Digital Citizenship Education in Elementary Schools Using Common Sense Media Certified Curriculum

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DEDICATION

To my husband:
I could not have completed this without your unwavering love and support.
You are my rock.

To my parents & family:
You have always inspired me to work hard and reach for the stars.
I admire you more than you can ever know.

To my battle buddy, Megan:
You have kept me sane!
Cheers!

To Cohort 27:
Each of you has made a profound impact on me personally and professionally.
I consider it truly an honor to count you among my peers and friends.

Finally, to my baby girl:
I hope nothing in your long, happy life is ever as difficult as this damn paper.
ABSTRACT

This research was conducted to determine the efficacy of Common Sense Media as the sole form of digital citizenship curriculum in an elementary school. Due to the rapid progression of technological devices and their constant use in classrooms and everyday life, this field of study has become increasingly important for today’s students beginning even before kindergarten.

Data was collected in the form of surveys targeting four subgroups: students, parents, teachers and building administrators. Individual surveys measured each group’s perception of the curriculum and its degree of success in the separate content areas covered by Common Sense Media. In addition, targeted questions collected information regarding student mastery, parent and teacher supervision habits, technology usage trends, and relevant demographics.

Results of the assessments indicate that Common Sense Media’s Digital Citizenship Curriculum is an effective tool for educating students in regard to media literacy and technology etiquette as very high percentages of students in each grade level achieved proficiency in each subtopic tested. However, a significant gap is evident in the perceived mastery of students. The Administration and collective student body over-estimate the proficiency in each of the topics covered in the curriculum. Teachers and parents generally under-estimate student ability. Taking into account the limitations of this study, it is my professional opinion that the Common Sense Media Digital Citizenship is only somewhat effective as a sole form of digital citizenship education for students in second through fifth grade.
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CHAPTER ONE
INTRODUCTION

When public education was first deployed to the masses, subjects were limited to basic essentials like literacy, writing skills, and basic mathematics. These subjects were dictated by the needs of society; those joining the workforce needed to possess those skills, at bare minimum, in order to be successful and functioning members of the current society. As society has evolved, so has its needs and demands of future generations.

In today’s education world, subjects are dictated by the beliefs that students need to have a broader understanding of many subjects in addition to the mastery of those same core subjects of years prior. Throughout high school and higher education, students experience many electives before narrowing their educational focus to courses specified for a specific job market or skill set. However, in recent years, the core subjects are evolving to meet the needs of a society that is becoming increasingly more technology dependent.

Naturally, as technology became more accessible, portable, and affordable, devices became more prevalent in businesses, homes, and eventually schools. The technology available today for student use provides students the ability to instantly access information and communicate with people all over the world through multiple mediums. Though districts attempt to regulate and censor sites and applications, such boundaries might not exist at home, and certainly do not exist in the world outside education. There is a clear need for students of all ages,
especially those impressionable students in elementary school, to understand ethical use of such a resource and the impact their digital footprint can have on not only their own lives, but the lives of everyone else.

PRESENTATION OF THE PROBLEM

The launch of the Russian satellite Sputnik in the midst of the Cold War sent the United States Government into a panic, resulting in an unforeseeable series of events that would revolutionize modern technology in addition to contemporary education. Schools began offering subjects like chemistry, physics, and calculus in anticipation of demands to fill positions in new government formed agencies such as the National Aeronautics and Space Administration (NASA) and the Department of Defense’s Advanced Research Projects Agency (ARPA). Many scientist and military officials feared a Soviet attack on lines of communication, which at the time consisted of telephones. In response to the perceived threat, a scientist from M.I.T and ARPA, J.C.R. Licklider, proposed a solution in 1962: a ‘galactic network’ of computers that would have the ability to communicate with each other (History Channel 2017). By the end of the 1980s this network would undergo many developments and evolve into what is now known as the Internet. By this time the International Society for Technology in Education (ISTE) was in full swing.

Gradually, technology grew to be more affordable and the Internet more accessible to the common man. By the time the first iPhone was released in 2007, cell phones had already revolutionized portable communication, but smart devices
were beginning to revolutionize methods to access information instantly, at all times. Educators, recognizing the benefits to such instant access began pushing for devices in school, providing students with all the benefits of the World Wide Web. Unfortunately, with great power, comes great responsibility and not all schools or teachers were prepared for future developments like social media, which again radically transformed how people interact with one another. As students gained access to informational databases, they also became vulnerable to a host of web-related troubles. Many educators, already feeling stress to meet impossible core content deadlines, neglect to address digital citizenship, exposing students as easy targets for cyber-bullying, sexual predators, identity theft and more.

The past 5-10 years has seen a dramatic increase in the advocating of digital citizenship education with companies like Common Sense Media at the forefront. This non-for-profit organization offers free resources to schools, teachers, and parents on topics ranging from developing safe passwords to addressing sexting with teens. Additionally, they offer a digital citizenship curriculum for grades K through 12, hoping to educate each new generation of digital natives on proper web-etiquette and safety. The question becomes: is it enough?

HISTORY OF PROBLEM

Among the top seven most in-demand jobs of 2017 are web developers, computer systems analysts and software or applications engineers. "More and
more candidates working within STEM fields, specifically IT, will be highly sought
after as more complex issues related to cyber risk and business compliance
continue to arise,' says Bob Dickey of Randstad’s technology and engineering
group’ (Forbes 2017). In order to provide students with the skills for an evolving
job market, many districts have invested in providing a plethora of technology
devices distributed amongst teachers and throughout buildings for student use.

Over the course of the past ten years, Franklin Howard School District has
begun to place increasingly more focus on technology integration, mainly on
providing a 21st Century learning environment for students to acquire the skills
needed to function in a tech-centric society and job market. This focus was housed
and operated out of each individual school’s learning commons, or library. Para-
professional educators were hired to assist specifically in the deployment of 21st
century skills education, yet no set curriculum was supplied or agreed upon.

As of 2015, budget cuts forced schools, and the district, to reevaluate
positions resulting in 21C paras no longer being funded and progress towards 21st
Century initiatives being stalled. With no curriculum provided or agreed upon,
responsibility for developing and teaching technology skills and digital citizenship
fell upon librarians. Throughout the district, the methods used to teach these skills
varies wildly. Librarians have total control over the curriculum. There is no unified
curriculum nor system to monitor the effectiveness of programs utilized in each
building.
CURRENT STATUS OF THE PROBLEM

David Broom Elementary School within Franklin Howard is currently the only school in the district to obtain certification through Common Sense Media. Now operating a 1:1 device to student ratio in grades 2 through 5, students begin their digital citizenship education in 2\textsuperscript{nd} grade, completing one unit of 5 lessons each year. Units cover the following topics:

- Self-image and identity
- Relationships and communication
- Digital Footprint and reputation
- Cyberbullying and digital drama
- Information Literacy
- Internet Safety
- Privacy and Security
- Creative Credit and Copyright

Though recorded discipline incidents involving technology has decreased slightly since beginning the Common Sense Curriculum, there is still dramatic room for improvement. In terms of content covered, the assessments provided by Common Sense Curriculum give limited insight into the effectiveness of the program.

