning and social-emotional well-being. Participants believed that providing ongoing, meaningful, collaborative digital citizenship training could help them address these issues with

their students. Siemens (2005) expressed that technology is essential to education.

Future implications also proved to be an essential theme as integrating digital citizenship curriculum into secondary classrooms can positively affect students by adequately preparing them to become law-abiding, digital citizens. Understanding technology integration through pedagogical practices is important when increasing student competencies and learning (Mishra & Koehler, 2006). The study, along with the literature and theoretical framework support, provides insight into the direct impact of professional training on the successful or unsuccessful integration of digital citizenship curriculum in the secondary setting.

Limitations

Two limitations apply to this study. The basic qualitative study occurred within only two regions of South Carolina. The Upstate and the Lowcountry were the only two regions of South Carolina represented in the study with a majority of the participants located in the Upstate. The second limitation was that the study was limited to 15 participants, which could raise concerns about the transferability of the findings. Transferability relates to transferring the findings to other contexts, studies, or settings (Stahl & King, 2020). Systematic sampling was used to provide a variety of participant selections. However, data collection occurred throughout summer break for teachers, which limited the number willing to participate due to scheduling conflicts.

Potential bias could have occurred with participants who knew the interviewer or were colleagues. Credibility is critical to the data collection, analysis, and portrayal of the reality of the participants' experiences (Williams & Moser, 2019). Using validated, open-ended questions and remaining objective helped with the consistency and credibility of the interviews. Transcripts were sent to participants to member check and approve, and audit trails were used to establish the dependability of the study and reduce limitations. Participants were informed of

their rights, information was kept private, and the ability to maintain trust helped establish

confirmability to reduce limitations.

Recommendations

Recommendations for future research and changes in policies and practices are based on

grounded research, resulting from the themes that emerged from the findings and the data

analysis. Digital citizenship is a growing topic within instructional technology, directly impacts

student learning, and continues to concern educators, administration, and policymakers

nationally. Utah is the only state requiring a mandated digital citizenship curriculum. South

Carolina does not require every content area to include digital citizenship within the curriculum,

and districts across South Carolina have varying requirements for digital citizenship.

Recommendations for changes in practices and policies supported by the findings to further

research are discussed.

Based on the findings within this basic qualitative study, one recommendation stems

from providing ongoing professional training for digital citizenship. Specifically, training on the

impact of social media use could benefit instruction and student learning. The participants'

responses revealed they received initial technology training that included digital citizenship but

felt more training would help address digital citizenship skills with students, regardless of the

content area. Leadership and accountability support from the administration should help with this

recommendation. Participants agreed there was a gap in training for digital citizenship and would

like the administration to offer more training related to content areas to provide differentiation.

Educators need support when integrating technology from all stakeholders in the community.

Another recommendation based on the findings of this study is to provide more resources

for digital citizenship curriculum integration to support student learning. Programs such as the

ISTE frameworks or Ribble and Park's (2020) digital citizenship framework could be provided for South Carolina educators. Appropriate teacher training should occur to support the implementation of any new curriculum or technologies.

During the pandemic, social-emotional learning and digital citizenship skills were pushed for educators to address with students but have since subsided. The findings based on participant responses overwhelmingly stated that cyberbullying was a topic that needs to be addressed with students as it directly impacts their social-emotional well-being. Online safety can be supported by teaching students about the ethical and legal use of the online world and that there are consequences to their actions. A recommendation stems from stakeholders in the community, including parents, administration, district personnel, and teachers, who need to be aware of the dangers of the internet and how it can impact students' future. Collaborative decision-making opportunities with all stakeholders can support the development and integration of digital citizenship curricula across the state.

Based on the findings, recommendations for future research can expand on using a variety of participants and schools within South Carolina and across the nation for professional training and curriculum integration of digital citizenship to support student learning. One significant limitation of this study included the limited sample size. Using a mixed-methods study could help expand the participant sample size. Pursuing another qualitative study that offers perspectives of K-8 educators could also prove beneficial for the transferability of the research. Researchers could also continue to study professional training opportunities available for educators and the implementation of digital citizenship, as it is essential to students' future personal, academic, and professional lives.

Implications for Leadership

Based on the results of this study, stakeholders such as parents, teachers, counselors, administration, and district personnel can understand the importance of supporting and offering ongoing professional training for digital citizenship within secondary classrooms. Implementing a digital citizenship curriculum can positively impact students' social-emotional well-being by addressing digital footprint, online safety, cyberbullying, and future implications for students. Teenagers have difficulty processing the consequences of their actions online, while many have personal experiences of hostile online behavior (Phillips & Anderson, 2020).

