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UNDERSTANDING FIRST-YEAR UNDERGRADUATE STUDENTS SAFETY, SAVVINESS, AND SOCIAL ETIQUETTE ONLINE

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UNDERSTANDING FIRST-YEAR UNDERGRADUATE STUDENTS SAFETY, SAVVINESS, AND SOCIAL ETIQUETTE ONLINE

DISSERTATION

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Education in the College of Education at the University of Kentucky

By

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Richmond, Kentucky

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2023

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ABSTRACT OF DISSERTATION

UNDERSTANDING FIRST-YEAR UNDERGRADUATE STUDENTS SAFETY, SAVVINESS, AND SOCIAL ETIQUETTE ONLINE

Student's engagement and interaction online continue to grow as technological advancements increase. The ability to engage and connect is endless today compared to two decades ago. This mixed methods action research study examines the digital citizenship knowledge of first-year students at a private liberal arts work college. The study focuses on student's understanding of digital citizenship through the lens of safety, savviness, and social engagement online. Additionally, the study seeks to explore students, staff, and faculty perceptions around more education about digital citizenship at the undergraduate level. This study discusses the problem of practice, methodological framework, and study plan in detail. Results from this study have the potential to help first-year undergraduate students better understand digital citizenship to increase their awareness of best practices of online engagement.

KEYWORDS: digital citizenship, higher education, online safety, online savviness, social engagement online

Collis Ray Robinson

April 20, 2023

UNDERSTANDING FIRST-YEAR UNDERGRADUATE STUDENTS SAFETY, SAVVINESS, AND SOCIAL ETIQUETTE ONLINE

By

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Dr. John Nash
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April 20, 2023
Date

(DEDICATION)

To my beloved family, ancestors, and educators,

This dissertation is not solely my accomplishment, but the result of the collective support, guidance, and wisdom imparted to me by each one of you.

To my family, your unwavering love and encouragement have sustained me through every challenge and triumph. Your sacrifices have made it possible for me to pursue my dreams and become the person I am today. I am grateful for your presence in my life and dedicate this work to you.

To my ancestors, I honor your legacy and the resilience you demonstrated in overcoming the obstacles that once barred our people from achieving our goals. Your stories, struggles, and triumphs have inspired me to persevere and use my education to positively impact the world.

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I am deeply grateful to everyone for the love, support, and guidance they have provided me throughout this journey. Without their support, this dissertation would not have been possible.

I humbly dedicate this dissertation to each and every of you with heartfelt gratitude and appreciation.

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Introduction

In the growing age of technology, students need to fully understand and know how to engage as citizens online safely and respectfully. This mixed methods action research (MMAR) study focused on understanding undergraduate students' digital citizenship. At Berea College, a private liberal arts work College in Berea, Kentucky; matriculated students are given a laptop computer to use during their time at the College. The study aims to examine first-year undergraduate digital citizenship knowledge and explore an intervention to support student growth and development in digital citizenship. This chapter will describe the problem of practice, the context for this study, key stakeholders, the methodological framework, and the overall study plan.

Context of Study

This study will take place at Berea College in Berea, Kentucky. Berea College is a private liberal arts work college founded in 1855 by the Reverend John G. Fee. Every student enrolled at the College receives a *tuition promise scholarship*, resulting in students paying no money for tuition. Berea College is also one of ten *work colleges* in the United States. In work colleges, every student is required to work a job on campus alongside their academic journey. Since its founding, Berea College has upheld a firm commitment to social justice through its dedication to interracial education for students from Appalachia. Today, the College is guided by the following principles referred to as the Great Commitments, which are:

1) To provide an educational opportunity for students of all races, primarily from Appalachia, with great promise and limited economic resources.
2) To offer a high-quality liberal arts education that engages students as they pursue their personal, academic, and professional goals.

3) To stimulate understanding of the Christian faith and its many expressions to emphasize the Christian ethic and the motive of service to others.
4) To promote learning and serving in the community through the student Labor Program honoring the dignity and utility of all work, mental and manual, and to take pride in work well done.
5) To assert the kinship of all people and to provide interracial education with a particular emphasis on understanding equality among blacks and whites as a foundation for building community among all peoples of the earth.
6) To create a democratic community dedicated to education and gender equality.
7) To maintain a residential campus and to encourage all community members to a way of life characterized by mindful and sustainable living, health and wellness, zest for learning, high personal standards, and a concern for the welfare of others.
8) To engage Appalachian communities, families, and students in partnership for mutual learning, growth, and service.

These commitments have allowed Berea College to remain grounded in its mission and vision.

The College's current demographics affirm that the Great Commitments still guide the College. Berea College enrolls about 1,600 students each academic year. In the 2021-2022 academic year, 57% were considered first-generation college students, and 20% were from at-risk and distressed Appalachian counties (Berea College, 2022). The student body is diverse, with 54% white, 26% Black/African American, 12% International, and 8% Other Races. The current student body represents 45 states, 1 U.S. Territories, and 70 countries. (Berea College, 2022).

Stakeholders

In identifying a problem of practice for this research study, talking with stakeholders is essential. “Stakeholders help in the investigation process to find practical solutions to address

the problem" (Ivankova, 2015, p. 30). Administrative leadership stakeholders in this study include the Vice President and Associate Vice President for Student Life. The Student Life Division is spearheading the development of an extracurricular guide for students with components of the guide written expressly for the needs of each class year (i.e., first-year students, sophomores, juniors, and seniors). This guide will describe recommended pathways for students to support their learning outside the classroom. The Student Life Division at Berea College enforces the code of conduct prescribed in the Student Handbook. Due in part to violations of the code of conduct and judicial hearings associated with this violation, the divisional leadership team has recognized the need for students to learn about digital citizenship. Some students engage in unsafe behaviors online, such as giving out too much information about themselves to strangers. Other students struggle to be respectful to peers and others when online. The Student Life Division is interested in ways to help educate students about being safe, savvy, and respectful online.

Other stakeholders in the study are the Chief Information Officer and those who work in the Information Systems and Services office. Every student at Berea is issued a laptop computer upon arrival during orientation week. The Office of Information Systems and Services is a key stakeholder as they are tasked with ordering and distributing laptops and maintaining the machines. Staff members in this area have valuable insight regarding undergraduate students' digital literacy skills when they arrive at college. In addition, this office can share perspectives about the needs of faculty, staff, and students related to the use of technology.

The Digital Humanities Librarian (DHL) also served as a stakeholder. The DHL is a relatively new role at the College, launched in 2019. The Digital Humanities Librarian supports faculty and student engagement with digital tools, methods, and projects inside and outside the classroom through one-on-one consultations and in-class workshops. The DHL provided

information regarding current initiatives at the College that pertain to student laptop use. The DHL also described how their role is structured to support faculty and students' digital literacy skills.

This study's stakeholders are faculty, staff, and students at Berea College. Each group will provide information about digital literacy skills and their understanding of digital citizenship. Gathering feedback from these stakeholders will be critical in developing an intervention to address the problem of practice.

Researcher Role

I currently serve as the Dean of Student Labor. In this role, I serve with voice and vote on the senior management committee of the College, which also functions as the President's Cabinet. Additionally, I provide leadership and have responsibility for all aspects of the College's student labor program. Serving in this role means that I ensure that federal, state, and institutional policies are followed for students working on campus. The Labor Program is considered an educational program; students must work 10 hours a week and attend academic classes. As with the academic program, students can be placed on probation and suspended from the College for not performing or meeting the hour requirement. Before serving as the Dean of Student Labor, I served as the Associate Dean of Student Life at Berea College.

In the Associate Dean of Student Life role, I provided leadership for the College's residential and campus life areas, including educational, social, and recreational programs, student support services, residence hall facilities, and the housing selection process. I helped to provide support and guidance to Counseling Services, Public Safety, Campus Life, The Black Cultural Center, and the Espacio Cultural Latinx. In this role, I worked with various departments to ensure student success in and out of the classroom. Additionally, in this role, I was responsible for enforcing the Student Handbook and helping students learn from their mistakes. Learning is essential, and when serving as Associate Dean, I noticed that students

struggled with being safe, respectful, and knowledgeable online. This research will provide a tool for students who may have yet to have the opportunity to learn about digital citizenship before coming to Berea. In this study, I analyzed institutional data surrounding my problem of practice while also having informal conversations to understand first-year students' digital citizenship skills.

Diagnostic Phase: Problem of Practice

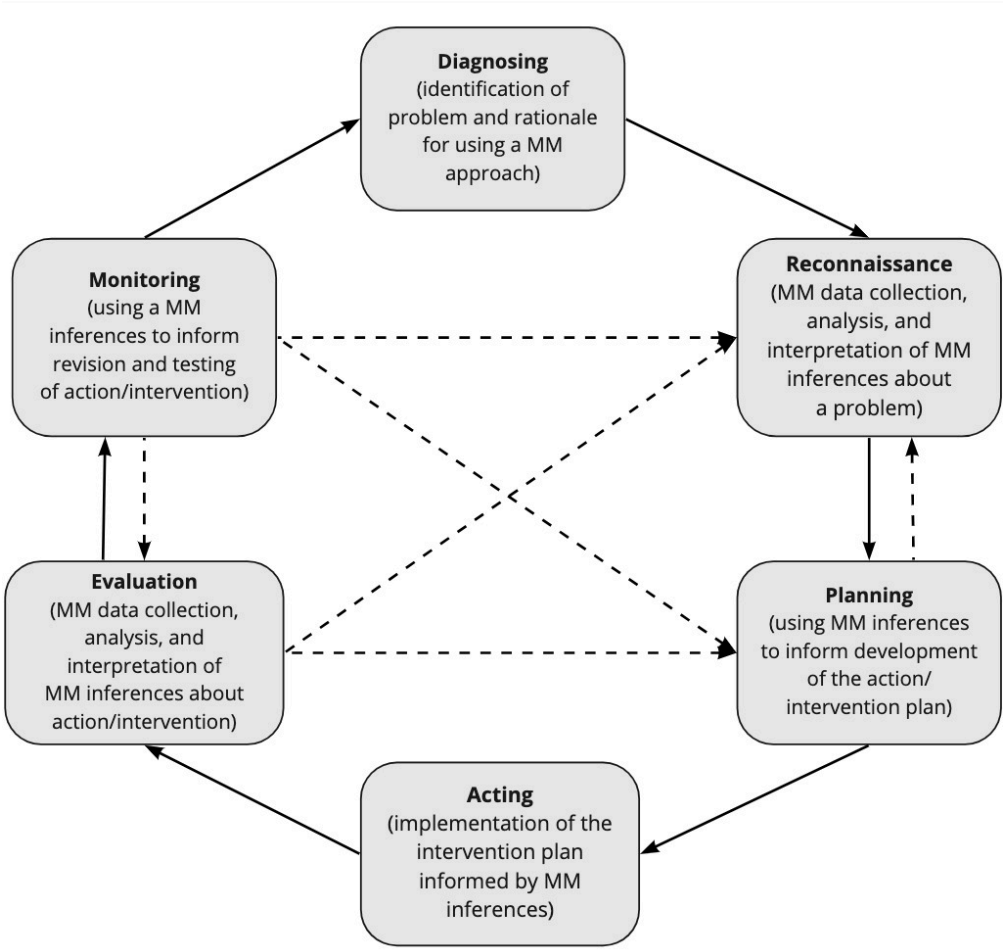
Students at Berea College receive a laptop computer in their first year to help ensure access to technology throughout their undergraduate experience. Through the Information Systems & Services department, students can seek technical support for their laptops. While technical services are offered to students, no services are available to help students understand what it means to be a digital citizen. As a result, many students need more etiquette and understanding of how their actions online have consequences, just as their actions in life do. This lack of etiquette and understanding of the consequences of their online actions can become problematic for students during their undergraduate studies and beyond. Because technology is all around us, digital citizenship is something students need to learn and understand (Ribble, 2014). Nearly 96% of Kentucky school districts reported a purposeful implementation of the nine elements of digital citizenship on the 2020-2021 digital readiness survey (Office of Education Technology, 2020). While a tremendous amount of scholarship focuses on digital citizenship K-12, there needs to be more regarding undergraduate students. This study will help identify undergraduate first-year students' digital citizenship knowledge and understanding. Students will develop safe and respectful digital etiquette as they engage with faculty, staff, and students throughout their time at Berea and beyond. As a result of this action research, an intervention will be created to support first-year students at Berea College's growth in their knowledge and understanding of digital citizenship through the lens of safety and etiquette.

Overall Study Design

A mixed-methods action research framework (MMAR) provides a systematic way to conduct action research (Ivankova, 2015). The following six phases comprise the framework: diagnosing, reconnaissance, planning, acting, evaluation, and monitoring. In the diagnosing phase, problem areas are identified and explored along with relevant literature. During reconnaissance, the researcher identifies areas for potential action related to the problem. Action steps are developed and shared with stakeholders during the planning phase to discover a plan for action/intervention. Following the planning, phase is the acting phase, where the intervention plan is carried out. In the evaluation phase, evidence is collected about the intervention to address the problem area, along with feedback from stakeholders to measure buy-in about the action plan. From here, monitoring takes place to revise the intervention based on results from the evaluation phase. Each of the phases is critical for mixed methods research.

Figure 1.1

Mixed Methods Action Research Framework (Ivankova, 2015, p. 61)



Diagnosis Phase

Diagnosis of the problem of practice for this study started with me exploring areas for improvement within the institution. As I explored challenges, there was repeated concern from students, staff, and faculty about students' digital safety and etiquette online. As previously mentioned, Berea College gives every first-year student a laptop computer, and assumptions are made about students' awareness of engaging online safely and respectfully. In turn, some within the campus community (faculty, staff, and students) experience cyberbullying, disrespect, and a lack of awareness about what it means to be a safe and respectful digital

citizen. In some instances, students ignite the disrespect and misuse of technology instead of finding ways to disagree respectfully.

This problem of practice leads me to examine how the College can create awareness through an intervention to create digital citizens who are safe, savvy, and social among first-year students at Berea. For the purposes, of this study, it is important to define safety, savviness, and social engagement. Safety can be defined as actively protecting oneself and others from the multitude of dangers, risks, and injuries that can arise in the digital world (Ribble, 2017). Savviness refers to the way students educate themselves about digital citizenship skills and how they exercise sound judgement when navigating the internet (Ribble, 2017). Lastly, social engagement refers to how individuals connect with others respectfully as well as maintain healthy, cooperative relationships (Ribble, 2017). The problem of practice was diagnosed through conversations with key stakeholders, including students, staff, faculty, and administrators, and an examination of institutional data.

Stakeholder Conversations

Stakeholder conversations helped refine the problem of practice. Each group of stakeholders described below sees the need for Berea students to be aware of etiquette practices for engaging online. However, students or professionals at Berea need help understanding digital literacy. For example, when asked about digital literacy, students refer to many things, including cyberbullying. When I shared a definition of digital literacy (as defined by The American Library Association) with the students, many said they were unaware of digital literacy and that students need to be taught skills to be better digital citizens. I also asked students if they knew of their digital footprint (TechTerms, 2014), meaning the trail of data created using the internet. It includes the websites visited, emails sent, and information submitted to online services. They seemed surprised by this question, and many of them shared that they had not thought about the footprint they are leaving behind as they engage online.

Staff and Faculty. Staff and faculty shared similar opinions about the students, such as the need for students to be educated on how to email them respectfully. At the same time, staff and faculty perceptions of the problem differed. Staff members focused on how students interact with others via technology. Specifically, staff shared the need for students to learn etiquette about what should and should not be posted on social media. For instance, in the past, students have taken screenshots of private replies from staff members after sending an email to discuss a concern and sharing it publicly on social media, indicating a lack of understanding about digital etiquette and the appropriateness of sharing private correspondence publicly. A faculty member shared how students sometimes need help understanding that what they post on social media could impact them later in life. In other words, students only sometimes think about what they are posting, and, in some instances, social media is used as a venting venue. Faculty's different perception is that students must be sufficiently digitally literate and possess adequate technical computer skills to succeed in academia and life beyond College. For instance, a faculty member shared how they noticed students struggle to understand how to write papers using Microsoft Suite applications. An additional theme from the faculty perspective was students' obliviousness about what sources to take at face value and which ones need further scrutiny. Students often take what they see online to be true and then use the information to engage in conversations or cite in coursework without fact-checking the source.

The examples above highlight the gaps that faculty and staff see in students' knowledge of digital citizenship. Given the areas of concern above, both staff and faculty suggest that Berea students understand the importance of digital citizenship through online safety, respect, and social engagement.

Digital Humanities Librarian. Another vital stakeholder conversation involved the Digital Humanities Librarian (DHL). The DHL was hired to oversee the Digital Initiatives unit, whose mission is to encourage and support faculty and students use of digital tools.

Specifically, DHL supports digital methods in research and learning through consultations, project support, workshops, one-on-one training, and curricular engagement. The DHL shared that faculty or students must reach out for services. The challenge is that students and faculty must be aware of the services to take advantage of them. Students and faculty needing to be made aware of services add to the problem of practice. When students receive their laptops, they must be given information about developing their digital literacy skills.

In sum, the stakeholders' conversations suggest a need to help students at the undergraduate level gain awareness about their online engagement as it impacts their experiences and relationships inside and outside the classroom. Improving students' knowledge of online safety, savviness, and online best practices is an apparent priority for stakeholders.

Institutional Data

The findings from a Berea College Fact Book (Office of Institutional Research and Assessment, 2022) revealed that the College finds technology important. The Information Systems & Services (IS&S) department supported 2,925 computers/laptops. The number of supported computers/laptops is more than the number of employees and students combined. When students enter their first year at Berea, they are given a new Dell laptop computer which they may keep upon graduation. These computers are managed and supported through the IS&S department. Data in the Fact Book suggests the focus is on the technical aspects of maintaining the laptop computer. The lack of data reflects the need for more conversation and work around digital citizenship for students. Access is one piece of the puzzle; however, we have an opportunity to create better digital citizens.

I also reviewed college policies on social media. The Administrative Committee, also known as the President's Cabinet, approved Berea’s latest Social Media Policy in January 2019 (Berea College, Social Media Policy 2019). The policy focuses on institutional and organizational social media accounts. There are currently no policies or guidelines that direct

or guide individual social media accounts for any stakeholders at the College. Having no community guidelines around social media etiquette exacerbates our problem of practice where students receive laptops but need the knowledge and awareness around utilizing them. Focus and conversations around community guidelines may help support safe and respectful practices around digital etiquette.

In addition to reviewing the social media policy and the data about access to devices, I also reviewed incident reports for the 2020-2021 academic year. There were eighteen incidents that year involving interactions via social media that had real-life implications. For example, one incident involved a student conversing online with a stranger. At some point in the conversation, the student later decided they were not interested in talking to the stranger. Having received enough information to find the student on Berea's campus, the stranger came to campus to stalk the student. Local law enforcement became involved in this situation. The example above is one example of a range of incidents about students' safety, savviness, and online etiquette.