Neighboring districts to Franklin Howard, Parkwood and Rockview, both utilize resources provided by Common Sense Media as part of a larger adopted district-wide curriculum. Furthermore, Common Sense Media’s Curriculum has not changed since it was first published in 2012. As technology increases and adapts
constantly, so should the tools we use to educate students to prepare them for situations they encounter online. Current events and popular social issues are not discussed in the curriculum, highlighting a key area that is neglected in elementary digital citizenship and information literacy.

**RESEARCH QUESTION**

Does the current Common Sense Media Curriculum provide an adequate digital citizenship education to students in elementary school?

**DEFINITIONS**

**21st Century Skills**: generally used to refer to certain core competencies such as collaboration, digital literacy, critical thinking, and problem-solving that advocates believe schools need to teach to help students thrive in today's world

**Algorithm**: a procedure used to locate specific data within a collection of information

**Analog**: existing off-line, or in the physical world

**Bot**: an automated online program; short for *web robot*

**CIPA**: Children's Internet Protection Act that requires K-12 schools and libraries in the United States to use Internet filters, among other measures, to protect students from harmful online content as a condition of federal funding

**Clickbait**: online content created with the primary purpose of attracting visitors and enticing them to click on a link to a specific web page
**Common Sense Media:** San Francisco-based non-profit organization that provides education and advocacy to families to promote safe technology and media for children

**Computational propaganda:** the manipulation of information and communication technologies to influence attitudes, thinking processes and behavior

**Computer Microminiaturization:** the evolution of electronic devices as they become smaller, faster, and more efficient

**Confirmation bias:** the tendency to process new information as confirmation of the beliefs one already holds

**Counterknowledge:** inaccurate information that is presented as fact and is believed by a critical mass of people

**Digital:** existing online

**Digital Age:** period in human history characterized by the shift from traditional industry that the Industrial Revolution brought through industrialization, to an economy based on information computerization

**Digital Citizenship:** the norms of appropriate, responsible behavior with regard to technology use according to nine principles: access, commerce, communication, literacy, etiquette, law, rights and responsibilities, health and wellness, and security or self-protection

**Digital Footprint:** the information about a person that can be found online as a result of their internet activity
**Digital Literacy:** the set of competencies required for full participation in a knowledge society. It includes knowledge, skills, and behaviors involving the effective use of digital devices such as smartphones, tablets, laptops and desktop PCs for purposes of communication, expression, collaboration and advocacy

**Digital Native:** a person born or raised during the digital age and who is thus familiar with the internet, computers and other digital technology from an early age

**Digital Revolution:** the advancement of technology from analog, electronic, and mechanical devices to digital technology available today, sometimes called the Third Industrial Revolution

**Disinformation:** false information that is disseminated to the media or other entities with the purpose of deceiving

**Dox:** to publicly share private or identifying information about a person online, usually with a malicious or vengeful purpose

**E-Rate Compliance:** a program that makes certain communications services and products more affordable for eligible schools and libraries

**Fake news:** disinformation that is presented as news and optimized for online sharing

**Filter bubble:** the limited perspective that can result from personalized search algorithms

**Group polarization:** a group’s tendency to make more extreme decisions than its individual members would typically be inclined to make
**Groupthink:** a group’s practice of thinking or making decisions in such a way that promotes harmony and conformity within the group at the expense of creativity or individual responsibility

**Information Age:** also referred to as the Digital Age

**Information diet:** the kinds and quantity of information that a person consumes on a regular basis

**Information literacy:** the ability to recognize the need for information and to locate, analyze, and use it effectively in various ways

**Information pollution:** the tainting of available information with inaccuracy, redundancy and lack of quality

**Knowledge Economy:** the use of knowledge to generate tangible and intangible values

**Native advertising:** online advertising that fluidly adheres to the look and feel of the context or platform in which it is placed

**SMART technology:** Self-Monitoring, Analysis and Reporting Technology; often written as SMART, is a monitoring system included in computer hard disk drives (HDDs) and solid-state drives (SSDs) that detects and reports on various indicators of drive reliability, with the intent of enabling the anticipation of hardware failures

**Social media:** websites and applications that enable users to create and share content or to participate in social networking
Social networking: the use of dedicated websites and applications to interact with other users, or to find people with similar interests to oneself

Social spam: unwanted material that shows up on social networking platforms and any website with content generated by users

Stealth marketing: the practice of paying people to promote products without revealing that those people are being compensated

Technology Integration: the use of technology tools in general content areas in education in order to allow students to apply computer and technology skills to learning and problem-solving. Generally speaking, the curriculum drives the use of technology and not vice versa

Troll: a person who engages in provocative or harassing online behavior using their real identity

SUMMARY

Technology continues to advance at a constant rate, and along with it, the need for an effective, research-based curriculum that educates students with the skills they need to adapt in a digital society. Mastery of digital citizenship concepts will allow students to stay in online communities while information literacy skills will give them the tools to think critically about the information presented both on and off-line, allowing them to form educated opinions based on facts rather than misinformation. David Broom Elementary School has already taken measures to provide such education to their students through the application of curriculum provided by Common Sense Media. Chapter two will investigate both the need to
implement digital citizenship curriculums as well as the most effective applications of such programs. This study seeks to better define the depths to which digital citizenship and information literacy units should delve, as well as justify the need for a district-wide unified curriculum in this content area.
CHAPTER TWO

INTRODUCTION

Between the late 1950s and the late 1970s, society shifted from mechanical and analogue technology to digital technology, sparking what is now referred to as the Digital Revolution, which in turn paved the way for the Information Age in which we now live. In the 2001 article *Digital Natives, Digital Immigrants*, author and educational speaker, Marc Prensky, coined the term ‘digital native’ to refer to children born after the 1980s when technology was beginning to integrate more easily into schools, homes, and businesses. “Our students today are all ‘native speakers’ of the digital language of computers, video games, and the Internet” (Prensky, 2001). Those born prior were referred to as ‘digital immigrants’ (Prensky, 2001).

Exploring the divide between the two factions, Prensky notes that, “Education is the single largest problem facing the digital world as our digital immigrant instructors, who speak an outdated language (that of the pre-digital age), are struggling to teach a population that speaks an entirely new language” (Prensky, 2001). Even now as newer generations of teachers enter the workforce, there may still exist ‘language barriers’ due to the rapid rate at which technology has advanced over even the last five years and though they may be digital natives, their education was by digital immigrants delivered through what are now outdated methods.
Recognizing the role that technology plays in our everyday lives is crucial for educators, parents, and policy makers. In order to prepare students adequately for their futures, it is not enough to merely supply access to devices and the Internet. We must also strive to provide students with the more abstract critical thinking skills that it takes to remain safe and responsible while operating said devices or simply maintaining an online presence. By referencing experts in the fields of information technology and pedagogy, this paper will justify the importance of digital citizenship education in schools and seek to evaluate the curriculum offered through Common Sense Media by examining the term ‘digital citizen’ as well as the parameters of a successful digital citizenship curriculum.