Community is a significant aspect of implementing or suggesting any new changes within the field of education. Teachers need support from all community members, but especially parents. Students would benefit from hearing and being provided with the same information about the importance of making a positive digital footprint and leaving a positive impact on the internet since it can be filled with negativity. Parents could receive classes or training on addressing social media use, cyberbullying, and digital footprints with their children.

Leadership support can focus on offering teachers various professional training opportunities related to their content area regarding digital citizenship and how to support student learning in the digital age. District personnel and state-level leaders can support and address the negative impact that cyberbullying can have on students' social-emotional well-being. Integration should occur across all content area curricula for the digital citizenship curriculum to succeed.

The findings of this study can have a potentially positive impact on future research. Educational leaders, district leaders, and policymakers can be provided with an understanding that implementing digital citizenship training and curriculum can have a positive impact on

student learning based on the findings of the study. Teachers need community support and knowledge about providing students with the necessary digital citizenship skillsets to be productive members of society in this digital age. Supporting student learning through implementing a digital citizenship curriculum across all content areas would be most effective when promoted and supported by all education leaders involved at the district and state levels.

Conclusion

This basic qualitative study focused on public secondary South Carolina educators' perceptions of digital citizenship curriculum and training based on student learning. The results of the study included South Carolina educators having similar opinions on the necessity of providing ongoing professional training for teachers on digital citizenship. Many participants remembered initial digital citizenship training but felt refresher courses would benefit their teaching practices. Other indications from the results stemmed from integrating a digital citizenship curriculum and the need to provide students with accurate information on the importance of digital citizenship and the direct impact it can have on their future endeavors.

Leaders and policymakers for instructional technology and education could use the results of this study to resolve any challenges teachers may face when addressing and integrating digital citizenship curricula into their classes. Future research could prove beneficial to increase the study's transferability. One implication from this study indicates the need for educators to be provided with ongoing professional digital citizenship training that is adaptable to their content area and offered support from leaders within the organization. The second implication stems from the need to address digital citizenship across all content areas to provide students with lasting knowledge of the skills to allow them to become productive members of digital society. Data and findings presented in this study can provide insight for leaders at the district and state

levels on the importance of digital citizenship training and curriculum integration and the

positive impact it can have on student learning.

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Appendix A

Permission Email Signed by Point of Contact for the Research Site

Permission Request for Dissertation Research

Kelsey Barton
Thu 10/20/2022 10:00 PM

Dear SC for Ed Board,

My name is Kelsey Barton, and I am a doctoral candidate at the American College of Education (ACE) writing to request permission to interview members of the SC for Ed. Facebook group. This information will be used for my dissertation research on Educators' Perceptions on Digital Citizenship and Secondary Education: A Basic Qualitative Study. The purpose of the basic qualitative study will be to better understand educators' perceptions of professional training and the integration of digital citizenship in their secondary education curriculum.

Important Contacts for this study include:

Principal Investigator:
Kelsey Barton
E-mail:

Dissertation Chair:
Dr. Sandra Quiatkowski

Email:

Thank you for your attention to this issue and prompt response. I appreciate your time and consideration of my request for permission to use the SC for Ed. Facebook Group as my potential Research Site.

Regards,

Kelsey Barton

AMERICAN COLLEGE of EDUCATION

Re: Permission Request for Dissertation Research

You don't often get email from

Please be cautious
This email originated from outside of ACE organization

Yes. Please create a post in the Facebook group with this information and it will be approved.
Thanks,

9:36 AM

My name is Kelsey Barton, and I am a doctoral candidate at the American College of Education (ACE) writing to request permission to interview members of the Upstate Teacher Connection Facebook group. This information will be used for my dissertation research on Educators' Perceptions on Digital Citizenship and Secondary Education: A Basic Qualitative Study. The purpose of the basic qualitative study will be to better understand educators' perceptions of professional training and the integration of digital citizenship in their secondary education curriculum. Thank you for your attention to this issue and prompt response. I appreciate your time and consideration of my request for permission to use this group as a potential Research Site.

Thank you,

Kelsey Barton

You can now message and call each other and see info like Active Status and when you've read messages.

I reached out to [redacted] and we think it's fine for you to do that. Just be really specific in your post and say that we approved it for you.