Review of Literature

Digital Citizenship is a topic that is being discussed more in education. Many wonder what digital citizenship is and why it matters. Ribble (2014) states, "All users of technology need to come to grips with how to use the tools of today and how to become digital citizens" (p. 88). As increasingly more advanced technology is utilized, students must know their role as digital citizens. Ribble's (2014) nine elements of digital citizenship set norms of appropriate, responsible behavior regarding technology use inside and outside the classroom by defining how someone should engage others and behave online. The nine elements of digital citizenship are (a) digital access, (b) digital commerce, (c) digital communication, (d) digital literacy, (e) digital etiquette, (f) digital law, (g) digital rights and responsibilities, (h) digital health and

wellness, and (i) digital. These elements help school administrators and students learn about digital elements succinctly.

Digital citizenship is related to digital literacy, but they are distinct. Interestingly, most of the literature reviewed centered on higher education has little to no emphasis on undergraduate students learning digital citizenship. As it happens, higher education institutions focus on information literacy. The American Library Association (2006) defines information literacy as a set of abilities requiring individuals to recognize when information is needed and to have the ability to locate, evaluate, and use the needed information effectively. Given the amount of information shared and accessed daily, online information literacy among undergraduates is important.

Furthermore, information literacy and digital literacy work together to develop grounded digital citizens. Digital citizenship work is important to me as I am passionate about technology, and I have seen students punished for lack of knowledge. As an educator, students should be informed about digital citizenship to help them create a digital footprint that positively represents them. Therefore, for this research, I focus on exploring digital citizenship through the lens of safety, savviness, and respect.

Colleges and universities cannot assume that students enter with the necessary skills regarding the digital world. Institutions of higher learning can focus on building upon and deepening students' digital citizenship understanding. Although, some researchers like Prensky (2001) argue that younger generations of students are born knowledgeable and ready regarding technology.

Digital Natives. Prensky (2001) believes that people born after 1980 were born in the digital age. Prensky coined the term *digital natives*, signaling that those who grew up with technology are more proficient than those who did not. Prensky (2001) states, " Our students today are all "native speakers" of the digital language of computers, video games, and the

internet. Theorists like Tapscott (2008) and Palfrey and Gasser (2008) built on Prensky's beliefs, noting that digital natives of technology create different learners, consumers, thinkers, and workers than people who are not considered to be digital natives. "Growing up digital has had a profound impact on the way this generation thinks, even changing the way their brains are wired" (p. 10). Tapscott refers to this generation as the NET generation. There is a belief that the NET generation is smarter, "With assimilation, kids came to view technology as just another part of their environment, and they soak it up along with everything else. For many kids, using the new technology is as natural as breathing" (p. 18). Tapscott's theory suggests that people surrounded by technology have the necessary developmental skills to use it.

The term digital natives continue to be explored and revisited through different lenses today. Author Michael Thomas (2011) states, "One decade later, the term causes disdain as well as fervent acceptance" (p. 3). Simply put, the word gives some people pause as every generation is considered to have all the skills and understanding of technology. Other researchers accept the word and have strong beliefs about the generation that has grown up with technology. The term digital natives matter in education as some believe that digital natives must be taught differently. Author Michael Thomas (2011) examines three main assumptions about young people born after 1980. The assumptions are that young people:

- constitute a largely homogenous generation and speak a different language vis-a-vis digital technologies, as opposed to their parents, the "Digital Immigrants";
- learn differently from preceding generations of students;
- demand a new way of teaching and learning involving technology.

These assumptions have pushed the thinking that teachers are not equipped to educate digital natives on how they must be taught. Michael Thomas (2011) views,

The availability of new digital technologies and the changing assumptions about the nature of learners and the styles of learning has to be read against the background of the dramatic increase in the number of students entering higher education around the world and the need to discover new ways of both communicating with them and instructing them (p. 7). In other words, technology can transform learning, but the assumption that the transformation is the same for all learners has to be challenged. Thus, some researchers argue against the notion that a generation is homogenous as it relates to technology.

Students' Reality versus Perception. Although popular, Tapscott's theory about the NET generation and millennials having innate skills when it comes to digital literacy is different from other research on student information literacy. Gross and Latham (2012) conducted a study to examine undergraduate students' information literacy skills test scores compared to students' estimates of their actual skills. Simply put, the reality of students' information literacy was compared to their perceptions. Gross's and Latham's (2012) findings showed a gap between students' self-views and existing skills. Students in this study believed that their information literacy skill level was higher than the average skill level. The study results revealed that students were below proficient when tested on their information literacy skills. This gap between perception and reality is known as the Dunning-Kruger effect (Gross & Lathan, 2012).

Simply put, the Dunning-Kruger effect is the miscalibration of self-views of skill and actual skill (Gross & Lathan, 2012). Morris (2010) states, "If you have damage to your expertise or imperfection in your knowledge or skill, you're left literally not knowing that you have that damage" (p.35). Simply put, students may not know what they do not know about information literacy. When considering education around digital citizenship, students' awareness is important. Students may need help accessing their digital literacy and citizenship skills and comprehension.

Digital Literacy Proficiency. Understanding what it means to be digitally literate is important when considering whether colleges and universities should be teaching digital literacy curricula to undergraduate students. Teaching digital literacy must be a part of the discussion to aid in developing digital citizens. Digital Literacy means that one can read and write through online resources, select sources, and synthesize information appropriately (Bulger et al., 2014). One does not become digitally literate by merely growing up around technology. Digital literacy involves knowledge.

Bulger et al. (2014) examined predictors of academic digital literacy for students by looking at three types of knowledge that might be required to succeed in academic digital literacy tasks. The three types of knowledge are academic experience (undergraduate versus graduate status), domain knowledge, and technical knowledge (how to use computers based on a questionnaire). They also examined technology-centered versus learner-centered approaches to teaching digital literacy. Technology-centered approaches focus on students' knowledge of technology, whereas learner-centered approaches concentrate on students' academic knowledge. Findings from the study revealed that digital literacy depends significantly on educational experience rather than technical experiences. This finding supports the argument that digital literacy is about something other than teaching students how to use a computer. However, it is about teaching students skills and literacy to use the computer to deepen learning.

Factors Influencing Use of Technology. While being proficient in digital literacy is important, students' use of technology is impacted by several factors. Researchers Teo and Zhou (2014) conducted a study to examine the factors influencing higher education students' intention to use technology. Models have been developed to explain and predict the technology usage of students. Teo and Zhou used Ajzen's (1985) theory of planned behavior to explore how students use technology. The researchers found that perceived usefulness and attitude

toward computer use were significant determinants of the intention to use technology, while perceived ease of use influenced the intention to use technology through attitude toward computer use (p. 124). Teo and Zhou suggest that colleges and universities have to make the use of technology evident to students holistically, meaning that students see how technology benefits their experiences on campus and that the likelihood of their voluntary engagement with that technology increases.

Faculty Perceptions of Students' Technology Use. Although younger generations of students are perceived to enjoy using technology and be better at it, researchers continue to explore the connection to learning digital literacy in higher education. Nelson, Courier, and Joseph (2011) sought to understand the faculty's perception of what students need to learn to be fully engaged and knowledgeable in the digital community. The study took place at a medium-sized private university with about 6,200 students. At this institution, first-year students must take a one-credit-hour course on software applications. With this requirement, the university created a task force to examine the curriculum faculty found important in teaching undergraduate students digital literacy skills. Conventional thinking could lead one to believe that digital learners do not need digital literacy skills. Nelson et al. (2011) argue, "digital literacy education needs to occur across the curriculum and must be broader than the current one-credit hour course focused on computer literacy" (p.103). Results from the study emphasize the importance of information literacy skills and information research skills. As Nelson et al. note, "many respondents commented that students needed to know how to properly utilize databases on campus and how to properly employ search techniques" (p. 103). In other words, Nelson et al. (2011), like Bulger et al. (2014), conclude that while students have technology around them, they still need to possess the skills needed to be digitally literate. Their findings suggest that teaching digital literacy in K-12 is vital to helping students become digitally literate.

The literature surrounding digital literacy offers various perspectives about students' use of technology, their perception, proficiency, and the challenges around teaching the skills. While there is substantial research in the K-12 setting, it is evident that more research is needed to explore where digital citizenship falls in the curriculum for undergraduate students. The current literature does not examine its role in teaching digital citizenship in higher education. However, an argument can be made that digital citizenship is essential at all levels of education.

Research Problem Statement

Students at Berea College receive a laptop computer in their first year to help ensure access to technology throughout their undergraduate experience. Through the Information Systems & Services department, students can seek technical support for their laptops. While technical services are offered to students, no services are available to help students understand what it means to be a digital citizen. As a result, many students need more etiquette and understanding of how their actions online have consequences, just as their actions in life do. The lack of etiquette and understanding can become problematic for students throughout their undergraduate tenure or life after college. Nearly 96% of Kentucky school districts reported a purposeful implementation of the nine elements of digital citizenship on the 2020-2021 digital readiness survey (Office of Education Technology, 2020). While a tremendous amount of data focuses on digital citizenship K-12, there is a gap at the undergraduate level. This study will help identify undergraduate first-year students' digital citizenship knowledge to create safe and respectable citizens. Students will develop digital etiquette as they engage with faculty, staff, and students throughout their time at Berea and beyond.

General Study Plan

Purpose Statement

This MMAR study aims to create safe and respectful digital citizens among first-year undergraduate students at Berea College to support their appropriate interaction and engagement within digital communities. The goal of the reconnaissance phase is to identify students' knowledge of digital citizenship by using a sequential mixed methods design to collect and analyze students understanding of digital citizenship and data from interviews with faculty, staff, and students to inform the development of practices to support safe digital citizenship amongst our students. The goal of the evaluation phase of the study is to identify what skills students need to support better digital citizenship by using a sequential mixed methods design to collect and analyze students' current digital citizenship skills, faculty, staff, survey responses, and interviews. The rationale for applying mixed methods in the study is to gain insight into first-year digital citizenship knowledge to lead to safe and respectful digital citizens at Berea College.

Ethical Considerations

As my research progresses, being attentive to ethical considerations will be crucial. Ivankova (2015) outlines possible ethical issues within an MMAR study. For this study, an ethical issue to be mindful of is the study participants' dual role that might occur in the study. In other words, the participatory nature of action research should be considered (Ivankova, 2015). Specifically, participants are engaged in the design and implementation of the study, creating the potential for ethical issues to arise. Another ethical issue to be aware of is that when completing action research in a field where the researcher works, informed consent is important as there may be issues of power and authority (Ivankova, 2015). Informed consent will protect participants from physical, emotional, and mental harm (Ivankova, 2015). Other

ethical considerations include addressing the context and demands of both quantitative and qualitative research procedures and settings within one Institutional Review Board (IRB) application; submitting IRB protocol amendments for each sequential mixed methods design study strand that is informed by the results from the previous strand; and considering the need to have survey responses linked to study participants to enable follow up (Ivankova, 2015). Throughout my study, I will be mindful of the general research ethical principles and my study's possible ethical issues.

Summary

This MMAR study aims to create safe and respectful digital citizens among first-year undergraduate students at Berea College to support their appropriate interaction and engagement within digital communities. The goal of the reconnaissance phase is to identify students' knowledge of digital citizenship by using a sequential mixed methods design to collect and analyze students understanding of digital citizenship and data from interviews with faculty, staff, and students to inform the development of practices to support safe and respectful digital citizenship amongst our students. The MMAR process is overviewed, and the diagnosis phase is highlighted. Through the diagnosis phase, a problem of practice was identified at Berea College for first-year undergraduate students. Specifically, students are given a laptop computer without training or guidance and are expected to be safe and respectful citizens. Through stakeholder conversations, it was acknowledged that first-year students would benefit from learning about digital citizenship to help them be safe, savvy, and respectful when interacting with others online. The chapter also includes steps leading into the reconnaissance phase. Following the next steps, the chapter highlights potential research bias. In summary, this chapter focuses on the diagnosis phase of the MMAR research and the problem of practice, which helps build and guide the reconnaissance phase.

Chapter 2 Reconnaissance Phase

Introduction

Technology has given way to bring about possibilities that in previous times were unimaginable. During the COVID-19 shutdown, people relied on technology and the internet to connect with others and get work completed from home. In this growing world of technology, how people engage with vast information and each other has continued to be of concern. The concern is particularly about how people practice online safety, savviness, and respect. Anderson et al. (2014) share that "incivility can incite negative feelings of hatred, negative attitudes towards a topic, and a reduction of source credibility" (p. 376). Given this growing concern, there is a need to educate and teach digital citizenship. Searson et al. (2015) suggest, "Educators and policymakers across the world are dedicated to moving such behavior in a positive direction and guiding children toward the safest environments possible" (p. 732). In short, there is a renewed commitment to educating learners about digital citizenship.

The nine elements of digital citizenship to help educators teach and students learn about digital citizenship (Ribble, 2014) have been incorporated into three guiding principles: safe, savvy, and social (S3). The S3 framework supports and reinforces the themes of digital citizenship (Ribble, 2021, p.78). Although the nine elements were initially geared toward K-12 students, digital citizenship is important for everyone, including undergraduates.

Stakeholders at Berea College are interested in guiding students to have safe, savvy, and respectful experiences online. In this chapter, inferences will be made about the problem of practice through data collection and analysis. This MMAR study aims to create safe and respectful digital citizens among first-year undergraduate students at Berea College to support their appropriate interaction and engagement within digital communities.

Overall Study Design

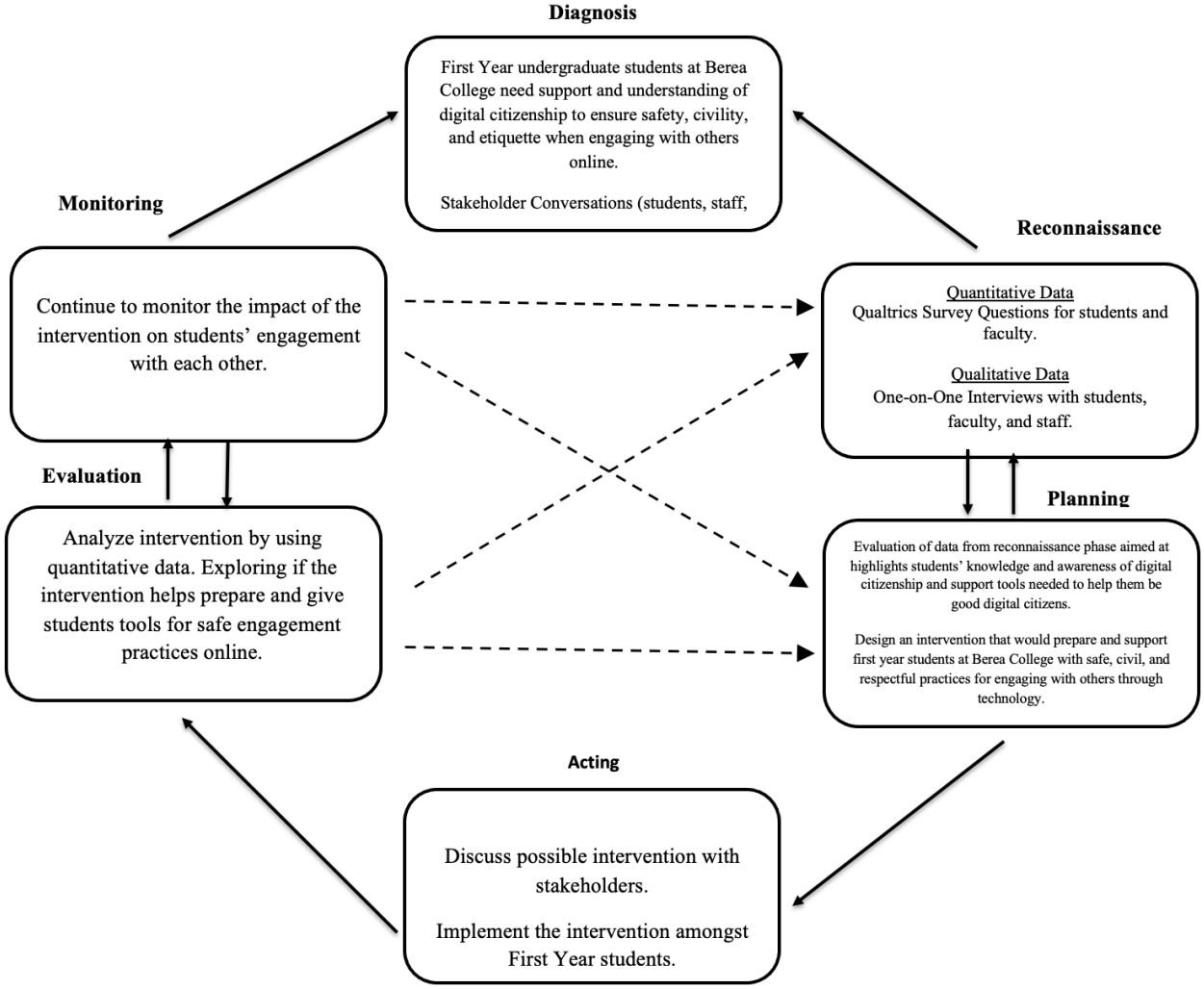
Mixed Methods Action Research

The MMAR framework illuminates how mixed methods can inform and enhance the action research process (Ivankova, 2015). Figure 2.1 illustrates the MMAR process steps: diagnosis, reconnaissance, planning, acting, evaluation, and monitoring. In the reconnaissance phase, the information from the diagnosis phase helps identify possible solutions to speak to the problem. This phase helps pinpoint ways an intervention can be developed to curve the problem of practice. Examining first-year students' understanding and experiences online related to safety, savviness, and respect will help identify actions to create safe and respectful digital citizens.

Rationale. In Chapter 1, the diagnosis phase was spotlighted to share background research, stakeholder conversations, and the process involved in identifying the problem of practice. After various discussions with campus stakeholders and reviewing current literature around digital citizenship, there needs to be more practice. Berea College first-year students must understand how to be safe, savvy, and respectful. Examining students' online experiences in safety, savviness, and respect is essential.

Figure 2.1

MMAR Process for Berea College First-Year Students' Digital Citizenship



Note: This figure is adapted from Mixed Methods Applications in Research: From Methods to Community Action (P.89, Ivankova, 2015).

Research Setting

The Office of Student Success and Transition, working alongside other campus partners such as Student Life, helps, welcomes, and orients students to Berea College. First-year students arrive on campus a few days earlier than continuing students. Upon arrival to campus, first-year students pick up their laptops from the Information Systems and Services department.

Picking up the laptop involves students showing their IDs and signing in. From there, students are handed their laptops. The incoming students at Berea College are diverse and composed of students from all over the world. The First-Year Class in the Fall of 2022 included students from 33 states, three U.S. territories, and 26 countries (Berea College Fact Book). After students receive their laptops, they move on to other orientation activities to learn more about being a campus community member.

Reconnaissance Phase

The reconnaissance phase aims to understand how Berea College can prepare first-year students to use technology safely, responsibly, and socially. The phrase used a sequential MMAR design to collect and analyze students, staff, and faculty's understanding of support around digital citizenship and areas of improvement to ensure safe and respectful digital citizenship practices on campus. The results and data from this phase helped develop an intervention that supports first-year students' safe, savvy, and social, digital citizenship practices.