HISTORY AND CURRENT STATUS

For many years, schools have incorporated various forms of character education, seeking to impress upon students the importance of specific traits believed to make them better people based on a shared set of virtues, or values. It is thought that integrating such non-traditional subjects into curriculum are vital to the success of students, due to the sheer number of hours spent in school settings in comparison to at home. With the development of technology and the infiltration of devices into buildings, the conversation has only just begun exploring the need for character education to include aspects from both digital (on-line) and analog (off-line) points of view.

Though technology has existed for much longer and made its way into schools much earlier, only in the past five to ten years have professionals started
looking at the effect these societal shifts have made on current generations and the consequences that they might have on the future of education. Starting in 2011, Common Sense Media began taking a census looking at the number of devices different age groups, accessibility of high speed internet connections among different income levels, screen time spent across different devices, and much more. What they found, was that in relatively short amounts of time, access to technology as well as screen time increased dramatically. Furthermore, gaps closed between some sub-groups while growing between others (See Figure 2.1).

Figure 2.1
(The Common Sense Census, 2017).

Note: Lower income is less than $30,000 a year and higher income is more than $75,000 a year. Middle income group is left off for clarity.
In 2011, 63% of families with kids between the ages of zero and eight owned smartphones. By 2013, that number jumped to 95%. Between 2013 and 2017, the amount of time this same age group spent on smart phones, tablets and other mobile technology tripled from a mere fifteen minutes to 48 minutes each day (The Common Sense Census, 2017). Of this screen time, “Children spend an average of 17 minutes a day watching online videos from sources such as YouTube…families with young children are now more likely to have subscription video service such as Netflix or Hulu (72%) than they are to have cable TV (65%)” (The Common Sense Census, 2017) (See figure 2.2 and 2.3).

Figure 2.2 (The Common Sense Census, 2017).
When it comes to high-speed internet access at home, the gap between income levels has closed significantly. In 2011 only 42% of lower-income families were able to afford access to high-speed internet. Today, that number has increased to 74% in 2017, while remaining in the high 90’s for families with higher-incomes. “The digital divide still exists, but is much smaller than it used to be: Today there is a 25-percentage point gap in home computer access and a 22-percentage point gap in high-speed internet access at home between children in lower and higher-income households (72 percent vs. 97 percent for a home computer and 74 percent vs. 96 percent for high speed internet)” (The Common Sense Census, 2017) (See figure 2.1).
Clearly the influence of technology is ever-present in our lives and the lives of our students. As accessibility continues to increase and gaps close, it is important that parents, policy makers, school administrators and other officials recognize the role they play in the development of students where technology is concerned. Common Sense Media founder and CEO, James P. Steyer is leading a campaign to encourage lawmakers to promote digital citizenship in schools using the state of Washington as a model. Earlier in 2016, Washington Governor Jay Inslee “signed into law a measure requiring the office of the state superintendent of public instruction to convene a statewide advisory committee that will devise best practices and recommendations for instruction in digital citizenship, internet safety, and media literacy” (Benjamin, 2016).

Though Washington is working toward a more defined and unified vision of what digital education looks like, across the United States, there is little to no consensus about the appropriate measures of digital education and implementation. According to the Federal Communications Commission, “the federal Children’s Internet Protection Act requires schools receiving federal E-rate discounts to adopt an internet-safety policy, block or filter obscene content, and provide for educating minors about appropriate online behavior, including interacting with other individuals on social-networking websites and in chat rooms, and cyberbullying awareness and response” (Benjamin, 2016). However, today, individual states are responsible for devising their own standards and plans for digital citizenship and technology education. Though most will cite ISTE as the
basis for standards, the implementation still varies wildly between states and even between districts as open-ended standards leave much room for personal interpretation.

On a national level, several states have passed and enacted legislation for the benefit of students’ digital lives:

“Washington: A 2016 law provided for a process by which students, parents or guardians, teachers, librarians other school employees, administrators, and community representatives may engage in an ongoing discussion on safe technology use, internet use, digital citizenship, and media literacy. A 2015 law modified the duties of teacher-librarians to include instruction in digital citizenship.

Utah: A 2015 law required school community councils to provide for education and awareness on safe technology utilization and digital citizenship. The aim was to empower students to make smart media and online choices and help parents and guardians learn and discuss safe technology use with their children.

Florida: A 2014 law required public schools to provide K-12 students with opportunities for learning computer science also permitted elementary and middle schools to establish digital classrooms to improve digital literacy and skills, such as coding.

Maine: A 2011 law required the state commissioner of education to develop a program of technical assistance or instruction in digital literacy, including
offering professional development and training for educators in the effective use of online learning resources” (Benjamin, 2016).

Locally, Missouri seems to be falling behind. With eleven states introducing legislation to “expand school and district access to digital citizenship and media-literacy resources” (A Big Year for Digital Citizenship, 2017) 2017 was a big year for policies and other legislation in efforts to be more proactive in digital citizenship education. Missouri introduced nothing. Furthermore, most states have already recognized the benefit of Common Sense Media’s free, research-based curriculum and met the standards to get certified as either an individual school or as an entire district. Missouri currently has one certified district and ten certified schools. Indiana, on the other hand, has over 100 certified schools and 17 certified districts. Georgia has over 150 certified schools and 4 certified districts. Finally, California has well over 200 certified schools and 23 certified districts (Common Sense Digital 2017).

Within the Franklin Howard School District, David Broom is the only school certified with Common Sense Media with one teacher currently certified as a Common Sense Media Educator. For liability purposes, the mandated digital citizenship curriculum to be implemented district wide in elementary schools only consists of one ten-minute video from 2014. If any further digital citizenship education is sought, it is dictated by either building administrators, classroom teachers, or library media specialists.
INTERNATIONAL SOCIETY FOR TECHNOLOGY IN EDUCATION

In 1979, David Moursund founded the International Council for Computers in Education, which has evolved into the International Society for Technology in Education (Maughan, 2017). At the University of Oregon, a small group of educators led by Moursund, came together to discuss the future of education as it pertains to technology, student driven learning, collaboration, and problem solving. The International Society for Technology in Education, also referred to as ISTE, has since become a recognized leader in field of integrating 21st Century Skills and pedagogical best practices, while creating a global professional learning network that focuses on “expanding the horizons of education” (ISTE, 2017) by helping educators and leaders, as well as professionals that support the world of education, build skills, connect with others and save money and time. “Because, ultimately, it's not about the technology at all. It's about changing the way learning and teaching takes place to make it more meaningful and impactful for educators and learners around the globe. It's about working together to turn what-ifs into what is” (ISTE, 2017).