Appendix B

Recruitment Letter for Facebook and LinkedIn Post

Dear South Carolina Teachers,

I am a doctoral student at American College of Education. I am writing to let you know about an opportunity to participate in a dissertation research study.

Brief description of the study:

The problem is that secondary educators face multiple challenges in digital citizenship, including a lack of professional training and curriculum support. The purpose of this basic qualitative study will be to explore the perspectives of secondary teachers in South Carolina regarding their experiences with the digital citizenship curriculum and how professional training affects their instruction and student learning.

Description of criteria for participation:

You are being asked to participate in this study because you meet the criteria of currently teaching secondary education in South Carolina and having experience with digital citizenship training and curriculum. Your contributions will help add to the existing knowledge of digital citizenship. Participant criterion selection includes: over 21 years old, two years of teaching experience, secondary education certification, experience with digital citizenship training and curriculum, and employed as a 9th-12th grade high school teacher in South Carolina. Exclusion criteria will consist of retired teachers, teachers outside of the state of South Carolina, and K-8 certified teachers. The duration for data collection will occur over a period of four months while I am enrolled in an American College of Education (ACE) research class and immediately after IRB approval, as noted in the informed consent document.

Research Design and Procedures

The study will use a qualitative methodology a basic qualitative research design. Informed consent forms will be disseminated to specific participants within the South Carolina for Education private Facebook group, the Upstate Teacher Connections Facebook group, and a personal LinkedIn post. The study will comprise of 15 to 20 participants who will participate in the interview process. The study will involve interviews to be conducted virtually using Microsoft Teams in a location of your choice during a time most convenient for participants. An in-depth semi-structured interview schedule will be used to collect data through video conferencing using Microsoft Teams and recordings and collection of transcripts of the interviews. A member check will occur after data collection and provide accessible data analysis to the participants. Participants will be emailed and provided with the opportunity to participate in a member-check to confirm, reflect, or modify any transcripts collected during the first interview. Member checks will be required to be returned within 5 business days.

Voluntary Participation

Your participation in the study will be voluntary. At any time, you wish to end your participation in the research study, you may do so by sending me an email explaining you are opting out of the study. There will be no repercussions for leaving the study.

I may publish the results of this study; however, I will not use your name nor share identifiable data you provided. Your information will remain confidential. If you would like additional information about the study, please contact the following

Candidate Contact Information: Kelsey Barton: **E-mail:** █████████████████

Chair Contact Information: Dr. Sandra Quiatkowski: **Email:** ███████████████

If you meet the criteria above, are interested in participating in the study, and would like to be included in the potential participant pool, please email me at █████████████

Thank you again for considering this dissertation research opportunity.

Appendix C

Informed Consent Form

Project Title: Educators' Perceptions on Digital Citizenship and Secondary Education: A Basic Qualitative Study

Researcher: Kelsey Barton

Organization: American College of Education

Email: ███████████████████ **Telephone:** ██████████████

Date of IRB Approval: 6/7/2023

Please note that this research study will be approved by the American College of Education Institutional Review Board. The IRB approved this study on <u>6/7/2023</u>. A copy of the approval letter will be provided upon request.

Researcher's Dissertation Chair: Dr. Sandra Quiatkowski

Organization and Position: American College of Education and Dissertation Chair

Email: ████████████████████

Introduction

I am Kelsey Barton, and I am a doctoral candidate student at American College of Education. I am doing research under the guidance and supervision of my Chair, Dr. Quiatkowski. I will give you some information about the project and invite you to be part of this research. Before you decide, you can talk to anyone you feel comfortable with about the research. If you have questions, ask me to stop as we go through the information, and I will explain. If you have questions later, feel free to ask me then.

Purpose of the Research

The purpose of this basic qualitative study will be to explore the perspectives of secondary teachers in South Carolina regarding their experiences with the digital citizenship curriculum and how professional training affects their instruction and student learning. You are being asked to participate in a research study which will assist with understanding South Carolina secondary educators' perceptions with digital citizenship curriculum and training. Conducting this qualitative study will explore the experiences of educators receiving professional digital citizenship curriculum training and the effects of integrating a digital citizenship curriculum.