Phase Design and Research Questions

Using a sequential MMAR design, the results from the first strand informed the second strand. An integrated mixed methods research question guided this inquiry: How can changes in the support offered to first-year students at Berea College as it relates to digital citizenship enhance students' understanding and knowledge of digital citizenship, as measured by a survey and described through perceptions of faculty, staff, and students?

Study Design

This study used a sequential Quan-Qual MMAR study design and consisted of two strands. Through the quantitative study strand utilizing a survey, data was collected from stakeholders to understand digital citizenship better. With the second strand, one-on-one

interviews were conducted to understand perceptions and thoughts around digital citizenship through safety, savviness, and social etiquette. The findings from both strands were integrated to help create an intervention to support first-year students.

Rationale for Design

Given the design of this study, the first strand helped clarify and focus the interview questions in the second strand. Understanding students' current knowledge and factors that impact their engagement online is essential to help identify the intervention. Faculty and staff provided insight based on their experiences working with students in the classroom through work and extracurricular settings. Integrating the quantitative and qualitative strands in this way creates an opportunity for inferences that impact how participants are followed up within the second strand of the study.

Pros and Cons of Design

A sequential mixed methods design has its procedural pros and cons. The pros of this design are that it allows the procedure to be straightforward and easier to organize and implement (Ivankova, 2015). Additionally, this design allows for the qualitative strand to provide better results that help deepen the understanding of the results from the quantitative strand. In other words, the initial quantitative strand results can be explored in more detail. Simply put, the design components of the qualitative strand are shaped by the outcome of the quantitative strand (Ivankova, 2015).

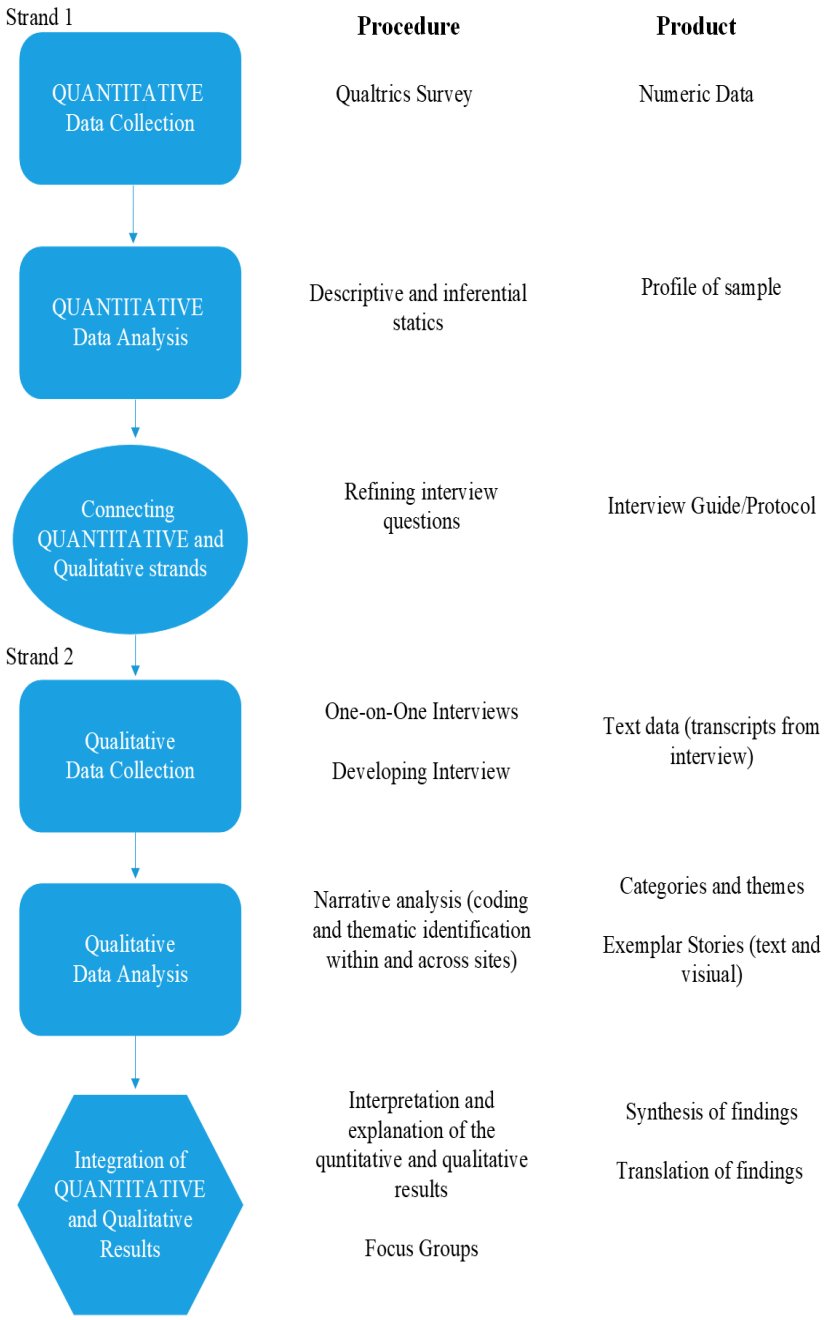
Challenges for this design from a procedure standpoint relate to the time and feasibility of resources to collect and analyze both data sets. Another con with this design is the wait time between strands. The researcher must complete quantitative data collection and analysis before deciding what stakeholders to approach further to explore quantitative results (Ivankova, 2015). As a result, an IRB amendment was required as the qualitative strand was undeveloped until the quantitative strand results were collected and analyzed. Amending the IRB can have a

negative impact by extending the length of the study. With this design, an additional challenge may arise around what quantitative results to follow up on and which stakeholders' views and opinions to explore further. Researchers must be cautious here as not selecting the best quantitative results and the wrong stakeholders can result in an erroneous and incomplete assessment of the problem of practice.

Appropriate instruments were developed to mitigate the shortcomings of the research design. Being aware of the cons helped me be mindful of the limitations of this study design. To see an illustration of this study design, see Figure 2.2 below.

Figure 2.2

Diagram of Sequential Quan → Qual Study Design



Note: This figure is adapted from *Mixed Methods Applications in Action Research: From Methods to Community Action* (p. 175) by N.V. Ivankova, 2015, Sage. Copyright 2015 by Sage Publications, Inc.

Quantitative Strand 1

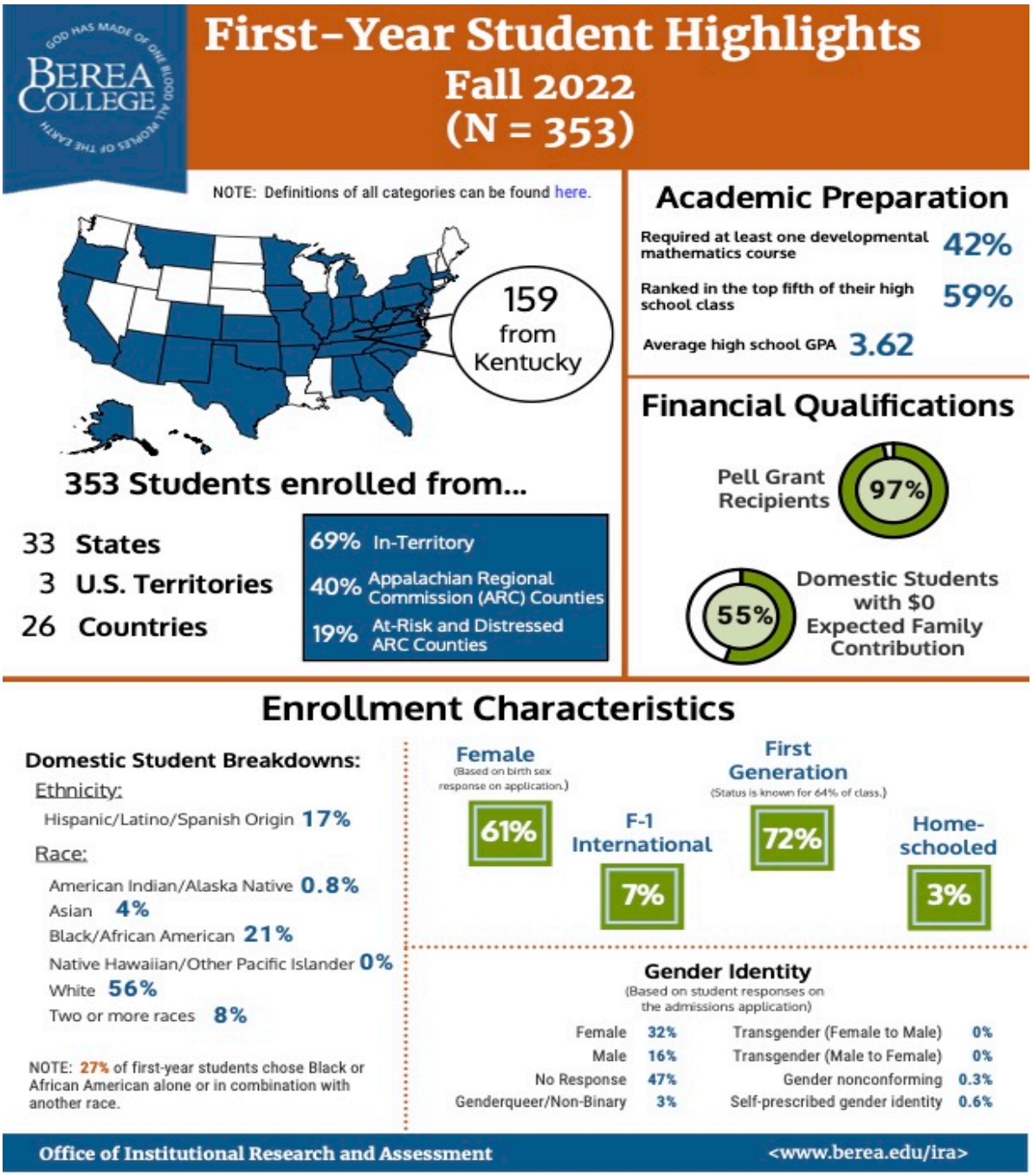
Data collection from the quantitative strand showcased students' understanding and knowledge of Digital Citizenship. The following two questions guided this strand:

1. What do first-year students understand about digital citizenship?
2. What factors impact students' ability to be safe, savvy, and social when engaging with others online?

Sample. The sampling approach used for this strand of the study was convenience sampling. The sample was made up of 102 first-year undergraduate students at Berea. Enrollment for the Fall 2022 term for First-Year students was 353 students. Figure 2.3 below details the characteristics of the Fall 2022 First-Year class, including gender identity, geographical location, family qualifications, and enrollment characteristics. As displayed below, the First-Year class is diverse, and over half of the students come from the Appalachian region.

Figure 2.3

First-Year Student Highlights Fall 2022



Note: This figure was compiled by Berea College Office of Institutional Research and Assessment www.berea.edu/ira/institutional-data-reports/

Student participants were identified and contacted through their GSTR 110 class. An email reminder was sent to students who agreed to take the survey and signed the consent form.

Instrument. A Qualtrics survey (Appendix A) was used to gather students' understanding of digital citizenship and their use of technology to engage with others online. Questions in the survey were centered around two research questions. Specifically, (Q2, Q3, Q4, Q5, Q17, Q18, & Q19) explored students' understanding of digital citizenship. To understand the factors that impact their safety, savviness, and respect when engaging online (Q8, Q9, Q10, Q11, Q12, Q13, Q15, Q16, Q21, Q22, & Q23) were asked. Although the reliability and validity of the survey are weak, it is not crucial to the present study's research questions.

Procedures. First Year students have a general education course they are assigned to take. I worked with GSTR 110 faculty to share information about my research with First Year students. Faculty members created space for students to hear about the research topic. Interested students were given a consent form and a link to complete the survey. A total of 102 students completed the survey. Demographic information about where students completed high school is provided in Table 2.1.

Table 2.1

Demographic school information of respondents (N=101)

Graduated from High School in Kentucky

Response	**% (N)**
Yes	40.59% (41)
No	59.41% (60)

Data Analysis. Survey responses were exported from Qualtrics and analyzed in SPSS Statistics. Student participants identifying information was removed from the dataset before the export.

Through the survey, respondents indicated their understanding and knowledge of digital citizenship (Table 2.2). Roughly 76% of student participants indicated that digital citizenship means using digital media safely, responsibly, and ethically. Additionally, 93% of students identified the various types of digital media. Given the survey results, students understand the meaning of digital citizenship.

Table 2.2

Meaning of Digital Citizenship

What does digital citizenship mean?		
	Frequency	Percent
Any information about you on the internet	21	20.6%
Using digital media safely, responsibly, and ethically.	77	75.5%
An online membership	4	3.9%
Total	102	100.0

Although students could identify the meaning of digital citizenship, 31 % indicated they needed to be more knowledgeable about the topic (Table 2.3). Another 33% of students said they were slightly knowledgeable about digital citizenship. The survey results indicate that 64% of participants need more knowledge about the topic.

Table 2.3

Respondents' Understanding of Digital Citizenship

Share your current understanding of digital citizenship.		
	Frequency	Percent
Not knowledgeable at all	32	31.4 %
Slightly knowledgeable	34	33.3 %
Moderately knowledgeable	29	28.4 %
Very knowledgeable	5	4.9 %
Extremely knowledgeable	2	2.0 %
Total	102	100.0 %

Findings from the survey suggest that students can define digital citizenship but need to become more familiar with the topic in practice. Furthermore, the data from this strand led the researcher to investigate more about how students learn about digital citizenship. Students could benefit from a deeper understanding of digital citizenship and real-world application to their use of digital media. Another finding from the survey revealed that 96% of students understand that they have a digital footprint. In other words, students know they are leaving a trail when engaging online. A third finding is that 80% of student participants somewhat to strongly agree that first-year students at Berea College would benefit from information about digital citizenship to help them be safe, savvy, and social online. This strand of the study helped me understand first-year students' knowledge base and the factors impacting them online through the lens of safety, savviness, and social engagement. Interview questions for the second strand were created to understand the survey results better.

Qualitative Strand 2

Data collected from the qualitative strand focused on perspective and perceptions from the view of faculty, staff, and students related to digital citizenship. The qualitative questions were developed after the quantitative data analysis. Conducting the study this way enabled the lead researcher to create qualitative questions to explore the research questions deeper. The research questions aimed to understand what improvements can be made at Berea to better educate students about digital citizenship at the undergraduate level. The following questions were studied through one-on-one interviews with students, staff, and faculty.

1. What are Berea's faculty, staff, and student's perceptions of the need for more education around digital citizenship at the undergraduate level?
2. How can Berea better prepare students to engage with others online through the lens of safety, savviness, and social etiquette?

Sample. For this strand of the study, purposeful sampling was utilized to gather more insight from first-year students, staff, and faculty. The student participants for this strand were selected from the initial participants that completed the survey. All survey participants were asked if they would like to participate in the one-on-one interviews. Eleven of the 102 student participants in the survey indicated they would be willing to be interviewed. Six of the eleven participated in an interview. In addition to students, faculty and staff who work directly with First-Year students were sent an email and asked for their voluntary participation in one-on-one interviews about the research topic. There were sixteen faculty members identified as teaching a GSTR 110 course. Three of the sixteen faculty members agreed to participate in the one-on-one interview. An invitation staff who work closely with First Year students was shared with campus departments (Student Life & Student Success and Transition). Six staff members agreed to participate in the one-on-one interviews. In total, there were fifteen participants for this strand of the study.

Table 2.4

Characteristics of interview respondents (N= 15)

Participant Characteristics	% (N)
Student	40% (6)
Faculty	20% (3)
Staff	27% (4)
Administrator	13% (2)

Instrument. Fifteen questions (Appendix B) guided the interviews with students (Table 2.4). The interview questions aimed to discover the importance of digital citizenship and the need for it to be enhanced among students at the undergraduate level. Faculty and staff were asked twelve questions (Appendix C) to understand faculty and staff thoughts about more training for first-year students around digital citizenship. Additionally, both groups shared ideas about how First Year students can be supported around this topic at the College.

Procedures. Following the analysis of the data from the first strand, questions were developed for one-on-one interviews with students, faculty, and staff to understand better information gathered from the student survey. The results from the quantitative study were used to guide the design of the interview protocol, including the formation of the interview questions for individual interviews. Data collection in this strand involved one-hour meetings to conduct semi-structured interviews. The interview protocol helped with the reliability of the data as the same questions and protocol were used with all interviewees. The data were triangulated with the quantitative strand of the study to ensure the validity of the information collected.

Data Analysis. Qualitative data from the survey gave insight into students thinking about learning more about digital citizenship. Fifteen stakeholders participated in a semi-

structured one-on-one interview. Qualitative analysis is segmenting data into relevant categories and naming these categories with codes while simultaneously generating the categories from the data (Ivankova, 2015, p. 233). The qualitative interviews were transcribed using the voice-to-text application Otter.ai. Each transcript was reviewed in detail and corrected to reflect participant responses. Once the transcripts were corrected, they were imported into the qualitative data analysis application atlas.ti. This software enabled the transcripts to be coded using key words. The key words were then analyzed and from there themes emerged from the qualitative data. The aim of segmenting and reassembling the data is to transform the data into findings (Ivankova, 2015, p. 233). The themes were integrated with the quantitative findings in creating meta-inferences across the quantitative and qualitative data. The themes evident from coding included:

- learning about digital citizenship,
- assumptions of knowledge,
- the importance of digital citizenship, and
- the role of faculty and staff in supporting students regarding the topic.

Learning about Digital Citizenship

When asked about their learning about digital citizenship, student participants gave credit to growing up with parents who created safeguards around the use of technology. One participant stated, "I learned a lot from my mom because she is very careful with those kinds of things. Another student shared, "My parents are also good about keeping us educated on how not to fall victim to the internet." As a result, something I never do is put out my school's name because that can give someone an idea of my location." This thinking aligns with the literature about observational learning.

Assumptions of Knowledge

There are assumptions made about students at the undergraduate level understanding and need to learn more about digital citizenship. Faculty and staff were asked to speak to students' knowledge about the topic. One faculty member shared, "These students were born with the use of technology, whereas we all had to learn it, so I think they already know how to do it." A staff member stated, "There is an assumption that Gen Z is a saturated generation that they do not remember a time in their life without a smartphone, high-speed internet, social media, and this sense of digital connectedness. However, I think they lack the skills to navigate virtual spaces". During the student interviews, some participants expressed a desire for deeper learning. One student indicated they wanted to learn more about the topic from an educational standpoint. The student stated, "I don't have any actual education in the topic. I think it is necessary to have a course about digital citizenship available". A second student shared, "The information would be simple in a class, but it would also be a way to expand my understanding of it. Also, I know a lot of people do not know this stuff". In other words, students recognize the need to learn about digital citizenship at the undergraduate level.

Importance of Digital Citizenship

Interviewees were all in agreement that digital citizenship is an important topic. One student commented, "I think it is important that people are educated on digital citizenship and have knowledge about it, especially from the angle of safety. We talk a lot about scams these days, and we always joke about our grandparents getting into bad scams, but it is important that more people are educated on the topic as the internet gets more dangerous."