Recognizing the changing landscape of education due to rapidly developing technology and increasing accessibility, ISTE focuses not on specific devices or digital tools, but rather on the skills it will take to empower students to become life-long learners and prepare them to function in a society that has no clear definition or direction in terms of what may or may not be invented between today and tomorrow. As education has struggled to keep pace with the impact that technology
has had on our every-day lives, ISTE created standards to shepherd schools toward a more forward-thinking approach to student learning; one that incorporates traditional best practices while also integrating future ready skills. “The ISTE Standards work together to support educators, students and leaders with clear guidelines for the skills and knowledge necessary to move away from the factory model. These are not the typical boxes educators need to check. They provide a framework for rethinking education, adapting to a constantly changing technological landscape and preparing students to enter an increasingly global economy” (ISTE, 2017).

**STANDARDS FOR STUDENTS**

According to the International Society for Technology in Education website (2017), their abbreviated standards for students are as follows:

1. **Empowered Learner**

   Students leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals, informed by the learning sciences.

2. **Digital Citizen**

   Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical.

3. **Knowledge Constructor**
Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others.

4. Innovative Designer

Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions.

5. Computational Thinker

Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.

6. Creative Communicator

Student communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals.

7. Global Collaborator

Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.
STANDARDS FOR TEACHERS

According to the International Society for Technology in Education website (2017), their standards for educators are as follows:

1. Learner
   
   Educators continually improve their practice by learning from and with others and exploring proven and promising practices that leverage technology to improve student learning.

2. Leader
Educators seek out opportunities for leadership to support student empowerment and success and to improve teaching and learning.

3. Citizen

Educators inspire students to positively contribute to and responsibly participate in the digital world.

4. Collaborator

Educators dedicate time to collaborate with both colleagues and students to improve practice, discover and share resources and ideas, and solve problems.

5. Designer

Educators design authentic, learner-driven activities and environments that recognize and accommodate learner variability.

6. Facilitator

Educators facilitate learning with technology support student achievement of the 2016 ISTE Standards for Students.

7. Analyst

Educators understand and use data to drive their instruction and support students in achieving their learning goals.
*For more detailed standards see Appendix B *

**COMMON SENSE MEDIA**

An independent non-profit organization, Common Sense Media is an entity dedicated to “helping kids thrive in a world of media and technology. We empower parents, teachers, and policymakers by providing unbiased information, trusted advice, and innovative tools to help them harness the power of media and technology as a positive force in all kids’ lives” (Common Sense, 2017). By targeting parents, teachers and policymakers, Common Sense Media provides resources for each group to make educated decisions when it comes to students/children and digital influences.
For parents, they offer a library of ratings and reviews for a plethora of mediums including, but not limited to, TV, movies, and games. Paired with a dedicated blog and concerns page specifically for parents, this audience is able to find information regarding what is available to their children, while allowing them to voice concerns and ask questions of their peers to help them navigate parenting in the digital age. For schools, Common Sense Education provides “high-quality digital literacy and citizenship programs to educators and school communities. Together, we work to empower students to harness technology for learning and life. Our free resources include ratings and reviews of digital tools, a comprehensive K–12 Digital Citizenship Curriculum, ready-made lesson plans, videos, webinars, and more” (Common Sense, 2017) (See Figure 2.6).
Finally, for policy makers, they offer Common Sense Kids in Action. This advocacy program aims to ensure that all students have the opportunities to achieve success by working to “drive policies at the state and national levels that ensure all kids 0-5 have access to vital education and health resources; that all children have high-quality digital learning experiences; that their online data and privacy is protected; and that child poverty is reduced in America” (Common Sense, 2017).

Using research to drive the content of each program offered, Common Sense Media provides trusted resources that are unbiased and allow parents, teachers, and policy makers to make informed decisions about what may benefit their specific purposes the best. The curriculum provided to schools identifies key areas for teachers to target that will, once mastered, will give students the tools to think critically about what they see and read online, recognize the intent of websites, protect private and personal information, preserve a healthy self-image both on and off-line, maintain a balance between time spent on devices and in the real world, and prepare students to be good digital citizens of any age. This research-based curriculum spans kindergarten all the way through high school with units scaffolded to the unique challenges that each age faces. Free units and lesson plans are provided to educators along with correlated letters to send home to allow parents to reinforce skills as they deem necessary for their individual child and beliefs of their family. Lessons incorporate ISTE standards for both students and teacher throughout implementation and are available on multimedia platforms to optimize student engagement.
DEFINING DIGITAL CITIZENSHIP

In the physical world, the definition of a citizen is “an inhabitant of a particular town and city” (Dictionary.com, 2017). Analog citizenship is dictated by the laws of a geographical governing body and the societal norms are set through shared culture. These norms and laws vary from city to city or country to country, and specific requirements must be met to gain lawful citizenship. The Internet, however, has no single governing body. Digital society has no geographical boundaries or physical barriers. Due to the technology available, there are no language barriers, either. This globalization allows digital citizenship to be open to interpretation by any individual with access to the online world with no one collective set of norms. For example, in the United States, citizens have the right to free speech and expression, whereas in other political environments this ‘freedom’ is much more policed. Also, in America the definitions and limitations of digital ownership of data as well as digital privacy are constantly evolving.

According to Micah Issitt’s article, Digital Citizenship (2016) published by the Science Reference Center, digital citizenship refers to the fundamental norms and behavior any individual using digital technology for any reason: online shopping, social networking, research or education, or professional purposes. Interestingly, the article also refers to digital citizenship existing on a scale based on knowledge and skill of use. “A person’s digital citizenship begins when they engage with the digital domain, for instance, by beginning to use a smartphone or
e-mail. However, digital citizenship exists on a spectrum based on an individual’s level of digital literacy” (Issitt, 2016).

One of the founding fathers of the digital citizenship movement in education, Mike Ribble, began exploring and advocating for the concept in the early 2000s. From his website (digitalcitizenship.org) he provides a broken-down, simplified definition as “digital citizenship is the norms of appropriate, responsible behavior with regard to technology” (Digitalcitizenship.net, 2017). Eight years later, in a book co-authored by Gerald Bailey, he defines and illustrates what is now widely adopted as the nine major themes for digital citizenship (See Appendix C for full descriptions) (See figure 2.7) (Digitalcitizenship.net, 2017). Ribble further organizes these major themes under three overarching principles: respect, educate and protect (See figure 2.8). Each aspect, theme or principle, is set out with the intention to have the capability of being taught to children and adults alike. Ribble’s definitions, both broad and specific, are endorsed by ISTE, being used as their official definition of the term.