Research Design and Procedures

The study will use a qualitative methodology a basic qualitative research design. Informed consent forms will be disseminated to specific participants within the South Carolina for Education private Facebook group, the Upstate Teacher Connections Facebook group, and a

personal LinkedIn post. The study will comprise of 15 to 20 participants who will participate in the interview process. The study will involve interviews to be conducted virtually using Microsoft Teams at a location of your choice and during a time most convenient for participants. An in-depth semi-structured interview schedule will be used to collect data through video conferencing using Microsoft Teams and recordings and collection of transcripts of the interviews. A member check will occur after data collection and provide accessible data analysis to the participants. Participants will be emailed and provided with the opportunity to complete a member-check to confirm, reflect, or modify any transcripts collected during the first interview.

Participant Selection

You are being invited to take part in this research because of your experience as a currently employed South Carolina public secondary-educator who can contribute much to the existing knowledge of digital citizenship and the topic of the study, which meets the criteria for this study. Participant selection criteria: Secondary South Carolina educator, currently working as an educator, and have experience with digital citizenship training and curriculum.

Voluntary Participation

Your participation in this research is entirely voluntary. It is your choice whether to participate. If you choose not to participate, there will be no punitive repercussions.

Right to Refuse or Withdraw

Participation is voluntary. At any time, you wish to end your participation in the research study, you may do so by sending me an email explaining you are opting out of the study. There will be no repercussions for leaving the study.

Procedures

We are inviting you to participate in this research study. If you agree, you will be asked to participate in a virtual interview using the Microsoft Teams video conferencing software. The virtual interview will be recorded. The type of questions asked will range from a demographical perspective to direct inquiries about the topic of educators' perceptions on digital citizenship and secondary education.

Duration

The interview portion of the research study will require approximately 45 to 60 minutes to complete. If you are chosen to be interviewed, the time allotted for 45 to 60 minutes will be set up at a location and time convenient for the participant. Prior to an interview, you will be asked to provide permission to have the interview recorded for the sake of having accurate transcripts for data. A follow-up member check will take place after all the participant interviews are completed through email and will be returned to the researcher within 5 business days.

Risks

The researcher will ask you to share personal and confidential information, and you may feel uncomfortable talking about some of the topics. You do not have to answer any question or take part in the discussion if you do not wish to do so. You do not have to give any reason for not responding to any question.

Benefits

You will not receive any type of incentive for your participation in the study but, your participation is likely to help us find out more about educators' perceptions on digital citizenship and secondary education. The potential benefits of this study will aid the contributions in existing research by providing in-depth interviews on documented secondary education teachers' experiences relating to digital citizenship education.

Confidentiality

I will not share information about you or anything you say to anyone outside of the researcher. During the defense of the doctoral dissertation, data collected will be presented to the dissertation committee. All data will be stored and maintained using two factor authentication secured password-protected one drive files on a personal laptop computer that will be locked in a cabinet only the researcher can access for three years. At the end of the three-year window all digital data will be destroyed using double deletion by deleting one drive files and files from the recycle bin. All physical printed data will be shredded. Any information about you will be coded and will not have a direct correlation, which directly identifies you as the participant. Only I will know what your number is, and I will secure your information using two factor authentication secured password-protected one drive files on a personal laptop computer that will be locked in a cabinet only the researcher can access for three years.

Sharing the Results

At the end of the research study, the results will be available for each participant. It is anticipated to publish the results so other interested people may learn from the research.

Questions About the Study

If you have any questions, you can ask them now or later. If you wish to ask questions later, you may contact Kelsey Barton or Dr. Sandra Quiatkowski. This research plan will be reviewed and approved by the Institutional Review Board of American College of Education. This is a committee whose role is to make sure research participants are protected from harm. If you wish to ask questions of this group, email IRB@ace.edu.

Certificate of Consent

I have read the information about this study, or it has been read to me. I acknowledge why I have been asked to be a participant in the research study. I have been provided the opportunity to ask questions about the study, and any questions have been answered to my satisfaction. I certify I am at least 21 years of age. I consent voluntarily to be a participant in this study.

Print or Type Name of Participant: _____

Signature of Participant: _____

Date: _____

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily. A copy of this Consent Form has been provided to the participant.

Print or type name of lead researcher: Kelsey Barton

Signature of lead researcher: _____

Date: _____

**PLEASE KEEP THIS INFORMED CONSENT FORM FOR
YOUR RECORDS.**

Appendix D

Interview Protocol

Script for Interview:

I am going to begin recording the interview. Do you give permission to record this interview for the sake of having accurate transcripts for data? The interview will focus on demographics, teaching experiences, experiences with digital citizenship professional training, effects of integrating digital citizenship curriculum, and recommendations.