This student was not alone in voicing the importance of digital citizenship. A staff member remarked, "After the COVID-19 pandemic sent us into this virtual space, even more, it has become more important that we educate and teach students about digital citizenship as a concept and a theory". Furthermore, faculty members commented on the need for students to

have technical and digital citizenship skills when using technology. One faculty member pointed out that if Berea is going to give students laptops, the College must give students all the necessary tools to succeed.

Faculty & Staff Role

Data from the qualitative interviews spotlight that faculty and staff need to be more clear about their role in supporting students as digital citizens. Many are open to learning more and finding ways to support students better. When examining the topic through the lens of safety, savviness, and social etiquette, faculty and staff comfort level vary based on their own experiences. One staff member adds, "I have not had formal training. So, I am sure there are things I do not know related to safety and savviness". The same staff member shared their comfort while discussing respect with students. Another staff member notes, "I have had to become adept around discussing safety with students. I would not say that I have all the awareness that I need". One faculty member points out, "There is an assumption that all of us grownups have digital citizenship skills, and we do not." In other words, there has to be room for more learning around the topic for faculty and staff.

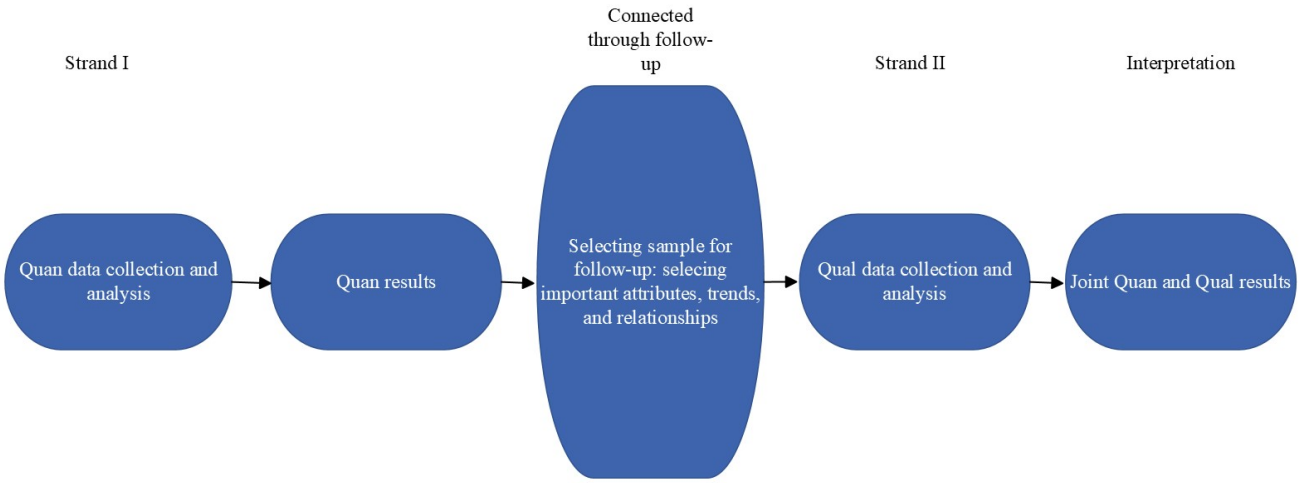
Data Integration and Quality

Data Integration. Data were collected sequentially for the quantitative and qualitative strands. For students, data collection for the quantitative strand was gathered in the Fall of 2022. After collecting the quantitative data, they were used to develop qualitative interview questions for students, staff, and faculty. Subsequently, the qualitative data was collected and coded. Following the data collection, findings were integrated with the quantitative data to provide depth to the findings from the quantitative strand. The quantitative data provided an overview of students' understanding of digital citizenship and the factors that impact their ability to be safe, savvy, and social when engaging online. The qualitative data allowed me to

explore students' general understanding deeper. Figure 2.4 below shows a conceptual diagram of my data analysis for this study.

Figure 2.4

Conceptual Diagram of a Sequential Quan → Qual Mixed Methods Data Analysis



Note: This figure is adapted from *Mixed Methods Applications in Action Research: From Methods to Community Action* (p. 250) by N.V. Ivankova, 2015, Sage. Copyright 2015 by Sage Publications, Inc.

Quality. There were no foreseen significant challenges with gathering the data needed for either strand of the study. A minor challenge was the data collection timing for the study's qualitative strand. The timeline involved the principal researcher doing interviews toward the end of the Fall term.

Findings. The qualitative strand enabled me to explore the gap between students' ability to define digital citizenship and their understanding of the topic. When examining the data from both strands of the study, the key findings centered on assumptions driving practices, digital technology impacts, safety concerns, and the need for training.

Assumptions are driving practices

As noted previously, students receive a laptop computer upon coming to Berea College. One finding from the data is positioned around assumptions being made to drive practices. One faculty member mentioned that they only think a little about student digital citizenship since

they assume students know the information they need, having already learned it in middle school. Furthermore, the faculty member felt that someone other than the professors should address gaps in student digital citizenship skills. First-Year students expressed the general importance of digital citizenship but needed to convey a complete understanding of the topic. One student mentioned that everyone thinks they are good digital citizens, but many need more skills. In other words, students have been told for so long that they are good at using technology, so they believe that they are too.

Meta-inferences from the two strands of the study crystalize the perceptions students have about their knowledge of digital citizenship into X and Y. Participants indicated that knowledge about digital citizenship is important to them. However, simultaneously, participants perceived students to be proficient and well-informed on the subject matter. While this perception was highlighted in the one-on-one interviews, it differs from what students expressed in the quantitative strand of the study. When asked about their knowledge of digital citizenship, 64% of students indicated little to no knowledge about the subject. One conclusion that can be drawn by integrating the data from both strands is that students' perceptions are not in line with reality. This is not surprising given that there needs to be more alignment between students' self-views of skills and actual skills (Gross & Lathan, 2012). The perception is exacerbated by faculty and staff who believe that students are knowledgeable about the topic and have learned everything they need to know about it at a younger age.

Impacts of digital technology

Another key finding from the research points to the relationship between digital technology and students' safety, savviness, and social interactions online. The data suggests that students spend a significant amount of time online. 87% of students surveyed indicated that they use social media daily. Time spent online and on social media impacts students in ways not always discussed by educators in higher education. One student participant noted that

they know that algorithms are utilized on social media apps to drive content to devices that distract students from their studies. In turn, these distractions explain why some students need to be active and engaged on social networking sites to be socially included by their friends. This pressure is leading to unhealthy boundaries and consequences beyond social media.

For example, a staff participant shared that while working with first-year students, they had concerns about students' ability to find the balance between online social engagement and completing work to be successful in the classroom. To further illustrate this, the staff member shared an instance when a student became so engrossed one evening on TIK TOK that they did not complete coursework due the next day. The staff member concluded that the student needed more tools and resources to set healthy boundaries.

Time boundaries are not the only challenge facing students. Many survey respondents spoke about cyberbullying and how easy it is for individuals not to be held accountable. There is a belief that when students are behind the screen, consequences for their actions are not as clear. The questionnaire data indicates that 33% of students feel uncomfortable navigating online conflict. Roughly 23% shared that they are neither comfortable nor uncomfortable navigating conflict. The other 44% of students felt somewhat too comfortable addressing conflict online. In the one-on-one interviews, I worked to understand students' feelings about conflict better online. One student stated, "Conflict happens all the time online, and I am numb to it at this point. Many times, we will get into fights on the internet, and I don't really take it seriously." Another student explained, "I try to stay out of conflict online most of the time because that's the safest route." The data suggest that conflict happens online, and the impact can cause a relationship breakdown.

These are some negative impacts digital technology can have on students. If students become knowledgeable about best practices around being digital citizens, it will, in turn,

support their academic success. Furthermore, it would help them navigate conflict online and maintain healthy relationships and boundaries.

Safety Concerns

A third key finding around the research topic illuminates safety concerns for students when engaging online. There are instances when students post information that creates concern for their safety. For example, one staff member shared that they had to advise students not to post their residence hall and room number on social media. Students needed to understand why they could not do this initially. Students and staff also shared how students use online dating apps and sometimes give personal identifying information to strangers. Revealing personal identifying information can lead to stalking, harassment, and cyberbullying.

Another example would be staff working with a student estranged from their family. The student had separated from their family and had not been in contact with anyone for years. Following a post on social media, a family member could locate the student and pinpoint where they were. The family member locating the student created distress for the student and left them wondering about their safety. Safety concerns, as mentioned above, create a need for the college to address the matter in a way to support students. These types of concerns can impede learning and result in students being distressed.

Need for Training

This study focuses on first-year undergraduate students' understanding and knowledge of digital citizenship. Students shared that they know how to navigate technology but need help understanding digital citizenship. Students shared that they have learned about technology through their parents and observed other peoples' mistakes. Additionally, when asking faculty and staff about their training, they indicated that they still needed formal training through the college. Many indicated that they, too, need more understanding of digital citizenship to support students better. In line with more training, one faculty member shared the need for the

college to make a statement about the importance of digital citizenship skills at the undergraduate level. In other words, the college should make the campus community aware that this is an important topic and create a platform for students to explore it. When surveying students and asking if they expect to learn more about digital citizenship in college, roughly 60% of students indicated that they did. Through the data, it is evident that learning and training are needed. The venue to ensure training needs are met is essential to the planning of the intervention.

The college will want to engage students intentionally around the topic in a meaningful way. The assumptions the college makes about students' skills around the topic drive practices and creates a potential risk for the college. These key findings positioned stakeholders to discuss possible interventions focused on what Berea College can do to support first-year students. The findings also provide context for how Berea College should consider digital citizenship.

Planning

Meta-inferences were used to inform the planning of an intervention. As noted by Ivankova (2015), “Drawing consistent conclusions from multiple pieces of evidence results in meta-inferences that provide a realistic depiction of the problem and identify direction for its possible solutions” (p.299). The intervention was designed with action objectives and expected outcomes in the study's planning phase.

Meta inferences were shared through a presentation with stakeholders after data collection and analyses in the reconnaissance phase. Key stakeholders were allowed to ask questions about the findings. The inferences made it clear that a broad approach to digital citizenship at Berea is recommended in the following ways.

1. All students at the undergraduate level will benefit from learning about digital citizenship.

2. Students must get the opportunity to apply their learning so that they understand the implications of online engagement as digital citizens.

3. Increased training and ways to support staff and faculty will be important, so digital citizenship is discussed broadly across campus.

Students must have an opportunity to learn about digital citizenship and apply their learning. A stakeholder support team with key leaders across campus was developed to work on the intervention. The stakeholder team consisted of eight faculty and staff members working across various areas on campus, including Student Life and the Information Systems and Services department. The group was given context about the study along with the findings. The team spent a day brainstorming the best intervention to implement at Berea. There were ideas about creating a course and modules for first-year students around the topic. Another idea was centered around creating a campus initiative that would seek to educate the entire campus community about digital citizenship. An alternative suggestion was to integrate digital citizenship into existing courses and support students already receive. A member of the stakeholder team shared the importance of the intervention to be created in collaboration with our Information Systems & Services department. Overall, it was stressed that the initial intervention should focus on bringing community awareness. After generating ideas by brainstorming, it was important to select the most effective intervention to implement.

Through this process, the intervention design aimed to provide understanding and skills around digital citizenship to first-year students at Berea College. If the intervention is effective, the outcome will result in students understanding digital citizenship and being aware of the best practices related to engaging with others in the campus community in a savvy, safe, and socially respectful manner. Because students may conflate the concepts of digital citizenship, and information literacy, it felt important to create opportunities for students to experience the topic through scenarios and case studies.

Considering the need for more awareness around digital citizenship, the stakeholder team decided that it was best to start at ground zero and think through the possible implementation of online modules for first-year orientation. In today's fast-paced digital world, being a socially conscious, responsible, and justice-minded digital citizen who can effectively navigate and understand the internet is crucial (Curran & Ribble, 2017). As technology continues to evolve, students learning and understanding of their digital footprint will need to continue to grow. Considering this fact, students in higher education are not exempt from needing continuous learning around digital citizenship. Understanding, modeling, and engaging are key to facilitating students' development on the topic. As students learn about digital citizenship, they must also get the opportunity to have hands-on experiences, as it cannot be taught in a vacuum.

Summary

This chapter focuses on the overall study design with detailed information about the reconnaissance and planning phase for the intervention. Information and a rationale for selecting a sequential quantitative/qualitative MMAR study design are presented. Additionally, the quantitative strand was conducted and analyzed to give input into the qualitative strand. One limitation of this study is that the survey instrument used to collect data needed stronger reliability. Data integration occurred and revealed that, in general, students could define digital citizenship but need to be more knowledgeable about its application when engaging online.

Furthermore, students shared that it seems like common sense, but they recognize that many of their peers think they are good digital citizens. However, their actions do not necessarily align with this belief. Students, faculty, and staff stressed the need for training and understanding at all levels. Overall, the intervention implemented at Berea requires a comprehensive approach to support first-year students, staff, and faculty.

Chapter three presents an overview of the action plan and evaluation phase and the rationale for the concurrent mixed methods design. After evaluating the intervention, the data

collection process and meta-inferences will be described in detail. The chapter also highlights the evaluation's monitoring phase and discusses the study's implications and its impact on leadership.

Chapter 3

Introduction

Digital citizenship is not a competency that can be taught to students in isolation (Curran & Ribble, 2017). Therefore, educators must incorporate this topic into various aspects of students' lives, including the curriculum. It is suggested that exposure to subjects like reading and math only sometimes leads to proficiency (Murray & Perez, 2014). Similarly, mere exposure to digital citizenship should not be considered for complete understanding and mastery of the topic by students. Therefore, faculty and staff should be cautious about assumptions about students' proficiency in digital citizenship. Many students often navigate the digital world with self-taught skills. This reality starkly contrasts with how students learn about the core areas of math, reading, writing, and language in undergraduate studies. Most colleges and universities assess students' math knowledge through placement tests and their writing skills through general education courses. As Berea College continues its mission of providing a high-quality education to students from low socioeconomic backgrounds, it will be essential to consider where and how digital citizenship fits into the puzzle.

This chapter describes the action plan, its evaluation, and the rationale for a concurrent mixed methods research design. Information on the data collection process and insights gained from evaluating the intervention are provided. The monitoring phase of the evaluation is also described. I close with a discussion of the study's implications and impact on leadership.

Intervention/Acting Phase

Digital citizenship is important for students at all educational levels, including undergraduates (Curran & Ribble, 2017). Given the increasing ways students can connect and engage with others via the Internet, students must become good digital citizens. The key to addressing the issues related to the absence of digital citizenship in the P-12 curriculum and instruction is to engage P-20 students in this essential conversation, model the desired

behavior, and ensure they understand its importance. (Curran & Ribble, 2017). Digital citizenship is crucial for everyone, including college students.

Using the Safety, Savvy, & Social (S3) framework (Ribble, 2017), an action plan was created to develop modules for first-year students on digital citizenship. Developing an action/intervention plan was guided by meta-inferences generated from the interpretation of the quantitative and qualitative results obtained during the reconnaissance phase of the study (Ivankova, 2015, p. 308). The intervention's purpose centered on deepening students' awareness and application of digital citizenship skills in a higher education setting. The modules and resource guide are outlined below, with information about the objectives, implementation process, and intended audience.

The S3 framework applied in this study suggests that when students learn digital citizenship through online modules provided by the College, they will increase their knowledge and awareness about how to be safe, savvy, and social when engaging online.

The primary objectives for the intervention were as follows:

1. Design instructional modules designed to increase students' knowledge of digital citizenship.
2. Offer resources to faculty and staff members who are involved with first-year students that enhance their capacity to:
    1. integrate discussions of digital citizenship in their courses/work department, and
    2. create connections between their curriculum/work and digital citizenship.

Instructional Modules and Resources Design Team

A subset of key stakeholders reviewed and provided feedback about the curriculum for the modules. This intervention was developed through collaborative partnerships. The following people were members of the design team:

1. Chief Information Officer (CIO), who contributed expertise in Information Technology management, is responsible for distributing laptops to first-year students. The CIO provided insights into infrastructure threats and challenges and recommended content to educate students about relevant topics such as phishing scams.
2. Director of Student Success & Transition (DSST), who brings experience in developing and implementing strategies to support students' success. The DSST played a crucial role in helping the design team consider best practices to promote student success.
3. Vice President of Student Life (VPSL) oversees and is responsible for various Student Affairs areas, including the Residence Halls, Counseling Services, Public Safety, and Student Conduct. The VPSL provided critical input during the content development phase, bringing thoughts and ideas on what topics needed to be covered in-depth to educate students. The VPSL was also aware of the different student conduct issues and saw this as an opportunity to educate students and create good digital citizens.
4. Digital Humanities Librarian (DHL), who has expertise in designing and providing training to faculty and students on the use of technology in the classroom. The DHL provided valuable insights into how digital citizenship was linked with digital literacy.

Modules/Guide Development and Timeline

Curriculum design meetings began on February 3rd and were held weekly until March 3rd. The team composition aimed to enable us to create informative modules that effectively conveyed the concepts around digital citizenship. In each meeting, the design team reviewed the curriculum and objectives of one module and provided recommended suggestions to improve them. This was a highly effective iterative process, where significant improvements were made to the modules after every meeting. For example, in one of the meetings, it was noted that the flow of the modules was not evident. Members of the design team were

concerned that students would need clarification about the order in which to complete the materials in the module.

Consequently, I revised the module structure to ensure that all modules followed a similar sequence, allowing students to understand the steps needed to complete each one. The design team provided yet another critical feedback moment regarding the chosen curriculum resources. The resources needed to start at an introductory level. Initially, the modules jumped right into the content, and upon review and discussion, it was evident that an introduction module was needed. The design team meetings were invaluable and provided an opportunity to discuss the gaps in the curriculum and resources.

The digital citizenship modules were designed to be incorporated into Berea College's first-year online orientation, which students can access through a webpage up to three months before their arrival on campus. These modules will be housed in the College's learning management system, Moodle. In preparation for receiving their laptops, students will have the opportunity to explore and familiarize themselves with the digital citizenship modules. An introductory video will accompany the modules to aid with this process, guiding you on navigating Moodle and accessing course materials. By enrolling students in their first Moodle course through the assignment of the digital citizenship modules, they will have an early introduction to the platform. They can become comfortable with its features and capabilities.

Objective One

For the first objective, I developed, with input from the design team, three interactive modules around the S3 framework on digital citizenship. This work occurred in the first half of the Spring 2023 semester. Moodle, the learning management system used at Berea, housed the modules.

To ensure that the design team could access the modules easily and review them outside of scheduled meetings, each team member was enrolled as a non-editing teacher in the

modules. This allowed them to provide feedback on their own time and review the modules as students would see them.

During the development of the digital citizenship modules, the design team was empaneled to ensure the materials would effectively enhance students' understanding of the topic. At each meeting, I would review the state of the curriculum, and the team would then evaluate it for its relevance and appropriateness.

During the design process, the team recognized that it was crucial to incorporate experiences as part of the learning process. Therefore, Kolb's (1984) experiential learning theory was used in the design process of the intervention. Kolb's theory aligns with the findings from the reconnaissance phase of the study in that it is useful for students to be allowed to apply the knowledge they gain in the modules.