Common Sense Media launched in 2011 and defined digital citizenship as “the ability to use technology competently; interpret and understand digital content and assess its credibility; create, research, and communicate with appropriate tools; think critically about the ethical opportunities and challenges of the digital world; make safe, responsible, respectful choices online” (Common Sense, 2017). Though each definition has clear similarities, each is still open for interpretation based on physical location or personal perspective: what is considered respectful
in one geographical location may be the opposite in another. What analog or digital tools are appropriate to share resources in one school, may be considered inappropriate in another, and so on. Norms on an international level have yet to be defined in their specificity, but broadly, evidence suggests that there are clear commonalities in the definition of what makes up a digital citizen as well as the qualities of acceptable behavior online. “Though the digital world is a complex, rapidly evolving realm, advocates argue that the rules of digital citizenship can be reduced to a basic concept: respect oneself and others when engaging in digital life” (Issitt, 2016).

Figure 2.7 (Booth, 2017)

9 Elements of Digital Citizenship

Digital Access
- Full electronic participation in society

Digital Commerce
- Electronic buying and selling of goods

Digital Communication
- Electronic exchange of information

Digital Literacy
- Teaching and learning about technology and its use

Digital Etiquette
- Electronic standards of conduct or procedure

Digital Law
- Electronic responsibility for actions and deeds

Digital Rights & Responsibilities
- Those freedoms extended to everyone in a digital world

Digital Health & Wellness
- Physical & psychological well-being in a digital world

Digital Security
- Electronic precautions to guarantee safety

#bitesizePD
JUSTIFICATION FOR SCHOOL IMPLEMENTATION

The influence that technology in its various forms has on our lives has become undeniable. “Media and technology are at the very center of all our lives today -- especially our children’s. Kids today spend over 50 hours of screen time every week. The media content they consume and create has a profound impact on their social, emotional, cognitive, and physical development. Learning how to use media and technology wisely is an essential skill for life and learning in the 21st century...Now more than ever, they need a trusted guide to help them navigate a world where change is the only constant” (Common Sense, 2017).

Stephen Yates, 2017-2018 AASL President and educator and coordinator of the School Library Media Certification Program at the University of Alabama in Tuscaloosa, states that “as the environment became more 1:1 [in terms of device-
to-student ratio], it became more important to have that online reputation management piece and help students understand the lasting impact that your digital activity has. That memory does not go away” (Maughan, 2017). With endless lines of communication open at all times, it becomes vital that students understand that simply deleting a post or picture does not erase it from the internet. Students of all ages need to understand the implications their words and actions with have on others as well as themselves.

“Our children know more than we think they know and less than they think they know. They are swimming in oceans of data, communications, and media. While we call members of this generation ‘digital natives’ – those with the ability to consume, create, absorb, and navigate everything in the digital spectrum – in truth, our children are in danger of being overwhelmed by this 24/7 unfiltered digital world without our guidance. While we carefully oversee other areas of their lives, many of us are unintentionally negligent when it comes to their digital experiences” (Orth, 2013). Many districts filter inappropriate websites and naively believe they are keeping students safe. However, when students leave school grounds, there are no such filters blocking their access to online games, social media, advertisements, and anything else they can find on the internet. If students are not taught critical thinking skills as they apply to the online world and given the opportunity to practice digital literacy and citizenship skills, they are more likely to fall victim to online sexual predators, identity theft, and more. This threat significantly increases considering that “several cutting-edge technologies,
including virtual reality, voice activated assistants, and internet-connected toys, are making their first appearances in children’s homes” (Common Sense, 2017).

The benefits of educating students about media include “recognizing point of view, improving critical thinking skills, learning how to create different products, breathing relevancy into different subjects, and linking existing content with student interests” (ProdigyGame, 2017). These lifelong skills will benefit students through their education career and beyond. Individuals who are able to think critically about what they are reading and its validity will become more informed physical citizens, voters, parents, consumers, and contributors to society.

EXAMPLES OF SUCCESSFUL PROGRAMS

According to a 2017 article by Publishers Weekly, schools across the country are already implementing successful digital citizenship programs, mainly through the school’s library or learning commons. In these schools, librarians are seen as experts, both leading student education as well as supporting teachers with integration or reinforcement of concepts. Gwenn Marchesano and Kathy Lester, both of the Plymouth-Canton school district in Michigan, partnered with three other colleagues to create a plan to educate teachers about the use of technology and educate students about technology and digital citizenship (Maughan, 2017). Stephen Yates’s former district interlaced digital citizenship into classroom curriculum. “He notes that pieces of digital citizenship are woven throughout the current version of the AASL’s Standards for 21st-Century Learners” (Maughan, 2017) (See Appendix D for AASL Standards). Denver public schools
doesn’t mandate curriculum for teachers, but does require schools to teach digital citizenship; many of which choose to implement Common Sense Media (Ullman, 2017).

In 2011 Independent School District in Lewisville, TX began cultivating an environment of digital citizenship by beginning a strategic design plan that would include digital citizenship lessons across curriculums. Year one began with librarians becoming leaders in their buildings. “That spring our librarians began a nine-week digital citizenship campaign. We reviewed each element as identified by Mike Ribble, creator of the Digital Citizenship website, for one week” (Stout, 2017). By year three the district had implemented curriculum based on Common Sense Media lessons that corresponded with Texas technology standards. As of year four, the curriculum included grades four through seven with plans to add one grade level to inclusion each year (Stout, 2017).

Gerry Swan and Marty Park created and implemented the Digital Driver’s License (DDL) initiative in 2011 at the University of Kentucky. This program “is both a platform and curriculum. The ‘license’ is a set of scenarios, or cases, designed to expose students to crucial concepts and build their skills in the nine elements of digital citizenship. The content covers a broad range of topics, such as digital communications, etiquette, security, commerce, law, media fluency and health and wellness” (Swan, 2015). The program integrated aspects of Mike Ribble and Gerald Bailey’s ISTE publication Digital Citizenship in School with the input of approximately 20 K-12 educators and applied those concepts to the driver’s ed.
model of teaching. Schools are able to customize the curriculum to fit the need of their students, also dictating the longevity of DDL validity (Noonoo, 2014).

Widely known as an innovative district, Forsyth County Schools in Georgia began a Bring Your Own Device initiative several years ago, which led to the development of a framework that addressed responsible use of devices among students. Underneath the umbrella of acceptable use fell digital citizenship and literacy. “The document focuses on respect, keeping personal information private, acknowledging the work of others, understanding the purpose of using technology for educational purposes and the responsibility to report the inappropriate use of a device or program” (Ullman, 2017). Forsyth has recently revised their curriculum to include aspects from Common Sense Media, Rosen Digital’s digital literacy database, and PebbleGo (Ullman, 2017).