Demographics

1. What subjects do you teach?

2. What are your certification areas?

3. How many years of teaching experience do you have?

4. How many years have you taught in the state of South Carolina?

5. Which region of South Carolina do you teach?

Teaching Experiences

6. What technology is available for teachers and students at your school/district?

7. How did COVID and virtual school affect your use of technology?

    a. What technologies are you still using or not using from teaching during the pandemic?

8. What training does your district offer to support technology proficiency?

9. Do you have access to an Instructional Technology coach at your school or through your district?

10. What are some strategies you use with technology integration within your classroom?

Digital Citizenship Training

11. Does your district require every teacher to integrate digital citizenship into their classroom?

    a. If yes, do you use a set curriculum or are you free to choose your own?

12. Why do you think digital citizenship professional training is necessary to address the needs of today's digitally driven student?

13. What professional training opportunities have you attended to support the use of digital citizenship curriculum in the secondary classroom?

Digital Citizenship Integration

14. How would you define digital citizenship?

15. Why do you think digital citizenship skills are important for students to acquire?

16. Do you currently teach any digital citizenship curriculum or lessons within your classroom?

17. Why is it important for students to understand how to use digital tools and technology in a safe, legal, and ethical manner?

Recommendations

18. What advice would you give to teachers who want to integrate digital citizenship curriculum into their content area?

19. What advice would you give to school leaders to support digital citizenship professional training?

20. Is there anything else you would like to add relating to digital citizenship education or your teaching experiences?

Sharing the Results

At the end of the research study, the results will be available for each participant. It is anticipated to publish the results so other interested people may learn from the research.

Questions About the Study

If you have any questions, you can ask them now or later. If you wish to ask questions later, you may contact Kelsey Barton or Dr. Sandra Quiatkowski. This research plan will be reviewed and approved by the Institutional Review Board of American College of Education. This is a committee whose role is to make sure research participants are protected from harm. If you wish to ask questions of this group, email IRB@ace.edu.

Participants will be thanked for their time and the information they provide and will be informed of any revising or reviewing of content.

Appendix E

Subject Matter Expert Field Test Feedback Modifications

The SMEs will not be participants in the study.

Re: SME-Validation of Interview Instrument

You don't often get email from [redacted] Learn why this is important

Please be cautious
This email originated from outside of ACE organization

Here are my suggestions:

On 15 you may want to identify/give examples of specific names of training you are referring to

On questions #19 you may want to identify what ISTE stands for

I didn't really know how to answer 26

24, 25, and 27 are very similar and as I answered them I felt like I was kind of repeating myself.

These are excellent questions! These are just some suggestions to give you feedback. If you didn't make any changes they would still be great!

Hope this helps!

BE CAREFUL WITH THIS MESSAGE: This message was sent from someone outside of [redacted]. Do not click on links or open any attachments until you have confirmed with the sender and know the content is safe. Never reply to an outside message with any personal information including your password or phone number. Do not send money or gift cards. If assistance is needed call the [redacted]

Good afternoon,

I am Kelsey Barton, a doctoral student at American College of Education (ACE). I will be conducting research under the guidance and supervision of my chair, Dr. Sandra Quiatkowski. The research study will assist in exploring South Carolina educators' perceptions on digital citizenship and secondary education.

The study will be a basic qualitative research design. The data collection method will be semi-structured interviews using open-ended questions. I am asking for your scholarly advice and expertise to examine the attached interview questions, and provide any suggestions or feedback. Additional questions can also be suggested. I greatly appreciate your support, and I welcome any feedback you may have to offer.

Thank you for the support,

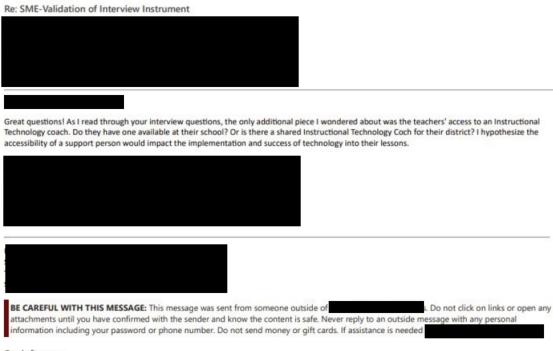Kelsey Barton
ACE Doctoral Candidate

Dissertation Topic: Educators' Perceptions on Digital Citizenship and Secondary Education: A Basic Qualitative Study

Research Questions:

1. What are the experiences of educators receiving professional digital citizenship curriculum training at public secondary-education schools in South Carolina?
2. What are the effects of integrating a digital citizenship curriculum on educators in public secondary-education schools in South Carolina?