Kolb's (1984) theory around experiential learning zooms in on four stages: 1) Concrete experience, 2) Reflective observation, 3) Abstract conceptualization, and 4) active experimentation. The content and characteristics of the modules were built with experiential learning in mind. For example, case studies were used to help get students involved in exploring how they would apply their knowledge in each situation. Additionally, students can reflect on their learning through the modules. To help students conceptualize their learning, videos and readings were embedded in each module. Finally, students are called to take action to pull them into active experimentation.

Module Content/Characteristics

Each module was designed to engage a learner for approximately thirty minutes. The topics were:

- Introduction to Digital Citizenship
- Safety Online
- Savviness and Security
- Social Engagement and Society

Each module's design incorporated interactive elements to engage students in learning, including quizzes, open-response questions, and case studies. These interactive elements were selected to ensure that students' learning and experiences were at the center (Kolb, 1984). For example, the introduction to each module included one or more videos and an article about the topic. After learners can study the topic in depth, they are presented with a case study to read. Following this, they are tasked with answering an open-ended discussion question related to the case study. The discussion question provides a chance for students to reflect on their learning and contemplate how they would apply it to the case study. Following the case study, students are asked to act around the topic, asking learners to take at least one practical and beneficial action in line with the module topic. This *take-action* section offers easy-to-do and wise steps students can take to increase their safety and savviness. For example, after the module on savviness and security, students are asked to consider three actions they could take. The actions are practical, as follows:

1. Use Strong Passwords: Create strong, unique passwords for each online account and avoid reusing passwords. Use a password manager to store and manage your passwords securely.

2. Keep Software and Operating System Updated: Keep your computer's software and operating system up to date with the latest security patches and updates. IS&S will help notify you when system updates are needed.
3. Enable Two-Factor Authentication: Enable two-factor authentication on your online accounts to add an extra layer of security. This requires a user to provide two forms of authentication to access an account, such as a password and a code sent to a mobile device. It would be best if you considered doing this for your social media and other personal accounts.

The *take action* section of each module helps students think about their digital experiences and what they can do immediately to implement what they have learned. The modules conclude with a quiz to assess the learner's understanding of the material presented in the module. The modules are designed to align with the overall learning objectives of enhancing students' understanding of digital citizenship and enabling them to apply this knowledge in practical settings.

Objective Two

Objective two was reached in the middle of the Spring 2023 semester. The guide's purpose is to aid faculty and staff in finding effective ways to involve students in conversations about digital citizenship during their interactions with the students.

Guide Contents

The guide's content (Appendix D) included tips on engagement and suggested ways faculty and staff could incorporate the topic into their discussions and connections with students. Digital citizenship is a broad topic, so determining what should go in the resource guide was challenging. Therefore, I had to select the most critical information to include carefully. This was done by using Ribble's (2014) digital citizenship framework. The topics in the resource guide were identified based on feedback from the design team about gaps they

perceived students had in knowledge on the topic. We started by considering the S3 framework and sharing anecdotes of students' struggles, which helped us brainstorm topics. For example, one design team member shared that they noticed students need help understanding copyright and fair use guidelines. With this feedback, I included a section in the resource guide on how to integrate copyright and fair use into conversations in lessons with students. The design team also urged the inclusion of resources in the resource guide, offering faculty and staff a wealth of opportunities to expand their knowledge of digital citizenship.

The resource guide was developed and designed using an online resource called Canva. Once the resource guide was developed, it was sent to the Printing Services department of the College. Printing Services collaborated with the design team to improve the graphics of the resource guide. The resource guide included a section with links to online tools that can be utilized to help faculty and staff explore a topic further.

Evaluation Phase

The evaluation phase of action research aimed to evaluate the impact of the intervention to be implemented. In this portion of the study I collected evidence about the intervention's effectiveness, to understand how it is perceived by students, staff, and faculty, and if it will be embraced by interested stakeholders (Ivankova, 2015). The purpose of the evaluation phase in this study is to assess the effectiveness of the digital citizenship modules' content and structure as perceived by faculty and staff and to evaluate any barriers to implementation while creating support resources to guide engagement around the topic.

Phase Design

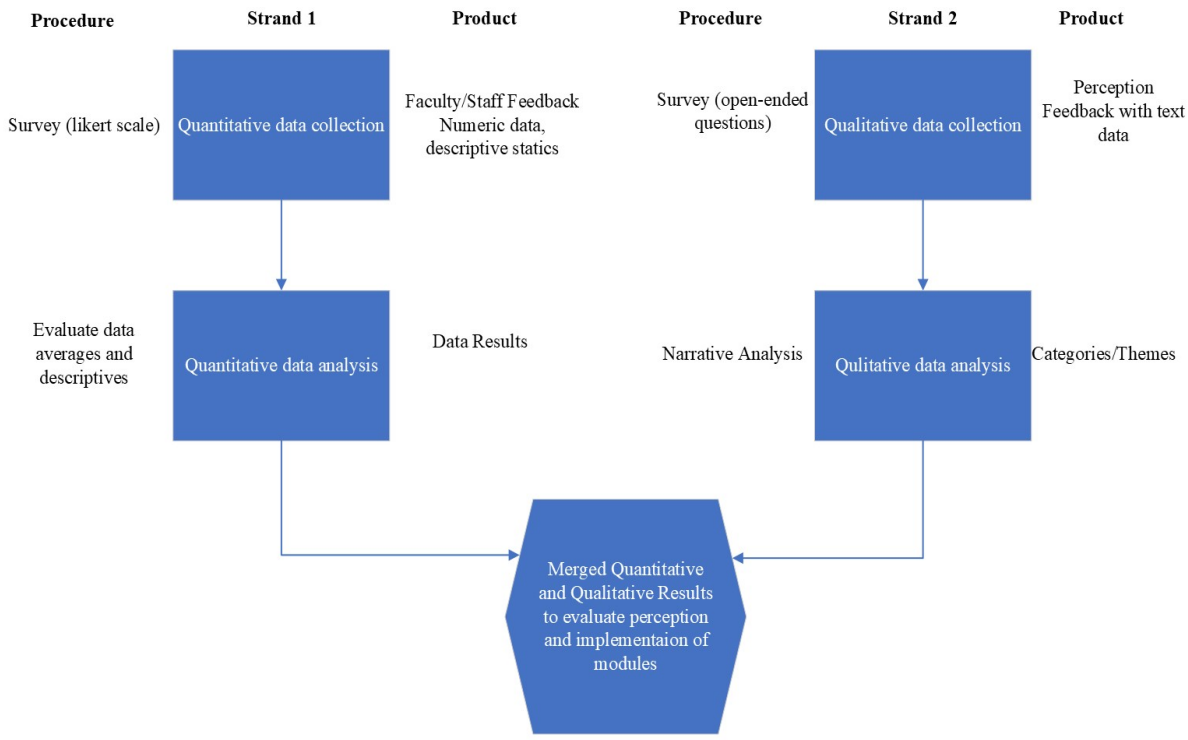
I used a concurrent quantitative–qualitative research design (See Figure 3.1). The primary purpose of a concurrent study design is to compare quantitative and qualitative results to obtain complementary evidence in different types of data and produce well-validated

conclusions (Ivankova, 2015). This study design supports the credibility of the data resulting in validated conclusions (Ivankova, 2015).

Although the concurrent quantitative-qualitative research design has its advantages, there are drawbacks to using the design. On the downside, this study design can be challenging for a solo practitioner-researcher as both the quantitative and qualitative strand is implemented at the same time. Another drawback includes the integration of data and the risk of the data not providing supporting outcomes (Ivankova, 2015). To mitigate the cons of this study design, the study participants were intentionally selected, and I worked to collect the most relevant data from the surveys.

Figure 3.1

Diagram of a Concurrent Quantitative-Qualitative MMAR Study Design - Evaluation



Rationale for the Research Questions

Through meta-inferences derived in the reconnaissance phase of the study, I discovered that students believe learning more about digital citizenship at the College would be a benefit. My goal was to create research questions that would assess the effectiveness of the course content, catering to the development of the modules and the students receiving it. One quantitative research question aimed to capture information about students' pre-existing knowledge of digital citizenship in the realms of safety, savviness, and social engagement. This allowed me to gather baseline data on students' understanding, creating an opportunity to tailor the course content before the release of the course. Additionally, I sought to examine professionals' perceptions of the course's effectiveness in engaging first-year students and addressing the S3 framework.

Complementing the quantitative strand, the qualitative research questions delved deeper into the experiences and perceptions of both students and professionals. I aimed to understand how students felt about the usefulness of the digital citizenship modules and their experiences regarding safety, savviness, and social engagement. This inquiry allowed me to refine the course content further, ensuring it had a practical impact on students' lives.

The second qualitative question focused on the challenges and opportunities in implementing the digital citizenship course for first-year students, as well as the support needed for successful implementation. This exploration provided a comprehensive understanding of contextual factors that could affect the course's success, creating an opportunity to optimize its delivery and effectiveness.

Research Questions

In this concurrent study design for the evaluation phase, the quantitative strand addresses the following questions:

1. What is the level of knowledge and awareness of students regarding digital citizenship in the areas of safety, savviness, and social engagement?
2. To what extent do faculty and staff perceive the content and structure of the modules for first-years students on digital citizenship to be effective in addressing the S3 framework and engaging students to be better digital citizens?

The following research questions guided the qualitative strand of the study:

1) What are the perceptions and experiences of students around safety, savviness, and social engagement online, regarding the usefulness of knowledge shared through the modules.
2) What are the barriers and facilitators to implementing digital citizenship modules for first-year students, and what is the level of support needed for successful implementation?

Sample

Purposeful sampling was utilized for the evaluation phase of the study. Student participants were selected based on their work department at the college. Each student works in addition to attending classes. The departments selected included a significant number of first-year student staff. Faculty and staff were selected based on their roles in supporting and working closely with students. The aim was to get faculty who teach General Studies courses to evaluate the intervention. For staff, the intention was to get a representative group that works closely with students when various concerns arise. This includes staff in the following areas, Student Life, Student Success and Transition, Counseling Services, and the Labor Program.

Instrumentation

The collection of data was gathered through the online survey administration tool, Qualtrics surveys. Two surveys were used in this phase of the study. One survey (Appendix E) was used to get students to share their perceptions and experience around the S3 framework and the usefulness of the knowledge gained through the online modules. The survey addresses the following two research questions: 1) What is the level of knowledge and awareness of students regarding digital citizenship in the areas of safety, savviness, and social engagement? 2) What are the perceptions and experiences of students around safety, savviness, and social engagement online regarding the usefulness of knowledge shared through the modules? The survey Q6 – Q15 aimed to understand students' knowledge and awareness about safety, savviness, and social engagement. While Q16 – Q21 of the survey centered on students' perceptions and experiences around the S3 framework.

The second survey (Appendix F) was used for faculty and staff to provide feedback regarding the online modules. This survey addressed the following two research questions: 1) To what extent do faculty and staff perceive the content and structure of the modules for first-year students on digital citizenship to be effective in addressing the S3 framework and engaging students to be better digital citizens? 2) What are the barriers and facilitators to implementing digital citizenship modules for first-year students, and what is the level of support needed for successful implementation? Q4 – Q13 of this survey sought to understand faculty and staff perception around the effectiveness of the modules in addressing the S3 framework and the ability to inspire students to be good digital citizens. Questions 14 – 20 of the survey focused on the barriers and facilitators to implementing the modules from faculty and staff points of view.

Data Collection Procedures

Data collection for the evaluation phase of the study was conducted in two ways. For students, an email (Appendix G) was sent, describing an overview of the study and asking them to participate. The departments chosen for the project were deliberately selected based on the current cohorts of first-year students with whom the Labor Program closely collaborates. A total of 46 students asked to complete the survey. Demographic information for the students who completed the survey is provided in Table 3.1.

Table 3.1

Demographic information of respondents (N=48)

Classification of Student Respondents

Response	% (N)
First Year	62.50% (30)
Sophomore	16.67% (8)
Junior	14.58% (7)
Senior	6.25% (3)

Data collection for faculty and staff was completed by inviting them to a meeting where the study context and findings from the diagnosis and reconnaissance phase were shared with them. After that, faculty and staff enrolled in the online Moodle course to review the modules. The evaluation of the modules was collected through the survey. There was a total of 15 responses, and demographic information for faculty and staff respondents are as follows in Table 3.2.

Table 3.2

Demographic information of faculty/staff respondents (N=16)

Demographic info for faculty and staff	
Characteristic	**% (N)**
Role at the College	
Faculty	33.33 (5)
Staff	66.67 (10)
Labor Supervisor	
Yes	33.33 (5)
No	66.67 (10)

Data Analysis

In the evaluation phase of the study, data analysis was conducted for qualitative and quantitative strands using procedures such as narrative analysis and thorough evaluation of data averages and descriptives. The data gathered from this phase allowed for evaluating the digital citizenship modules. Additionally, the data analysis connects the findings in this phase to data collected in earlier phases of the study.

Quantitative data analysis. Data were categorized through SPSS, and descriptive statistics and data averages were utilized to analyze the data.

Students. Using Qualtrics, the survey data collected from students provided valuable insights into their understanding of digital citizenship with a focus on safety, savviness, and

social engagement. The survey aimed to gauge if the modules would cover new knowledge for students.

Faculty/staff. Using Qualtrics, the data from the survey from faculty and staff provided insight into the evaluation of the modules from faculty and staff perspectives. Data from this study phase were compared to those from the reconnaissance phase to answer the research questions.

Qualitative data analysis. Qualitative data was gathered through the same Qualtrics survey as the quantitative data. The data were categorized and assigned codes to help identify themes. The findings were integrated with the quantitative data to provide a deeper understanding of the research questions being asked.

Quantitative Findings

Students. The findings indicate that students need to describe citizenship thoroughly (Table 3.3). This connects to data from the study's reconnaissance phase, as students could define it in simple terms. When students were asked to describe digital citizenship, roughly 62% of respondents could not describe it correctly.

Table 3.3

Defining Digital Citizenship

Which of the following best describes the concept of digital citizenship?		
	Frequency	Percent
The ability to use digital tools and technologies to communicate and access information.	11	23.40%
The responsible and appropriate use of technology to support community and civic engagement.	18	38.30%
The understanding and practice of ethical behavior online.	10	21.28%
The protection of personal information and privacy in the digital world.	8	17.02%
Total	47	100.0

Although students struggled to describe digital citizenship in the evaluation phase, when the topic is dissected through the lens of safety, savviness, and social engagement, students are confident about their abilities. Table 3.4 highlights the mean and standard deviation of each of the multiple-choice questions where students shared their confidence in their abilities.

Table 3.4

Abilities of Respondents as it relates to S3 Framework

		Abilities of Students				
		I feel confident in my ability to be safe online.	**I feel confident in my ability to be savvy online.**	**I feel confident in my ability to engage socially in a respectable way online.**	**I know what steps to take to prevent me from becoming a victim to online scams and personal information theft.**	**I know how to identify cyberbullying and I am aware of what steps should be taken.**
N	Valid	46	46	46	46	46
	Missing	2	2	2	2	2
Mean		16.24	4.09	4.63	4.43	4.41
Std. Deviation		.923	.939	.741	.779	.858

Note: Descriptive statistics for multiple questions are presented. Mean and standard deviation (SD) are reported for each question

Also, students indicated through their responses that they feel confident in their ability to engage socially in a respectful manner online. Students again indicated high confidence when sharing their confidence in avoiding scams and personal information theft. The findings align with the literature about students' self-views and abilities of, their skills. Students who lack skills but believe they have them are unlikely to seek help (Gross & Latham, 2012).

While many questions had low standard deviations, there was a slightly higher standard deviation around students' ability to be savvy online and identify cyberbullying. This indicates that the answer to the response question is more spread out. The slightly high SD around these questions indicates that some students are confident in their ability to be savvy online, identify cyberbullying, and know what to do about it, while others are not. Given the gap, it can be

concluded that savviness and cyberbullying are topics worth providing additional support to students.

When students were asked about their ability to apply digital citizenship in their everyday lives, there was a wide range of responses. Table 3.5 highlights the mean and standard deviation of this question. There was a significant variation in students' responses, signaling that some students better understand how to apply digital citizenship.

Table 3.5

Applying Digital Citizenship

Applying Digital Citizenship		
	Mean	**SD**
I fully understand digital citizenship and know how to apply it in my everyday life to be a responsible digital citizen.	3.91	.985

The findings from the evaluation phase of the study indicate that students at Berea College can benefit from modules around the S3 framework of digital citizenship. Students were asked if they agreed with the statement, “Online modules on digital citizenship will help me be a better digital citizen”. 50% of respondents somewhat to strongly agreed with the statement and another 26% did not disagree or agree. This suggests that some students may be uncertain about how online modules will help them apply digital citizenship. Since half of the respondents viewed online modules as helpful, it suggests that online modules can potentially increase students’ knowledge and understanding of digital citizenship.

Faculty/staff. The survey that faculty and staff received gauged their perception of the modules' content and structure in effectively addressing the S3 framework. Following the analysis of the faculty and staff survey data, some findings helped assess the intervention.

The first finding in Table 3.6 indicates that 85% of respondents believe online modules will help students learn more about the topic.

Table 3.6

Online modules increase learning

Do you think the online modules on digital citizenship can help someone learn more about the topic?

	Frequency	Percent
Definitely will not	0	0 %
Probably will not	0	0 %
Might or might not	2	14.29 %
Probably will	4	28.57 %
Definitely will	8	57.14 %
Total	14	100.0 %

This is an important finding, providing insight into the perception of the modules developed for students. The results indicate that there is a strong belief among faculty and staff respondents that digital citizenship modules have the potential to enhance students' understanding.

Another finding (Table 3.7) assesses faculty and staff perception of the module's effectiveness in providing an overview of the S3 framework. The modules aimed to provide learners with a broad understanding and application of the S3 framework (safety, savviness, and social engagement).

Table 3.7

Effectiveness of Modules S3 Framework

How effectively do the modules incorporate the S3 Framework (Safety, Savvy, Social)?		
	Frequency	Percent
Not effective at all	0	0 %
Slightly effective	1	7.14 %
Moderately effective	2	14.29 %
Very effective	9	64.29 %
Extremely effective	2	14.29 %
Total	14	100.0 %

Based on the results, about 79% of respondents believe that the modules effectively incorporated the S3 framework and learning objectives.

The third finding points to the structure and design of the modules. Not all respondents agreed as it related to assessing the structure and design. Roughly 21% of respondents shared that they somewhat disagreed with the effectiveness of the structure. This may result from the learning management system selected to house the modules. However, 79% of survey participants indicated that the modules' structure and design were effective.

Qualitative Findings

The qualitative findings were collected through the survey using open-ended questions. There were two sets of qualitative data analysis findings due to two different surveys being conducted. The first findings came from coding student responses to the open-ended questions. The second set of qualitative findings came from faculty and staff responses.