Though when compared to other states nationwide, Missouri has some of the fewest number of schools or districts represented on Common Sense Media’s website as certified with their digital citizenship curriculum, there are two local districts in very close proximity to the Franklin Howard School District that are making digital citizenship education a priority. Both the Parkwood and Rockway districts have similar populations and statistics to Franklin Howard, yet continuously outrank them each year.
ROCKWAY

Neighboring Franklin Howard is the Rockway School District, serving over 22,000 students from grades kindergarten through high school. Opening in the early 1900s, Rockway has grown to become one of the largest school districts in St. Louis County with one of the best reputations, repeatedly ranked among the top school districts in the state of Missouri. Operating at the district level is the Instructional Technology Team made up of seven instructional technology specialists who collaborate with school level librarians and technology classroom assistants to specifically teach digital citizenship. Each of the district’s 19 elementary school buildings has both a certified Library Media Specialist as well as a Technology Classroom Assistant.

Digital citizenship units are integrated into the curriculum designed for librarians to teach at each level (K-12). Including ISTE standards along with AASL and Common Core, lessons combine resources from both Common Sense Media and NetSmartz to educate students on topics such as, but not limited to, privacy, ethics, cyber-bullying, and self-image online. According to the Executive Director of Learning and Support Services for the Rockway District, the curriculum is newly in place this year and they are still in the process of refining and unpacking standards. In the future, officials are anticipating being able to gather various data, including student assessments, as the program progresses to continually monitor success and student growth, allowing them the make necessary changes as the needs arise.
PARKWOOD

Another nearby, high performing district is the Parkwood School District, housing more than 17,000 students as of 2012. With a dedicated, administrative level Innovation Department, Parkwood employees an Innovation Coordinator, Library Systems Support Specialist and Digital Learning Specialist who oversee the digital citizenship education of students through integrated library curriculum. The district has adopted and implemented the Future Ready Library program sponsored by the United States Department of Education to promote innovative learning opportunities, including digital citizenship education (See Figure 2.9).

Citing a mission to “transform teaching and learning in the digital age by providing tools and content that will give Parkwood students and teachers the ability to create, access, and experience all that the world has to offer,” they enlist an arsenal of resources (See figure 2.10). Though Common Sense Media seems to be the only resource that provides dedicated digital citizenship units and lesson activities, ISTE standards are communicated to classroom teachers and librarians in addition to being incorporated in supplementary lessons. Furthermore, using the abundance of resources referenced, curriculum covers both Digital Citizenship and Digital Literacy more intensely than is provided by Common Sense Media Curriculum alone.
Though most districts that implement successful digital education programs do so by employing an arsenal of resources, this study will focus on the efficacy of using solely the resources provided through Common Sense Media. According to
their website (2017), “Our K–12 digital citizenship program includes comprehensive learning resources for students, teachers, and family members. Our 65 grade-differentiated lesson plans are based on the research of Dr. Howard Gardner and the Good Play Project at the Harvard Graduate School of Education. The program addresses real challenges for teachers and students to help schools navigate cyberbullying, internet safety, and other digital dilemmas.” (See Figures 2.6 and 2.12). Each lesson and subsequent unit is aligned to Common Core State Standards, ISTE Standards, AASL Standards, incorporates 21st Century Skills and satisfies criteria for CIPA E-rate compliance (See Figure 2.11).

With the goal to seamlessly integrate digital citizenship into classrooms (or library/learning commons lessons) Common sense provides resources beyond lesson plans featured on the scope and sequence, though the lessons themselves are available on multiple platforms including Nearpod, iBook Textbooks, and PDFs. There are materials to support teachers through on-going professional development, online communities, blogs and other forums that allow educators to collaborate and ask questions. There are materials for family members of students at all grade levels that reinforce material covered through lessons and offer suggestions for parents to have continued conversations. Finally, there are videos, interactive games and assessments for students that allow active engagement but also progress monitoring and data collection.
Cross-Curricular Framework

Privacy & Security
Students learn strategies for managing their online information and keeping it secure from online risks such as identity thieves and phishing. They learn how to create strong passwords, how to avoid scams and schemes, and how to analyze privacy policies.

Digital Footprint & Reputation
Students learn to protect their own privacy and respect others’ privacy. Our digital world is permanent, and with each post, students are building a digital footprint. By encouraging students to self-reflect before they self-reveal, they will consider how what they share online can impact themselves and others.

Self-Image & Identity
These lessons are designed to help students explore their own digital lives, focusing on their online versus their offline identity. Students learn the benefits and risks of presenting themselves through different personas and the effects on their sense of self, their reputation, and their relationships.

Creative Credit & Copyright
Living in a “copy/paste” culture, students need to reflect on their responsibilities and rights as creators in the online spaces where they consume, create, and share information. From addressing plagiarism to piracy, students learn about copyright and fair use.

Relationships & Communication
Students reflect on how they can use intrapersonal and interpersonal skills to build and strengthen positive online communication and communities. They delve into the concept of digital citizenship and digital ethics, and they reflect on their online interactions.

Information Literacy
Information literacy includes the ability to identify, find, evaluate, and use information effectively. From effective search strategies to evaluation techniques, students learn how to evaluate the quality, credibility, and validity of websites, and give proper credit.

Cyberbullying
Students learn what to do if they are involved in a cyberbullying situation. They explore the roles people play and how individual actions—both negative and positive—can impact their friends and broader communities. Students are encouraged to take the active role of upstander and build positive, supportive online communities.

Internet Safety
Students explore how the Internet offers an amazing way to collaborate with others worldwide, while staying safe through employing strategies such as distinguishing between inappropriate contact and positive connections. These foundational skills are just the beginning!
Going beyond the basic scope and sequence offered to educators, Common Sense provides a plethora of stand-alone lessons on more current events or hot topics that students may be facing. These out-side lessons are created and submitted by teachers across the world for any grade level. Topics range from core subject matter to electives or current events. Each lesson integrates some form of technology device or application.
BEST PRACTICE

It is common pedagogical knowledge that to help students master concepts or solidify learning, educators must help students make real world connections, or relate concepts to prior knowledge. Digital citizenship skills are no different and cannot be taught in a vacuum, as separate lessons peppered throughout the year with no relation to core curriculum. Furthermore, education on digital responsibilities should happen as soon as topics are relevant to classroom activities or curriculum, perhaps even prior to in attempt to be proactive instead of reactive. It would be ethically irresponsible to wait until students were in middle or high school to begin explaining responsible technology usage. Yates relates to his previous district again by stating, “The instruction began as soon as students were interacting with technology and needing passwords and creating profiles. We were instilling early the whole idea that this is your private personal space, and if you’re going to have a password-protected environment, you want to make sure you protect your passwords. That may seem like a small piece, but I would argue it’s a piece all of our society still struggles with: keeping our own information safe” (Maughan, 2017).