CONFIDENTIAL EMAIL: This e-mail is intended solely for the addressee. The information contained herein is confidential. Any dissemination, distribution or copying of this e-mail, other than by its intended recipient, is strictly prohibited. If you have received this e-mail in error, please notify me immediately and delete this message.

Re: SME-Validation of Interview Instrument

Great questions! As I read through your interview questions, the only additional piece I wondered about was the teachers' access to an Instructional Technology coach. Do they have one available at their school? Or is there a shared Instructional Technology Coch for their district? I hypothesize the accessibility of a support person would impact the implementation and success of technology into their lessons.

BE CAREFUL WITH THIS MESSAGE: This message was sent from someone outside of ███████████████████. Do not click on links or open any attachments until you have confirmed with the sender and know the content is safe. Never reply to an outside message with any personal information including your password or phone number. Do not send money or gift cards. If assistance is needed ████████████

Good afternoon,

I am Kelsey Barton, a doctoral student at American College of Education (ACE). I will be conducting research under the guidance and supervision of my chair, Dr. Sandra Quiatkowski. The research study will assist in exploring South Carolina educators' perceptions on digital citizenship and secondary education.

The study will be a basic qualitative research design. The data collection method will be semi-structured interviews using open-ended questions. I am asking for your scholarly advice and expertise to examine the attached interview questions, and provide any suggestions or feedback. Additional questions can also be suggested. I greatly appreciate your support, and I welcome any feedback you may have to offer.

Thank you for the support,

Kelsey Barton
ACE Doctoral Candidate

Dissertation Topic: Educators' Perceptions on Digital Citizenship and Secondary Education: A Basic Qualitative Study

Research Questions:

1. What are the experiences of educators receiving professional digital citizenship curriculum training at public secondary-education schools in South Carolina?
2. What are the effects of integrating a digital citizenship curriculum on educators in public secondary-education schools in South Carolina?

RE: SME-Validation of Interview Questions

████████████████████████████

📎 1 attachments (16 KB)
Research Instrument Items_Semi Structure Interview Questions.docx;

Please be cautious
This email originated from outside of ACE organization

Hey Kelsey! Overall I think it looked great. I added a few questions/suggestions to your document and highlighted them in yellow. Feel free to use them or not use them. Also, if you want to talk about it further, we can set up a time to talk about it.

Teaching Experiences

8. Describe your generalized experiences with teaching at the secondary classroom?

   a. This question is very vague. Is there something specific you are trying to learn by asking it? If so, I would either give an example or change the wording of the question.

9. What challenges have you faced teaching at the secondary level?

10. What technology is available for teachers and students at your school/district?

11. Describe how transitioning to 1:1 technology has affected your teaching over the years?

   a. You could also ask how COVID and virtual school affected their use of technology. What are they still using, what have they stopped using?

Digital Citizenship Training

14. Does your district require every teacher to integrate digital citizenship into their classroom? If so, is it a set curriculum or are you free to use whatever you choose?

15. What training does your district offer to support digital citizenship curriculum integration?

16. Why do you think digital citizenship professional training is necessary to address the needs of today's digitally driven student?

17. Should professional training be offered one time for digital citizenship or be an ongoing process?

Appendix F

ACE IRB Approval Letter

AMERICAN COLLEGE of EDUCATION

June 07, 2023

To : Kelsey Barton
      Sandra Quiatkowski, Dissertation Committee Chair

From : Institutional Review Board
          American College of Education

Re: IRB Approval

"Educators' Perceptions on Digital Citizenship and Secondary Education: A Basic Qualitative Study"

The American College of Education IRB has reviewed your application, proposal, and any related materials. We have determined that your research provides sufficient protection of human subjects.

Your research is therefore approved to proceed. The expiration date for this IRB approval is one year from the date of review completion, June 07, 2024. If you would like to continue your research beyond this point, including data collection and/or analysis of private data, you must submit a renewal request to the IRB.

Candidates are prohibited from collecting data or interacting with participants if they are not actively enrolled in a dissertation sequence course (RES6521, RES6531, RES6541, RES6551, RES6561, RES6302) and under the supervision of their dissertation chair.

Our best to you as you continue your studies.

Sincerely,

Tiffany Hamlett
Chair, Institutional Review Board
American College of Education