Students. The findings from the students in the qualitative strand of the evaluation phase indicate that many students share experiences of when they had to apply the skills

around the S3 framework. Students could share their experiences, and many centered around scams and phishing attempts. When sharing these experiences, email scams were mentioned often. One respondent shared, “I got a fake email from someone claiming to be from UPS when I was expecting a package. They wanted my card info to pay a $1 fee (that did not exist).” Many other students echoed similar experiences around phishing attempts through email. These experiences may also stand out for students as the Information, Systems, and Services departments require annual training across campus around phishing attempts. These experiences, though, can be short-sighted as students sometimes need more in-depth information.

For example, when students were asked to share an experience when they had to apply their knowledge around safety, one shared, “I apply my knowledge when I pirate shows and need to find a safe streaming site.” The response here indicates that the student needs to fully understand how to be safe online. This conclusion can be made as pirating shows is illegal and violates the copyright. Digital Citizenship safety encompasses understanding copyright and the free use of materials.

Another finding from students in the qualitative strand reveals that students often learn about aspects of digital citizenship through mistakes. One student expressed, “I understand that scam emails and texts are sent online, and it is a way to trick people into giving them money. Based on previous experiences and being a victim, I can understand and realize when it is happening”. Educating students on the topic and giving them action steps is to prevent circumstances like this.

A third finding illustrates that students’ confidence in their abilities often leads to them helping others like their parents and grandparents. One student said, “I have experience being savvy when I help my grandparents or my parents with online things.” Another student shared, “All of my online safety experience comes from existing as a young person in this digital age.

My knowledge of online safety comes mostly from advising my grandmother to avoid scams online". The student is confident about their abilities and finds themselves assisting their grandmother. The thinking that younger generations of students are digital natives, might be causing students to be overconfident, misleading their need to learn more about digital citizenship.

Faculty and staff. Findings from faculty and staff in the qualitative strand of the evaluation phase were derived from the survey about the modules and resource guide about digital citizenship. This strand focused on barriers and challenges that faculty and staff perceived when implementing the modules. The themes from analyzing the qualitative data from faculty and staff produced important findings around access, students processing and reflecting on learning, and community support and buy-in.

Access to technology continues to be a critical component of digital citizenship. In open-ended responses, the faculty and staff expressed the need for access to be addressed for students, staff, and faculty. Regarding students, one respondent stated, "With students needing to complete the modules before they arrive on campus, access may be of concern." To address the concern around access, the institution can create opportunities for the modules to be completed during students' summer visits to campus or during the first few weeks when they arrive there. The point around access also connects to faculty and staff access. One respondent shared, "I think it would be helpful for faculty & labor supervisors to have access to the modules because chances are there are things we are unaware of too." This theme was echoed by others, stressing the importance of faculty and staff understanding being foundational in their ability to interconnect it to their curriculum and work.

Another finding from the qualitative strand was around students' need and ability to process what they have learned. Faculty and staff commented on students not only being able to reflect on their learning but also being able to process it. One participant shared, "I do like

the modules. I think the only thing for improvement would be more directly in the class where students have an opportunity to ask questions and discuss what they have learned in the modules". This aligns with Kolb's (1984) theory of experiential learning, which outlines four stages of learning, with the last stage being active experimentation. In this stage, students get to apply their learning in new situations. One way to achieve this would be creating projects in that students could collaborate with other students.

A third finding from faculty and staff revolved around community support and buy-in. This theme emerged in the reconnaissance phase but was more directly stated this time. A faculty member said, "Ensuring support at the Administrative level, including the President, in conveying the expectation that all campus community members are expected to exhibit these skills and will be held accountable for violations is crucial." The modules will function most effectively as developed with a campus-wide agreed-upon code of conduct. To support the modules and the workaround for digital citizenship, the campus will need to create guidelines for all community members.

Overall Evaluation Findings

Meta inferences were formed by triangulating the quantitative and qualitative data to understand the results better. Common trends were identified when analyzing and synthesizing the data from both sources. Through triangulating the data, relevant findings emerged that highlight the importance of

1. the impact of the modules and the resource guide on teaching and learning,
2. the gamification of modules,
3. the provision of additional support, and
4. the adoption of a broad approach to educating students about digital citizenship.

Impact on teaching and learning

A noteworthy finding pertains to the potential impact of the modules and resource guide on teaching and learning. The first finding signals that sharing the modules with faculty and staff about digital citizenship can change classroom and workplace practices. When asking faculty if they have considered modifying their instruction to incorporate the digital citizenship concepts covered, one respondent shared, "I definitely should base on some assignments I ask my students to create in certain classes." Supporting this, another respondent shared, "I plan to address digital citizenship at the beginning and throughout each semester. In addition, I will schedule a digital literacy presentation for each class". Increasing faculty knowledge about the topic is essential, and it will help students think about digital citizenship being connected to their learning. This finding connects to the results in the reconnaissance phase, where faculty and staff indicated an interest in learning more about the topic.

The classroom is one of many things that would be impacted, as participants shared the impact on the workplace. One participant said, "The modules succinctly cover topics that I can share with my labor students." Another respondent expressed, "In my department, we hire our majors, and this type of information would be something that would be important to address in our coursework prior to their hiring as juniors and seniors. I would remind them of the training in talking about their job responsibilities". The impact on learning in the classroom and workplace is evident. It connects to Curran and Ribble's (2017) research, which stresses that digital citizenship must be applied broadly across the curriculum and outside the classroom, as it should not be taught in a vacuum.

The gamification of modules

A second finding indicates that the modules will benefit from gamification to encourage student engagement. In other words, students may retain the knowledge and be able to apply what they learned if the information is gamified. This connects with Kolb's theory of

experiential learning. The first stage of Kolb's experiential learning theory is about students' concrete experience. To quote one respondent, "Find a way to 'gamify' the course and creating new labels for the pedagogical elements will be critical as you consider future iterations of the modules." Gamification can allow learners to engage in an experience directly (Kolb, 2014). Another respondent shared, "Make the modules interactive, visually stimulating, and condense the information present into summaries." This finding indicates that the current modules need to be gamified. This will be crucial to implementing them for first-year students.

Adding the gamification elements can also address the reoccurring theme of wording within the module. One participant mentioned not using the word module as it can make the work seem daunting to students. Another participant commented, "Some changes in the labeling would be helpful as more student-focused wording should be utilized." As the modules are further developed, adding a gaming element making it relatable to students, will be essential. The gaming element will likely result in students being motivated and inspired when engaging with the materials.

Provision of additional support

Implementing modules for first-year students will involve intentional craftsmanship and planning. Findings illuminated the need for additional support to be available to students regarding the learning management system utilized and combating thoughts of already being an expert on the topic. According to a participant, "Students knowing how to navigate Moodle is the biggest support that comes to mind." Another participant agreed and shared, "If it is going to be disseminated in its current form, there should be additional accompanying information on how to use Moodle. I know there is a video now, but I think that probably needs to be presented to them first and highlighted more heavily". Support is essential to help first-year students learn about modules and be aware of how the learning management system can be best utilized.

Additionally, faculty and staff will need support in effectively engaging students who believe they know everything about digital citizenship. A participant shared, "Understanding of the purpose and that they need to engage with the training. Digital natives may feel as if they know all the content and that it is redundant. Resources will need to be provided to get the students invested in the modules". This can be accomplished by helping students see how the topic will impact their tenure in college. Furthermore, the more faculty and staff can emphasize the importance of digital citizenship and its significance; the more students might be willing to engage and learn more about the topic.

Adoption of a broad approach

In considering how to best integrate the topic of digital citizenship on Berea College's campus, a broad approach is necessary. All community members play a role in helping the college create good digital citizens. This means that everyone must be a part of the dialogue and help set guidelines and expectations around how the community engages with technology. Respondents have ideas about how to make this happen. One respondent offered, "Drawing more direct connections to how getting this right is imperative for success at Berea in classes and labor is important. Perhaps, guidelines in the handbook would help to support that". In other words, digital citizenship must become a part of the campus culture. No matter where students are, digital citizenship is an expectation the community buys into. As a result, students should only learn about the topic in collaboration. In practice, they should know what being a digital citizen in every setting means. Utilizing weekly labor meetings was offered as a suggestion by a participant. A respondent points out, "Motivating students to do the modules will be easy if it is an assignment for a course or a labor meeting. Connecting it to coursework and work may result in student motivation and engagement with the materials. The respondent also shared that the content should be followed up with a significant discussion about the content of the modules.

Incorporating digital citizenship in various aspects will signal to students that it is a part of the institution's identity. A participant stated, "Digital literacy is crucial for our time, and iterating the ethical component to students can help them navigate what is true from fiction or fake propaganda." The broad approach to incorporating digital citizenship is vital to sustaining students learning through online modules.

Overall, faculty, staff, and students think digital citizenship modules will benefit our campus positively, contributing to good digital citizens. Some tweaks have to be made to enhance the implementation of the digital citizenship modules. The positive feedback from the campus community indicates that our campus is committed to developing knowledge and respectful digital citizens.

Monitoring Phase

In the monitoring phase of MMAR, the researcher explores if the intervention needs revisions or further testing based on the meta-inferences from the evaluation phase of the study (Ivankova, 2015). The monitoring phase aims to share results from the evaluation of the intervention with stakeholders and get their feedback about changes to the intervention plan (Ivankova, 2015). The findings from the Evaluation Phase of the study were shared broadly across campus. The implementation team, key stakeholders, the Administrative Committee, and campus partners received an overview of the findings, and possible implications were discussed.

To continue this important work, the design team will implement the revisions recommended from the feedback in the evaluation phase of the study. This is a topic that many individuals are passionate about as it has a direct impact on our campus community. With gamification being a highlighted recommendation, our next step as a design team will be working on ways to add gamification. We may have to consider alternatives to using the

current campus learning management system. The team's goal would be to pilot the modules this upcoming May as a part of the online orientation for students.

Study Limitations

There were limitations within this study, given the focus on action research in a particular setting. The context of the study limits its ability to generalize beyond Berea College. Additional limitations of the study include instrument development, time constraints, and representation of stakeholders.

Another study limitation was the reliability and validity of the instruments in the study. Establishing reliability and validity was challenging as the questions were created and not standardized. As such, the accuracy and creditability of the results were slightly diminished. Despite this limitation, steps were taken to minimize errors and improve the data quality. To improve the reliability and validity for the future, standardized questions should be used. For example, The International Society for Technology in Education (ISTE) has competencies around digital citizenship. These competencies can be used to developed survey questions to better understand students' knowledge about digital citizenship.

In addition, in the context of the study, time constraints impacted the depth of the research. This was challenging when parts of the findings generated areas of interest that could have been explored more, but given time constraints, they were not. Also, the study relied on feedback from surveys and semi-structured one-on-one interviews. The surveys received great participation, but the number of participants declined for the individual interviews, resulting in a small number of respondents. Given the small number of respondents the data from the interviews is not fully representative on Berea College faculty, staff. There are many reasons why the number may have fallen, one being that the time of the semester may have constrained respondents' availability.

Implications

Implications for Leadership

Leaders at higher education institutions have a unique opportunity to make a statement about expectations and guidelines around what it means to be a digital citizen on their campus. In making the statement and guidelines, thought will have to be given to find ways to involve faculty, staff, and students in the process. Strategies that foster collaboration and community directly connect to Ivankova's work around mixed methods action research. The action research process connects practitioners in the field with the community. The community is seen as essential in mixed methods action research. Practitioners involve the communities they serve in systematically investigating a problem of practice to guide them through the necessary information to improve the situation. They also aid in developing efficient approaches to implementing and assessing the required changes (Ivankova, 2015). As leadership moves forward, the community must be involved, as digital citizenship cannot be taught in a box, and it is something that the entire institution must be willing to commit to.

College leaders can employ several strategies to explore the implementation of digital citizenship initiatives on campus and establish guidelines for digital engagement. Ivankova (2015) described that the strategy focuses on effectively cultivating collaboration and community. The five areas are 1) community orientation, 2) practical focus, 3) participation and collaboration, 4) reflection, and 5) empowerment. These areas are essential to helping leaders take steps to embed digital citizenship in their institutional practices.

When considering community orientation, it is important to involve all stakeholders with an opportunity to engage in the process and find solutions. Regarding practical focus, it is important for practitioners to be involved as their practices are often the focus, and their perspective informs the inquiry. For participation and collaboration, it is imperative to have the community's involvement in generating knowledge and organizational change. For example, if

I conducted this study on digital citizenship without community involvement, I would have likely landed on an intervention that would excluded sound ideas, resulting in the wrong approach to addressing the problem of practice. Involving the community creates opportunities for the best ideas and intervention to be implemented across the institution.

Reflection also is a critical strategy in fostering cooperation and community. Ivankova (2015) shares, "Reflection is a part of the research process and is done systematically and purposefully at all stages" (p. 33). Considering the present study, there are things I would have done differently. One thing includes looking at the connection between digital citizenship and the demographics of students enrolled at the college. Additionally, I would have included administrator interviews to get a deeper understanding of what they see as possibilities to address the problem of practice. Through reflection, I recognized the significance of refining my thought process, collaborating with crucial stakeholders, and developing interventions to address the challenge effectively.

Other strategies for fostering cooperation and community centers around empowerment. Empowerment challenges practitioners to take active roles in their communities to ask questions and look deeper into situations that may have been overlooked. As Ivankova (2015) puts it, "Participation in action research projects raises practitioner-researchers' awareness of their right to voice in reframing and reconstructing social practices and informs and empowers them to take actions they perceive important" (p. 34).

Along with creating community involvement, higher education leaders can deploy mixed methods research to implement digital citizenship successfully. Mixed methods research can be utilized to accomplish this. For example, campus administrators could conduct surveys and focus groups with stakeholders to gather their feedback and perceptions of digital citizenship initiatives. Additionally, data collected through the modules could be analyzed to evaluate the effectiveness of the modules. One-on-One interviews would be another way to

continue gathering data about the implementation of modules and the digital citizenship initiative.

In addition to fostering community and collaboration, institutional leaders must evaluate the resources needed to support digital citizenship on their campus. There may be a need for a staff member or office to lead the campus charge and be responsible for digital citizenship. Creating substantial resources to maintain a digital citizenship program will signal to the campus community its importance. Faculty and staff support is key as many faculty and staff have not had formal training on digital citizenship.

By employing a mixed methods approach and using strategies for collaboration and community, campus leaders can gain a comprehensive understanding of the effectiveness of the modules. This understanding will allow leaders to make informed decisions about improving and sustaining digital citizenship initiatives on campus to develop and support well-rounded digital citizens. The study's implications for leadership showcase the critical components needed to make organizational changes around practices and expectations.

Implications for Practice

This research study will inspire educators to consider their role in helping educate students about digital citizenship. Every educator plays a role in helping students understand how to navigate the digital world. Technology is a part of everything, and students must understand how to use it responsibly and safely. In practice, this study should ignite educators to recognize that digital citizenship is as important at the undergraduate level as it is at K-12.

There are several ways educators can consider incorporating digital citizenship into their teaching practice. One way is by intentionally integrating digital citizenship into the curriculum. This would require educators to consider how digital citizenship fits into their teaching. For example, a math teacher could share about online privacy and security as students utilize math-related software to complete their classwork. Another avenue would be

finding ways to have discussions and reflections about technology as it arises in the classroom. This would encourage students to think critically about the responsible use of technology. A third way could be creating workshops addressing the various components of digital citizenship to help students gain hands-on experience and practical skills.

The implementation of these strategies comes with barriers. Some barriers include a lack of resources for faculty and staff, resistance from faculty, and the perception of students' knowledge of digital citizenship. To overcome these barriers, it will be important that institutions consider how to train and equip faculty and staff with the necessary tools and resources. Specifically, faculty and staff will need to feel confident in their abilities to work with students who sometimes they feel are more technology savvy than them. Additionally, everyone will need to buy into the importance of digital citizenship at the undergraduate level. Faculty and staff alike must see this as part of their role in working with students in and outside the classroom. The other barrier might be helping students see the value of learning more about digital citizenship. This barrier can be overcome by helping students see how digital citizenship relates to the present and the future.

The practical implication of this study is that colleges should build digital citizenship into their campus culture, as we all can benefit from digital citizenship skills. As technology evolves, our skills need to evolve as well. It will be important that practitioners stay up-to-date and current with emerging technologies and trends. Higher Education institutions can no longer sit back and not consider how technology impacts students' experience. This research study will help improve students' knowledge, making them better digital citizens.

Implications for Research

This study was centered on first-year undergraduate students understanding and growth in digital citizenship. The findings and results lead to an intervention to help Berea College support students' knowledge on the topic. The literature around digital citizenship mostly

focuses on K-12 students and does not often consider how undergraduate students are impacted. I hope this research will propel educators to continue considering what the role of higher learning institutions should be to ensure that students are role models and digital citizens.

This research study informs future research on digital citizenship in higher education. Specifically, the findings suggest that students are interested in learning more about the practical application of digital citizenship. This contrasts with the perception that students are digital natives and understand technology better because they have grown up with it.

There is a need for more research at the undergraduate level around digital citizenship. Beyond students' understanding of digital citizenship, additional research could be conducted on how higher education institutions should address digital citizenship. Research questions that could be explored further are as follows:

1. What are the most effective strategies for promoting digital citizenship education at the undergraduate level?
2. How do undergraduate students use technology in their academic and personal lives, and what are the implications of this use for their development as digital citizens?
3. How does undergraduate students' understanding of their role as digital citizens connect with social justice?
4. How do undergraduate students' experiences with digital citizenship education in college impact their attitudes and behaviors as digital citizens after graduation?

Understanding how students perceive and engage with digital citizenship will help higher education institutions consider the best way to implement and integrate the topic into students' experiences. Diving deeper into research around this topic has the potential to contribute to digital citizenship initiatives that meet the needs of diverse students and promote equitable and inclusive practices in the digital world.

To further enhance the implications of this research, it is recommended that mixed methods action research be utilized to understand better the complexities and gaps of knowledge around digital citizenship for undergraduate students. Using mixed methods, researchers can gather a vast range of qualitative and quantitative data and analyze it from various stakeholder perspectives. This results in a deeper understanding of how the intervention impacts the problem of practice. Through this approach, higher education institutions can play a proactive role in promoting and understanding digital citizenship for undergraduate students. The likely result would be that higher education institutions become leaders in supporting and developing responsible digital citizens.

Reflections

Leading Organizational Change

Creating change requires working with various stakeholders across the institution to ensure that there is buy-in and that everyone agrees with the need for the change. In doing this work, I discovered that no one individual had the full scope of how digital citizenship is being done on our campus. I brought together people from multiple departments. This resulted in each area learning more about the other area. This collaboration also ignited everyone to be a part of the work. Given the project's momentum, it became evident that this was a change that others wanted to see, and it validated the work we were engaging in.

Conducting mixed methods action research was invaluable as a practitioner and lifelong learner. The process helped me understand that change does not happen quickly and that for change to happen, others must see what you see. Another valuable lesson I learned was that just because I perceive something as a problem does not necessarily mean that others share the same viewpoint. Working on a problem of practice that the entire community feels is important to discuss and resolve adds significant depth to the work. The process showed me how to foster collaboration for change. In higher education settings, collaboration is a word that is used

often; however, practitioners are sometimes siloed and do not always find ways to collaborate on the level that is required through action research. I now have valuable strategies that help foster collaboration.