Paul Emerich France explains in his article, Patterns of Interaction, that digital citizenship “is also important from a young age. Lessons on technological conduct are being implemented in kindergarten. Although these lessons are necessary, it is more critical that they are contextualized and embedded into real-world activities, not offhandedly taught as an aside or touch-and-go lesson”
Marchesano explains that in her digital citizenship program, “The majority of this is taught in context, in conjunction with what’s being taught in the classroom” (Maughan, 2017) “I will partner with the history teacher or the language arts teacher, and we will find ways to integrate digital literacy concepts at the same times students are learning classroom content.”

In addition to being implemented immediately and in relation to classroom curriculum, like other core content, lessons should be scaffolded as well as cyclical, allowing students multiple opportunities to practice new skills. “Most everyone understands that to keep a healthy body it is beneficial to be active, and one way is to begin a workout routine. Often work-outs have the person go through several repetitions, or reps, to strengthen muscles. With the increase in technology in the hands of everyone, especially your kids, parents are in the need of a new workout, and new REPs. There are two aspects to each of the REPs: one focuses on an individual’s use of technology, and the other is users’ responsibility to do the same for others (which helps users to focus on empathy for others as well). The principles of respect, educate, and protect each include elements to help parents and children discuss the issues and ideas that are happening with respect to technology” (Digitalcitizenship.net, 2017). Like Ribble’s REPs, Common Sense Media offers similar opportunities through parent letters home with discussion ideas and activities for students that are analog and digital.
CHALLENGES

One of the biggest complaints from teachers everywhere is that there is not enough time. Whether there is a new policy, new intervention or new curriculum to implement, or if it is just to meet the demands of what is already in place; there is never enough time. Adding new elements of digital citizenship into curriculums will be no different. “Our greatest hurdle to teaching digital citizenship is gaining buy-in and instructional time for these critical life skills. Many policymakers lack awareness of the importance of digital citizenship, not fully realizing its existence and not fully realizing it must be intentionally taught” (Preddy, 2016). If buy-in is achieved, then administrators need to be able to support teachers in implementation. “For digital citizenship education to be successful, it requires a network of educators dedicated to collaboration, common language, and developing a horizontal and vertical alignment of gradually deepening skills” (Preddy, 2016).

When looking at a larger scale, in order to continue to communicate to students, families, and community stakeholders the importance of digital citizenship, it must be recognized on a governmental level as being a crucial aspect of children’s education. “Often state and local standards and guidelines have not caught up with the need and benefit to explicitly teach it, and teaching digital citizenship is a massive task requiring thoughtful integration into the curriculum” (Preddy, 2016). Most progressive states or school districts will have separate task forces dedicated to the ever-evolving landscape of digital citizenship.
Though the core principal remains critical thinking skills, the application must adapt at just as rapid a pace as the technology that is in use by students.

**SUMMARY**

Technology is advancing at an increasingly rapid rate, making the education that students receive vital for their success as adults in a digital society and knowledge economy. Considering the increase in children with devices as well as their time spent using the Internet, the potential dangers that threaten all Internet users, especially a young a naïve population, are much more visible and alarming. Though there have been no longitudinal studies on the consequences of lack of digital citizenship programs versus the benefits of employing a research-based curriculum, experts agree in the undeniable need for digital literacy and digital citizenship education. The need for such programs are beginning to get recognition at the state and federal level, with multiple legislation being brought to the table. However, there is little consensus about what defines an effective digital education program.

Locally, there are no mandates that specify what students need to learn in terms of digital literacy or digital citizenship. Nearby districts to Franklin Howard implement curriculum on a district-wide level, utilizing multiple resources to present a rounded digital citizenship curriculum that stems from the Library/Learning Commons and integrates classroom at all grade levels. These districts consistently outperform Franklin Howard on state standardized testing and outrank them in student achievement. Franklin Howard, in contrast to Parkwood and Rockway has
neither a district-level entity creating and over-seeing the implementation of a
unified digital education program, nor does it have a common curriculum in place
for teachers or librarians.

**HYPOTHESIS**

Common Sense Media provides a beneficial digital citizenship curriculum.
However, the depth of using solely the curriculum provided through Common
Sense Media is inadequate.
CHAPTER THREE

INTRODUCTION

Common Sense Media is a nonprofit organization that provides free expert-tested and teacher approved digital citizenship education for kindergarten through twelfth grade. The intent of this research is to determine if the curriculum provided is adequate in its scope and depth to prepare students in second through fifth grade for their continued digital education, giving them the foundation needed to succeed in their future lives in a tech-centric society. This goal will be attained through the defining of appropriate topics for each grade level and the collection of perceptual data gathered through targeted surveys of students, parents, teachers and administrators. The aforementioned compilation will provide a multidimensional picture broken down as to what each demographic deems as necessary in digital citizenship education and provide insight to the current status of Common Sense Media’s curriculum efficacy.

DESIGN OF THE RESEARCH

As Digital Citizenship is a relatively new concept, in addition to the ever-changing landscape of current workforce opportunities due to the influence of technology on society, there has been little to no research conducted on the long-term effects that an adequate or inadequate digital citizenship curriculum education has on students as they progress through school and into adult society. For this reason, my research will primarily rely on the perception of teachers,
students, administrators and the parents of students participating in the digital citizenship curriculum.

Common Sense Media’s Digital Citizenship Education is designed to prepare students to be safe and responsible online while giving them the critical thinking skills to communicate and collaborate effectively using technology. For current and future generations, these skills are absolutely vital as technology continues to break the physical barriers of civilization and create a global society undeterred by literal distance. As technology is revolutionizing the workforce, it is equally impacting home and school life. Students of all ages are gaining access to information without censorship or discrimination and are not always given the necessary tools to evaluate what is presented to critically analyze or process effectively. In addition to being vulnerable to misinformation, students are increasingly at risk of falling victim to a slew of other dangers including cyberbullying, identity theft, phishing, scams and more.

In order to identify the effectiveness of Common Sense Education’s Digital Citizenship Curriculum, a baseline for comparison needs to be identified and established in terms of the digital citizenship education that takes place outside of the Common Sense Education Curriculum directed through the Learning Commons. This will include collecting data on teachers and what supplemental education they provide students, as well as parents and how often they speak with their children about internet safety or monitor their online presence. Furthermore, norms will be defined through the perception surveys and compared to the
research to determine the most important appropriate topics to be covered in each grade level.

Using a mixed method approach, I will conduct multiple surveys to gather information from teachers, parents, students and administrators. Each subgroup will provide their opinion on each individual topic covered by the Common Sense Media Curriculum. This qualitative data will be aligned with the quantitative data collected in the student surveys that will measure the proficiency of students in all units taught by the digital citizenship curriculum.

**DEMOGRAPHICS**

This study will focus on the population David Broom Elementary School located outside of St. Louis, Missouri. In order to assess multiple units of the curriculum offered by Common Sense Media, I will be gathering information from each classroom from second through fifth grade.