Mixed methods action research is grounded in getting stakeholders involved at every level. My openness to obtain feedback from all members helped create a sense of community whereby everyone could see how best to solve a problem of practice. After going through the mixed methods action research process, I now have tools in my toolbox that will help me tackle other problems of practice. Overall, organizational change is challenging, requiring hard work and several discussions. The discussions serve as pulse checks to ensure that the work moves in the direction key stakeholders see as important. Creating organizational change requires support from the administration, faculty, staff, and students. I have received support from everyone, and the work from this research project will continue to push the college to examine how to support students, staff, and faculty around digital citizenship.

Conducting Action Research

As I conceptualized this study, I remember thinking about how I wanted to impact my project significantly. Initially, my topic needed to be narrower, and I had to narrow down the focus of the study. Now I understand it is best to start small when making a change. Working in this way, using an applied action research model, enables productive, collaborative conversations and allows multiple stakeholders to be involved. In today's fast-paced work environment, trying to make change occur quickly can be tempting. However, using an iterative process such as the one in this study helps ensure stakeholders have a voice in the action and intervention decisions. Without this process, it would have been tempting to solve the problem of practice on my own or with select voices. The process created opportunities to talk with various stakeholders, adding perspective and depth to the study.

The action research process helped me dissect the research problem and develop an intervention that is useable and useful. Campus partners became invested in the work and created synergy between my study and other departments on campus. With the commitment and buy-in of others on campus, conducting the research and developing the intervention was easier. Throughout the process, stakeholders provided valuable feedback about what was needed to address the problem and what solutions would work as an intervention.

Conclusion

This MMAR study aimed to promote digital citizenship to foster safe and responsible digital citizens among first-year undergraduate students at Berea College. The study aimed to help students understand responsible digital citizenship in hopes that students fully understand the implications of their online engagement through the lens of safety, savviness, and social engagement.

Through the diagnosis phase of the study, a problem of practice was identified at Berea College. The problem of practice centered around undergraduate students receiving a laptop without training or guidance on how to be safe and respectful online. Stakeholder conversations revealed that educating the campus about digital citizenship would be helpful. The study also included a reconnaissance and evaluation phase. The meta-inferences from qualitative and quantitative data revealed key findings around assumptions driving practices, digital technology impacts, safety concerns, and training needs. In the evaluation phase of the study, the triangulation of quantitative and qualitative data led to meta-inferences. Key findings centered around the impact of the modules and the resource guide on teaching and learning, gamification of modules, provision of additional support, and adopting a broad approach to educating the campus about digital citizenship.

This research study on digital citizenship has important implications for leadership, practice, and research in higher education. Implications for leadership highlight the need for

community involvement in crafting guidelines for digital citizens, allocating resources to support the campus in learning about digital citizenship, and the need to measure the effectiveness of digital citizenship initiatives. Implications of the research include utilizing mixed methods action research to understand better the complexities and gaps in knowledge around digital citizenship for undergraduate students. In doing this, the practice would be improved as the likely result would yield the development of responsible digital citizens. This would help higher education institutions be leaders in supporting and promoting digital citizenship.

The study did have limitations that should be kept in perspective. The study focused on action research in a specific setting, resulting in limitations around generalizability. Additionally, the instruments utilized in the study were created, impacting the reliability and validity of the instruments. Time constraints and participation also played a role in limiting the study. Nonetheless, the study successfully explored the problem of practice and identified an intervention to support students in their learning and development around digital citizenship. Overall, the study has brought together key stakeholders around a problem of practice that many are now invested in addressing. Students joining the Berea College community will now receive guidelines and knowledge about digital citizenship to support their responsible and safe online technology use.

APPENDICES

Appendix A: Student Safety, Savvy, and Social Engagement Survey

Safety,Savvy, & Social Engagement Survey

Did you graduate from a high school in the state of Kentucky?

- Yes
- No

What does digital citizenship mean?

- Any information about you on the internet
- Using digital media safely, responsibly, and ethically
- An online membership
- Not giving credit to someone else's work

Share your current understanding of digital citizenship.

- Not knowledgeable at all
- Slightly knowledgeable
- Moderately knowledgeable
- Very knowledgeable
- Extremely knowledgeable

Which is an example of digital media?

- Computers
- Social Media
- Video Games
- Podcast
- All of the above

If you send a message using any form of digital media, you can control what happens to the message after you send it?

- Definitely not
- Probably not
- Might or might not
- Probably yes
- Definitely yes

Have you had negative experiences using digital technology? If so, elaborate.

Do you expect to learn more about digital citizenship now that you are in college? Why or why not?

My peers make unkind comments about people online.

- Never True
- Sometimes True
- Don't Know/Does not apply
- Often True
- Always True

My peers post inappropriate comments online.

- Never True

- Sometimes True
- Don't Know/Does not apply
- Often True
- Always True

My peers post inappropriate pictures online.

- Never True
- Sometimes True
- Don't Know/Does not apply
- Often True
- Always True

As you engage with others online do they show respect?

- Definitely not
- Probably not
- Might or might not
- Probably yes
- Definitely yes

Have you ever felt unsafe as a result of sharing or doing something online?

- Definitely not
- Probably not
- Might or might not
- Probably yes
- Definitely yes

Share your comfort in navigating conflict online.

- Extremely uncomfortable
- Somewhat uncomfortable
- Neither comfortable nor uncomfortable
- Somewhat comfortable
- Extremely comfortable

In general, how do your peers treat each other online?

How often do you use social media?

- Never
- Once a week
- 2-3 times a week
- 4-6 times a week
- Daily

How often do you make new friends on social media?

- Never
- Once a week
- 2-3 times a week
- 4-6 times a week
- Daily

Everything you see on the internet is truth and real.

- Definitely not
- Probably not

- Might or might not
- Probably yes
- Definitely yes

Anything you do online can leave a permanent record.

- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

When using digital media, I understand that I have a digital footprint.

- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

What do you consider to be the biggest challenge with technology?

What factors impact your ability to be safe when engaging with others online?

What factors impact your ability to be respectful when engaging with others online?

Appendix B: Student Interview Protocol

Interview Protocol Form

First-Year Student One-on-One Interview

Interviewee:_____

Interviewer: Collis Robinson

Protocol

To facilitate my note taking, I would like to audio record our conversation today. Please sign the release form to allow me to record. I will also get your consent on recording of your consent. For your information, I will be the only one privy to the audio recording which will eventually be destroyed after I have transcribed the interview and my degree confirmed. The audio will be on a secure device that is password protected.

As the consent form reflects: (1) all qualitative information will be held confidential. (2) your participation is voluntary, and you may stop at any time if you feel uncomfortable, and (3) I do not intent to inflict any harm. (4) electronic data will be kept on password-protected and encrypted devices.

Introduction

I appreciate your time and you agreeing to be a part of my research. This interview is expected to last approximately one hour. You have been selected because you are classified as a first-year student at Berea College. My research project focuses on first-year students understanding of digital citizenship through the lens of safety, civility, and respect. This interview is a follow up to the survey that you took about your knowledge and understanding of digital citizenship. Before we start, I would like to share with you how digital citizenship is defined for the purposes of this study.

"Digital citizenship can be defined as the norms of appropriate, responsible behavior with regard to technology use." -- Mike Ribble.

Digital Citizenship classifies nine foundational elements in the following three guiding principles: Safe, Savvy and Social (or S3). The first guiding principal; Safety, focuses on protecting yourself and protecting others and creates the base of digital citizenship. The next is Savvy in which focuses on the concepts around educating yourself and connecting with others. These concepts build upon the concepts of Safety. The Social guiding principle commits to helping everyone make decisions exemplifying our commitment to respect ourselves and respect others.

Ribble, M. S. (2021). Digital citizenship in the frame of global change. *International Journal of Studies in Education and Science* (IJSES), 2(2), 74-86.

Interviewee Background Information

1. Before the survey what did you know about digital citizenship?
2. Had you ever been asked about digital citizenship?
3. Did you have regular access to technology prior to receiving your laptop computer?

Interview Questions

1. Have you taken any courses around digital citizenship? If so, explain the context (high school, elective, requirement)
2. Do you believe that digital citizenship is important? Why or why not?
3. Would you be open to taking a course related to digital citizenship at the college? Why or why not?
4. What can the college do to help first year students be better prepared to engage online safely?
5. What can the college do to help first year students engage in an informed way online?
6. What can the college do to help first year students be respectful when online?
7. Do you know others who have participated in unsafe behavior online?
8. How savvy are you when it comes to using online technology? Where did you learn your savviness from?
9. Did you ever share something online that later you felt was unsafe because of the replies or reactions to what you posted?
10. Some survey participants indicated that addressing conflict online makes them uncomfortable. What do you think contributes to the uncomfortableness? What is your response to conflict online?
11. In what ways would learning more about how to be safe, savvy, and respectful online make you a safer and stronger digital citizen?
12. Is there anything I didn't ask that you believe it is important for me to know about these issues?

Post Interview Comments: _____

Appendix C: Faculty/Staff Interview Protocol

Interview Protocol Form

Faculty/Staff One-on-One Interview

Interviewee:_____

Interviewer: Collis Robinson

Protocol

To facilitate my note taking, I would like to audio record our conversation today using an an app called Otter.ai. Please sign the release form to allow me to record. I will also get your consent on recording of your consent. For your information, I will be the only one privy to the audio recording which will eventually be destroyed after I have transcribed the interview and my degree confirmed. The audio will be on a secure device that is password protected.

As the consent form reflects: (1) all qualitative information will be held confidential. (2) your participation is voluntary, and you may stop at any time if you feel uncomfortable, and (3) I do not intent to inflict any harm. (4) electronic data will be kept on password-protected and encrypted devices.

Introduction

I appreciate your time and you agreeing to be a part of my research. This interview is slated to last no longer than one hour. You have been selected because you are classified as someone who engages with First-Year students through classes, work, or extracurricular activities. My research project focuses on first-year students understanding of digital citizenship through the lens of safety, civility, and respect. This interview is a follow up to the survey that you took about students understanding and knowledge of digital citizenship. Before we start, I would like to share with you how digital citizenship is defined for the purposes of this study.

"Digital citizenship can be defined as the norms of appropriate, responsible behavior with regard to technology use." -- Mike Ribble.

Digital Citizenship classifies nine foundational elements in the following three guiding principles: Safe, Savvy and Social (or S3). The first guiding principal; Safety, focuses on protecting yourself and protecting others and creates the base of digital citizenship. The next is Savvy in which focuses on the concepts around educating yourself and connecting with others. These concepts build upon the concepts of Safety. The Social guiding principle commits to helping everyone make decisions exemplifying our commitment to respect ourselves and respect others.

Ribble, M. S. (2021). Digital citizenship in the frame of global change. *International Journal of Studies in Education and Science* (IJSES), 2(2), 74-86.

Interviewee Background Information

1. Are you familiar with digital citizenship and is this an aspect of your role/job?
2. Has the college given you any formal training around digital citizenship?

Interview Questions

1. Have you had to discuss online safety with your students? If so, please share when.
2. Have you had to discuss savviness with your students as it relates to online technology?
3. Have you had to discuss respect with your students as it relates to online technology?
4. Do you think it is important for students to have technical and engagement skills when using technology? Explain.
5. Do you feel equipped to discuss safety with your students? Why or why not?
6. Do you feel equipped to discuss savviness with your students? Why or why not?
7. Do you feel equipped to discuss etiquette with your students? Why or why not?
8. What could the college do to support you in engaging students in the conversation about safety, savviness, and etiquette?
9. Do you think that training modules or a session for first year students on digital citizenship would be helpful?
10. Is there anything I didn't ask that you believe it is important for me to know about these issues?

Post Interview Comments: _____

COPYRIGHT AND FAIR USE

Copyright and Fair Use is an important topic to cover with students. Copyright gives credit to authors and creators of work. Author Karen Lagola shares the following in article titled ***A Teacher's Guide to Copyright and Fair Use***:

American copyright law originates in the U.S. Constitution and automatically protects all original, creative work in a fixed form; the moment a work is created, it is protected.

The copyright for works that are not part of these exceptions is invisible and active at all times, of course, so it can be helpful to think about it like this: In most contexts, works created by others have a "No trespassing" sign on them. If you simply ignored a "No trespassing" sign on land, you'd be in violation of the law, right?

Link to Article:
https://www.edutopia.org/article/teachers-guide-copyright-and-fair-use

Resources
WHERE CAN YOU LEARN MORE?

- Digital Citizenship
  - https://www.digitalcitizenship.net/nine-elements.html
- Making Digital Citizenship "Stick"
  - https://www.techlearning.com/resources/digital-citizenship-framework-updated
- Higher Education Institutions Need to Adopt Digital Citizenship Practices
  - https://www.fierceeducation.com/best-practices/higher-education-institutions-need-to-adopt-digital-citizenship-practices
- Measuring Fair Use: The Four Factors
  - https://fairuse.stanford.edu/overview/fair-use/four-factors/
- How to Teach Copyright and Fair Use to Students
  - https://www.edutopia.org/article/how-teach-copyright-and-fair-use-students/

This brochure was created by Collis Robinson in collaboration with other campus partners (Information, Systems & Services, Student Success & Transition, Student Life, and the Digital Humanities Librarian). If you have questions or would like to discuss further please reach out to robinsonc@berea.edu

BEREA COLLEGE

THE IMPORTANCE OF DIGITAL CITIZENSHIP

This brochure has been created to support faculty and staff in discussing digital citizenship with students. There are many aspects of digital citizenship and this guides gives some tips to help explore the topic.

OVERVIEW OF DIGITAL CITIZENSHIP

Digital citizenship is described as the norms of appropriate, responsible behavior with regard to technology use. The nine elements were identified as a way of understanding the complexity of digital citizenship and the issues of technology use, abuse, and misuse: these nine elements comprise digital citizenship. In this edition of *Digital Citizenship in Schools*, the nine elements are organized by the principles of respect, educate, and protect (REP).

As members of a digital society, it is our responsibility to provide all users the opportunity to work, interact, and use technology without interference, destruction, or obstruction by the actions of inappropriate users. Good digital citizens work to help create a society of users who help others learn how to use technology appropriately. Everyone should work together to identify the needs of technology users and provide opportunities to make them more efficient.

This is an excerpt from Mike Ribble's Digital Citizenship in Schools (Third Edition) ISTE Publications, Digital Citizenship in Schools, Third Edition by Mike Ribble, copyright 2015, ISBN No: 978-1564843647

ONLINE SAFETY & SECURITY

When working with students in the workplace or classes, take an opportunity to discuss with students how they can protect their personal information and online identity. This would include but not be limited to, creating strong passwords, avoiding phishing scams, reframing from oversharing.

ETHICAL ONLINE BEAHVIOR

Discuss with students how they can interact and engage with others online in an ethical and respectful manner. Online behavior and ethics can impact their future career opportunities. Share strategies with them about ways that you have found helpful in avoiding conflict online.

DIGITAL FOOTPRINT & REPUTATION

Share with students how their online activity can reflect on their reputation. Offer advice about how they can manage their digital footprint to establish a positive online presence. Have students brainstorm ways to be intentional about their character online.

MENTAL HEALTH & WELLNESS

Social Media and engaging online can have an impact on students' mental health. Share strategies with students on how they can create health habits and manage screen time. Be sure to share what works for you. This connects to time management and students being succesfful in and outside of the classroom.

DIGITAL LITERACY SKILLS

Digital Literacy skills are important and they help students become critical thinkers. Offer tips for how students might develop their digital literacy skills. For example, how do you evaluate online sources? Not everything on the internet is fact or real so exploring this with students will help them hone their digital literacy skills.

Appendix E: Student Survey for Evaluation Phase

Digital Citizenship Student Evaluation

Thank you for participating in this research study. To start, please answer the following demographic questions.

Select Your Classification

- ○ First-Year
- ○ Sophomore
- ○ Junior
- ○ Senior

What is your age?

- ○ 14-16
- ○ 17-19
- ○ 20-22
- ○ 23 or older
- ○ I prefer not to answer

Which of the following best describes your ethnicity and race? (Select all that apply)

- ☐ Hispanic/Latinx
- ☐ Black/African American
- ☐ Asian
- ☐ Native American/Alaska Native
- ☐ Native Hawaiian/Pacific Islander
- ☐ White
- ☐ Other (please specify)

☐ I prefer not to say

Please the information below in detail. The information below will help you answer the questions that follow.

"*Digital citizenship can be defined as the norms of appropriate, responsible behavior with regard to technology use.*" -- Mike Ribble.

Digital Citizenship classifies nine foundational elements in the following three guiding principles: **Safe, Savvy and Social (S3 Framework)**.

- The first guiding principal; **Safety,** focuses on protecting yourself and protecting others and creates the base of digital citizenship.
  - **Essential Q1:** Do you know how to keep yourself safe online regarding cyberbullying, online harrassment, and personal infromation protection?
  - **Essential Q2:** Are you aware of strategies for staying safe online, including managing passwords, avoiding phising scams, and avoiding oversharing personal infromation?
- As you work through the questions think of safety as your ability and awareness to stay safe online in the ways metioned above.

- The next is **Savvy** in which focuses on the concepts around educating yourself and connecting with others. These concepts build upon the concepts of Safety.
  - **Essential Q1:** Do you understand and know about computer secruity threats, including malware, virsuses, and hacking?
  - **Essential Q2:** Are you aware of strategies to keep your computer and online accounts secure and how to avoid risky websites and attachments?
  - **Essential Q3:** Do you know strategies to verify the validity of what you read and watch online?
- Think of savviness as your skills and awareness to navigate what you access online to educate yourself and connect others.

- The **Social** guiding principle commits to helping everyone make decisions exemplifying our commitment to respect ourselves and respect others.
  - Essential Q1: Are you knowledge about ways to create cooperative and interdependent relationships with others in the digital world?
  - Essential Q2: What does digital etiquette mean and how can you use that to engage with others online?
  - Essential Q3: How do you consider other's perspectives and be mindful of thier feelings when using digital technology?
- Think of the social guiding principle as knowledge and awareness about how to use your social engagement in positive ways that reflects respect to yourself and others.

As you answer the questions feel free to return back to this page to review the terms and examples.

Reference

Ribble, M. S. (2021). Digital citizenship in the frame of global change. International Journal of Studies in Education and Science (IJSES), 2(2), 74-86.

Which of the following best describes the concept of digital citizenship?

- The ability to use digital tools and technologies to communicate and access information.
- The responsible and appropriate use of technology to support community and civic engagement.
- The understanding and practice of ethical behavior online.
- The protection of personal information and privacy in the digital world.

Based on the information on the previous page, read each of statements and share if you agree or disagree. You may return to the previous page if you need to review any of the information as you answer the questions.

I feel confident in my ability to be safe online.

- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

I feel confident in my ability to be savvy online.

- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

I feel confident in my ability to engage socially in a respectable way online.

- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

I know what steps to take to prevent me from becoming victim to online scams and personal information theft.

- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

I know how to identify cyberbullying and I am aware of what steps should be taken.

- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

I know how to search for resources online in a savvy way.

- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

I fully understand digital citizenship and know how to apply it in my everyday life to be a responsible digital citizen.

- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

Online modules on digital citizenship will help me be a better digital citizen.

- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

Share an example where you had to apply your knowledge around being safe online. Be as specific as possible.

Share an example where you had to apply your knowledge around being savvy online. Be as specific as possible.

Share an example where you had to apply your knowledge around being respectful to engage with others online. Be as specific as possible.

Do you think learning more about safety, savviness, and social engagement will make you a better digital citizen? Share why or why not.

Would earning a certification or badge in digital citizenship inspire you to want to learn more about the topic? Share why or why not.

What advice would you share with College leaders who are implementing digital citizenship modules around safety, savviness, and social engagement online for first year students?

Anything additional you would like to share around digital citizenship?

Appendix F – Faculty/Staff Survey for Evaluation Phase

Modules Evaluation Faculty/Staff

Select Your Role

- ○ Faculty
- ○ Staff

Are you a labor supervisor currently?

- ○ No
- ○ Yes

How many years have you worked for the college?

- ○ 0-1 year
- ○ 2-5 years
- ○ 6-10 years
- ○ 11-15 years
- ○ 16 + years

How effectively do the modules incorporate the S3 Framework (Safety, Savvy, Social)?

- ○ Not effective at all
- ○ Slightly effective
- ○ Moderately effective
- ○ Very effective
- ○ Extremely effective

Did the modules provide actionable steps for how to stay safe online? If so, please describe what you found helpful or informative.

- Definitely not
- Probably not
- Might or might not
- Probably yes
- Definitely yes

To what extent did the modules effectively cover topics related to online safety (e.g., cybersecurity, privacy, online harassment, etc.)?

- Not effective at all
- Slightly effective
- Moderately effective
- Very effective
- Extremely effective

Do you think the online modules on digital citizenship can help someone learn more about the topic?

- Definitely will not
- Probably will not
- Might or might not
- Probably will
- Definitely will

Read each statement below and share if you agree or disagree with it.

The structure of the online modules on digital citizenship effectively facilitates learning.

- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
-

Somewhat agree

- Strongly agree

The online modules on digital citizenship provide relevant and up-to-date information.

- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

The online modules on digital citizenship address the needs of different types of learners.

- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

The online modules are paced and sequenced in a way that facilitates student learning.

- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

How effective do you perceive the assessment methods used in the online modules on digital citizenship to be in measuring student learning?

- Not effective at all
- Slightly effective

- Moderately effective
- Very effective
- Extremely effective

After reviewing the modules, have you considered modifying your instruction to incorporate the digital citizenship concepts covered?

After reviewing the modules, have you considered modifying your work place practices or topics you cover with your labor students?

In what ways do you anticipate the digital citizenship modules impacting your teaching practices or approach to technology in the classroom?

What improvements or changes would you suggest for future iterations of the online modules?

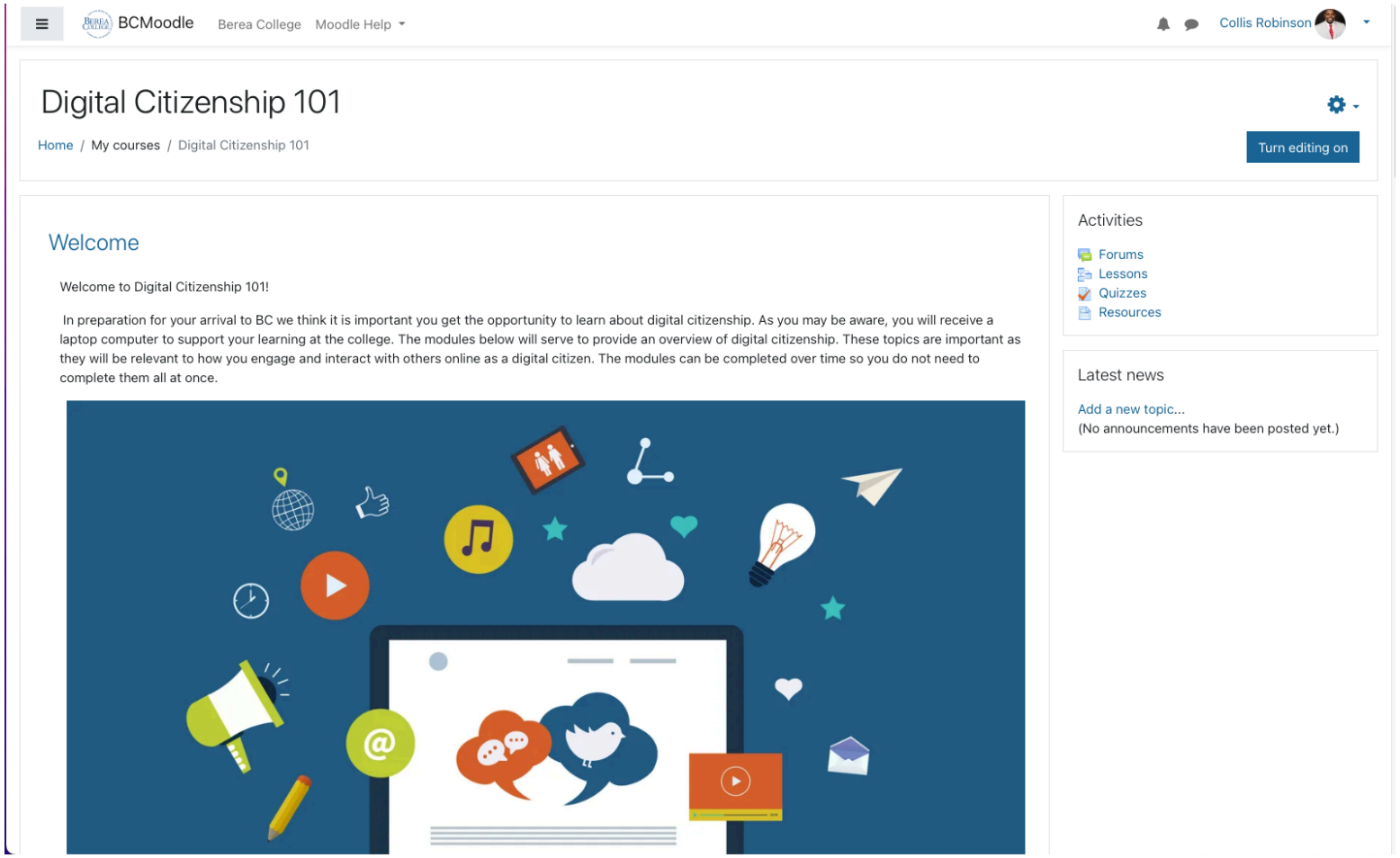
What do you perceive as the biggest challenges to successfully implementing the digital citizenship modules?

What additional support or resources do you think will be needed to help prepare students to engage with the modules?

Please share your feedback about the digital citizenship guide here.

Anything additional you would like to share as the modules are considered?

Appendix G: Snapshot of Modules in Moodle



Announcements

Student Moodle Video Guide

Student Quick Start (Moodle 3.11 Guide)

Introduction to Digital Citizenship

Steps to Complete the Introduction to Digital Citizenship

1. **Watch the video:** Digital Citizenship | Things Explained
2. **Read the Article:** Understanding Digital Citizenship
3. **Read about the S3 Framework:** S3 Framework (Safe, Savvy and Social)
4. **Take the Quiz titled:** Quiz 1: Digital Citizenship

Once you complete the introduction you should move on to Module 1: Safety Online.

Digital Citizenship | Things Explained

View

"Digital Citizenship | Things Explained." *YouTube*, YouTube, 30 July 2021,

Understanding Digital Citizenship

View

This PDF is an excerpt from Mike Ribble's Digital Citizenship in Schools (Third Edition)

ISTE Publications, **Digital Citizenship in Schools, Third Edition** by Mike Ribble, copyright 2015, ISBN No: 978-1564843647

S3 Framework (Safe, Savvy and Social)

View

Quiz 1: Digital Citizenship

Mark as done

Module 1: Safety Online

This module highlights common online safety concerns such as cyberbullying, online harassment, and personal information protection, and provides strategies for staying safe online, including managing passwords, avoiding phishing scams, and avoiding oversharing personal information like residence hall or room numbers.

Steps to Complete this Module

1. **Complete** Module 1 Lesson: Safety Online
2. **Next** Module 1: Take Action
3. **Lastly, Complete the** Quiz 2: Online Safety

Once you complete Module 1 you should move on to Module 2: Savviness and Security

Module 1 Lesson: Safety Online

View Go through the activity to the end

Module 1: TAKE ACTION

View

The final part of this module is for you to consider ways for you to take action. What will you do with the learning that you have obtained through the

Module 2: Savviness and Security

Module 2 focuses on understanding computer security threats, including malware, viruses, and hacking. Additionally, there are strategies for keeping your computer and online accounts secure, including using anti-virus software, avoiding risky websites and attachments, and protecting your passwords.

Steps to Complete this Module

1. **Complete Module 2 Lesson: Savviness and Security Overview**
2. **Next Module 2: Take Action**
3. **Lastly, Complete Quiz 3: Savviness and Security**

Once you complete Module 2 you should move on to Module 3: Social Engagement & Society

Module 2 Lesson: Savviness and Security Overview
View | Go through the activity to the end

Module 2: TAKE ACTION
View

Quiz 3: Savviness and Security
Mark as done

Module 3: Social Engagement and Society

In this module, you will learn about the importance of respecting yourself as a digital citizen, and how to create cooperative and interdependent relationships with others in the digital world. The focus will be on developing an understanding of digital etiquette, which refers to the electronic standards of conduct one must follow when using digital devices. This module will emphasize the significance of considering others' perspectives and being mindful of their feelings when using digital technology. By the end of this module, you will have a clear understanding of how to be a responsible digital citizen, and you will be equipped with the knowledge and skills to navigate the digital world with respect and understanding of others.

Steps to Complete this Module

1. **Complete Module 3 Lesson: Social Engagement and Society**
2. **Next Module 3: Take Action**
3. **Lastly, Complete the Quiz 4: Social Engagement and Society**

Module 3 Lesson: Social Engagement and Society
View | Go through the activity to the end

Module 3: TAKE ACTION
View

Quiz 4: Social Engagement and Society
Mark as done

Appendix H: Student email solicitating participation

Dear John Doe,

I am writing to request your help completing a digital citizenship survey. You are part of a random sample of Berea College students who have been chosen to complete a brief questionnaire about your understanding of digital citizenship. I am specifically interested in identifying ways the college can support students learning around the topic.

The questionnaire is short, only 13 questions, and should take about 15 minutes to complete. To begin the survey, click here.

The survey is anonymous. Your participation is voluntary, and if you come to a question that you would prefer not to answer, please skip it and move on to the next question. If you have any questions about this research, its procedures, risks, and benefits, contact the Principal Investigator (Collis Robinson, robinsonc@berea.edu, 859-985-3709). If you have any concerns or complaints about the research or your rights as a participant, please contact the Administrative Assistant to the Berea College Institutional Review Board (IRB), Jim Strand, at (859) 985-3486 or email at strandj@berea.edu.

Thank you for your help!

Sincerely,

Collis Robinson

Institutional Review Board (IRB)/Independent Ethics Committee (IEC) Authorization Agreement

Name of Institution or Organization Providing IRB Review (Institution/Organization A):
University of Kentucky
IRB Registration #: IRB00004367 U Kentucky IRB #5

Federalwide Assurance (FWA) #, if any: FWA00005295

Name of Institution Relying on the Designated IRB (Institution B):
Berea College
FWA #: FWA00003332

The Officials signing below agree that _____ may rely on the designated IRB for review and continuing oversight of its human subjects research described below:
(*check one*)

(___) This agreement applies to all human subjects research covered by Institution B's FWA.

(_X_) This agreement is limited to the following specific protocol(s):

Name of Research Project: "RELIANCE: Understanding First-Year Undergraduate Student Safety, Savvy and Social Etiquette Online" UKY IRB# 83087
Name of Principal Investigator: Dr. Collis Robinson

Sponsor or Funding Agency: _____ Award Number, if any: _____

(___) Other (*describe*):_____

The review performed by the designated IRB will meet the human subject protection requirements of Institution B's OHRP-approved FWA. The IRB at Institution/Organization A will follow written procedures for reporting its findings and actions to appropriate officials at Institution B. Relevant minutes of IRB meetings will be made available to Institution B upon request. Institution B remains responsible for ensuring compliance with the IRB's determinations and with the Terms of its OHRP-approved FWA. This document must be kept on file by both parties and provided to OHRP upon request.

Signature of Signatory Official (Institution/Organization A):

_____ Date: _____

Print Full Name: Lisa A. Cassis, Ph.D. Institutional Title: Vice President for Research

Signature of Signatory Official (Institution B):

Scott Steele Date: 11/15/2022

Print Full Name: Scott Steele Institutional Title: Provost

Institutional Review Board (IRB)/Independent Ethics Committee (IEC) Authorization Agreement

Name of Institution or Organization Providing IRB Review (Institution/Organization A):
University of Kentucky
IRB Registration #: IRB00004367 U Kentucky IRB #5

Federalwide Assurance (FWA) #, if any: FWA00005295

Name of Institution Relying on the Designated IRB (Institution B):
Berea College
FWA #: FWA00003332

The Officials signing below agree that _____ may rely on the designated IRB for review and continuing oversight of its human subjects research described below:
(*check one*)

(___) This agreement applies to all human subjects research covered by Institution B's FWA.

(_X_) This agreement is limited to the following specific protocol(s):

Name of Research Project: "RELIANCE: Understanding First-Year Undergraduate Student Safety, Savvy and Social Etiquette Online" UKY IRB# 83087
Name of Principal Investigator: Dr. Collis Robinson

Sponsor or Funding Agency: _____ Award Number, if any: _____

(___) Other (*describe*):_____

The review performed by the designated IRB will meet the human subject protection requirements of Institution B's OHRP-approved FWA. The IRB at Institution/Organization A will follow written procedures for reporting its findings and actions to appropriate officials at Institution B. Relevant minutes of IRB meetings will be made available to Institution B upon request. Institution B remains responsible for ensuring compliance with the IRB's determinations and with the Terms of its OHRP-approved FWA. This document must be kept on file by both parties and provided to OHRP upon request.

Signature of Signatory Official (Institution/Organization A):

_____ Date: _____

Print Full Name: Lisa A. Cassis, Ph.D. Institutional Title: Vice President for Research

Signature of Signatory Official (Institution B):

Scott Steele Date: 11/15/2022

Print Full Name: Scott Steele Institutional Title: Provost

Appendix J: Informed Consent to Participate in Study

Consent to Participate in Research

Project Title: Understanding First-Year Undergraduate Students Safety, Savvy, and Social Etiquette Online

DESCRIPTION: You are invited to participate in **a** research study on First-Year Undergraduate Students safety, savvy, and social etiquette online. I am asking you because you are currently a first-year students or a faculty/staff member that work with first-year students at Berea College. The purpose of this study is to create safe and respectable citizens among first-year undergraduate students at Berea College to support their appropriate interaction and engagement within digital communities. By doing this study, I hope to understand first-year students at Berea College knowledge about digital citizenship. You will be asked to complete a survey and a one-on-one interview about the research topic. Surveys and transcripts will be utilized for research and stored securely.

TIME INVOLVEMENT: Your participation will take approximately 30 minutes to complete a Qualtrics survey. An additional hour if you decide to take part in the one-on-one interview.

RISKS AND BENEFITS: The risks associated with this study are no more than minimal risk in everyday life. Students, staff, nor faculty will not get any personal benefit from taking part in this study. I cannot and do not guarantee or promise that students, staff, or faculty will receive any benefits from this study. Participants may gain a better understanding about digital citizenship, along with strategies to engage safely online. Student who decides not to take part in this study, will have no effect on academic status or class grade(s).

INCENTIVES: You will receive *no* incentive for your participation.

PROTECTION OF PARTICIPANT'S DATA: The following procedures are designed to protect your data from unauthorized access or inappropriate use. Your responses to the survey are completely anonymous. No personal identifying information or IP addresses will be collected. Quantitative and qualitative results will be shared with campus stakeholders to help create and support an intervention for students' safe use of technology and etiquette online. The qualitative interview data collected will be kept confidential. The investigator will safely keep all files and data collected in a secured locked cabinet in the principal investigator's office. Electronic data will be kept on password-protected and encrypted devices (Berea College – provided laptop). I will store audio recordings and any electronic or printed transcripts in encrypted files in a secure location for five years after the publication of this research, after which, all files will be destroyed.

PROTECTION FOR AUDIO RECORDING: To transcribe, automated software (otter.ai) will be utilized in the one-on-one interviews. The Principal Investigator (Collis Robinson) will be the only one privy to the recording. Audio will be recorded via the otter app and saved in the otter account that is password protected. Additionally, the app is stored on a password-protected device. The recording will be stored in the app and password protected until degree confirmation. At that time, the audio recording will be destroyed. If a participant decides to decline participation at any time, the audio recording will be deleted an not used in the research study.

PARTICIPANT'S RIGHTS: If you have read this form and have decided to participate in this project, please understand your **participation is voluntary** and you have the **right to withdraw your consent or discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled**. **The alternative is not to participate.** You have the right to refuse to answer particular questions. The results of this research study may be presented at scientific or professional meetings or published in scientific journals. Your individual privacy will be maintained in all published and written data resulting from the study.

CONTACT INFORMATION:
Questions: If you have any questions, concerns or complaints about this research, its procedures, risks and benefits, contact the Principal Investigator, (Collis Robinson, robinsonc@berea.edu, 859-985-3709).

Independent Contact: If you are not satisfied with how this study is being conducted, or if you have any concerns, complaints, or general questions about the research or your rights as a participant, please contact the Administrative Assistant to the Berea College Institutional Review Board (IRB), Jim Strand, at (859) 985-3486 or email at strandj@berea.edu.

Please indicate with your signature on the space below that you understand your rights and agree to participate in the experiment. You will be given a copy of this form to keep.

YOUR SIGNATURE BELOW INDICATES THAT, HAVING READ THE INFORMATION PROVIDED ABOVE, YOU ARE FREELY DECIDING TO PARTICIPATE IN THE RESEARCH PROJECT DESCRIBED IN THIS DOCUMENT.

_____ _____
Printed name of participant Date

_____ _____
Signature of participant Date

The extra copy of this signed and dated consent form is for you to keep.

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VITA

Collis R. Robinson

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MASTER OF ARTS — December 2016
M.A. in Education Technology
Teacher Leader w/Instructional Computer Technology Endorsement (P-12) Georgetown College, Georgetown, Kentucky

BACHELOR OF ARTS — December 2013
B.A. in Education Studies
Elementary Education with Certification in P-5
Berea College, Berea, Kentucky

PROFESSIONAL EXPERIENCE

BEREA COLLEGE

Dean of Student Labor	May 2022 – present
Associate Dean of Student Life	November 2019 – May 2022
Director of Student Labor	March 2018 – October 2019
Adjunct Instructor	Spring 2018 and Spring 2019
Training and Learning Assessment Analyst	October 2016 – February 2018
Systems Administrator	July 2016 – September 2016

MONTGOMERY COUNTY BOARD OF EDUCATION

Elementary School Teacher	January 2014 – June 2016