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<tr>
<th>Grade</th>
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<th>Female Students</th>
<th>Teachers</th>
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<td>Total</td>
<td>150</td>
<td>124</td>
<td>13</td>
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Figure 3.1
Though the relatively small population of David Broom Elementary School is not completely homogenous, the percentage of minority students is too small to be reported by the state due to confidentiality laws. Similarly, the district as a whole, reports the following statistics:
Additionally, within the district’s boundaries there is a median income of $79,096 and an average income of $93,780. Such background information is important to note when dealing with technology as the basic assumption is that higher income equates to easier access to multiple technological devices among age levels. Furthermore, it is assumed that a population with higher numbers of residents with at least some college education or advanced degrees have easier access to personal technology and somewhat recognize the importance of an adequate digital citizenship education.
TARGET SAMPLE SELECTION

Students in David Broom Elementary learn while utilizing various devices starting as early as kindergarten, and later transition to mainly Chromebooks, having a 1:1 ratio starting in second grade. Having devices readily available is not unique to David Broom, but the school does operate with a slightly higher device to student ratio than that of the district as a whole (Figure 3.6). David Broom students primarily use Chromebooks, whereas other schools throughout the district are not limited in the make and model of devices to which they have access.

Figure 3.6 (Francis Howell Fast Facts, 2017)

David Broom is the smallest school in the Franklin Howard district and boasts a 13:2 student to teacher ratio compared to the district’s 19:1 and the state’s ratio of 17:1 (Francis Howell Fast Facts 2017). On average, teachers in the district have 14.9 years of experience in the district, while teachers at David Broom
average 10 years of experience (Francis Howell Fast Facts 2017). The student population is almost 96% white, which is significantly higher than any other schools in the district or state, and has under 10% of students receiving free or reduced lunches, again setting David Broom apart from the district (18.7%) and state (51.5%) (Francis Howell School District 2017).

Though David Broom is unique in its small population and socio-economic status, when compared to surrounding districts, Franklin Howard School has a similar device to student ratio (Figure 3.6) to multiple other districts (Francis Howell Fast Facts 2017). The study conducted with David Broom’s second through fifth grade students will be applicable to any building where technology is available to students on a regular basis, though results might be affected by the average years of teaching experience and socio-economic status. Schools or districts with a larger population of more experienced teachers may find that those who have been teaching longer are not as comfortable with integrating technology or implementing a digital citizenship curriculum. Schools with a higher population of students qualifying for free and reduced lunches may notice variations in results due to ability to put into practice said skills learned through the curriculum in real life situations, as their practice might be dependent on the availability of technology at home rather than a controlled school environment. Additionally, buildings that are not fully stocked with devices will be able to replicate portions of this study with minor changes as Common Sense Media offers “unplugged” curriculum for digital citizenship that focuses on the same skills.
DESCRIPTION OF THE PROGRAM

Though Common Sense Media offers curriculum from kindergarten through 12th grade, this study will focus on the units specifically designed for 2nd through 5th grade (Appendix E). The over-arching topics covered for these grade levels consist of the following:

- Internet Safety
- Digital Footprint and Reputation
- Privacy and Security
- Self-Image and Identity
- Relationships and Communication
- Information Literacy
- Cyberbullying and Digital Drama
- Creative Credit and Copyright

Each individual grade level is designated one unit consisting of five unique lessons. For these basic lessons, many are analog: taking place offline. Teachers lead students through the outlined objectives that have been aligned to Common Core State Standards, ISTE Standards (Appendix A), and the Collaborative for Academic, Social, and Emotional Learning Standards. For each lesson, Common Sense Media also provides teachers with tools to assess student learning as well as informative “Tip Sheets” to send home to families to engage parents or guardians in discussions with their students over the topics covered by the curriculum.

In addition to the standard units, there is an additional online resource for upper elementary students called Digital Passport. This online platform covers the same topics using interactive games, videos, collaborative off-line activities, and teacher wrap-around materials. Since students are given their own accounts, teachers are sent feedback for each individual student to follow-up on questions or topics that may need to be re-taught.
DEFINITIONS

21st Century Skills: generally used to refer to certain core competencies such as collaboration, digital literacy, critical thinking, and problem-solving that advocates believe schools need to teach to help students thrive in today's world.

Common Sense Media: San Francisco-based non-profit organization that provides education and advocacy to families to promote safe technology and media for children.

Digital Citizenship: the norms of appropriate, responsible behavior with regard to technology use according to nine principles: access, commerce, communication, literacy, etiquette, law, rights and responsibilities, health and wellness, and security or self-protection.

Digital Footprint: the information about a person that can be found online as a result of their internet activity.

Digital Literacy: the set of competencies required for full participation in a knowledge society. It includes knowledge, skills, and behaviors involving the effective use of digital devices such as smartphones, tablets, laptops, and desktop PCs for purposes of communication, expression, collaboration, and advocacy.

Future Ready: personal and academic skills necessary for success in future individual endeavors.

Information literacy: the ability to recognize the need for information and to locate, analyze, and use it effectively in various ways.
**ISTE:** the International Society for Technology in Education, a recognized leader in field of integrating 21st Century Skills and pedagogical best practices

**Technology Integration:** the use of technology tools in general content areas in education in order to allow students to apply computer and technology skills to learning and problem-solving. Generally speaking, the curriculum drives the use of technology and not vice versa

**Unplugged:** without any electronic devices

**TIMELINE**

<table>
<thead>
<tr>
<th>Year</th>
<th>Month</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td></td>
<td>Complete research question</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Compose Chapter 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Compose Chapter 2</td>
</tr>
<tr>
<td>2018</td>
<td>February</td>
<td>Compose Chapter 3</td>
</tr>
<tr>
<td></td>
<td>March</td>
<td>Define parameters for appropriate curriculum content for each grade level</td>
</tr>
<tr>
<td></td>
<td>April</td>
<td>Develop surveys Pre-survey teachers about what digital citizenship strategies are employed in classrooms</td>
</tr>
<tr>
<td></td>
<td>May</td>
<td>Revise surveys for grade levels, student groups, parents</td>
</tr>
</tbody>
</table>
Digital Citizenship

| August through December | Deliver content instruction  
| Collect data from grade level teachers, students, parents, sample population from outside school |
| 2019 | January | Analyze and compare results of surveys |
| May | Compose Chapter 4 |
| July | Compose Chapter 5 |
| October | Present findings of research and defend Capstone |

Figure 3.8

COLLECTION OF THE DATA

This study is grounded on the perceptions of students receiving the Common Sense Media Curriculum instruction, their classroom teachers, their parents and the school’s administrators. In addition, comparative data will be gathered from a sample population in nearby elementary schools within the same district. Each survey will be submitted anonymously. Information will be collected as follows:

- Students will be given access to grade specific surveys during regularly scheduled library class times at the culmination of their respective digital citizenship education.
• Parents will be asked to complete surveys about their child’s digital citizenship education at spring parent-teacher conferences.

• Classroom teachers will complete a questionnaire about what supplemental digital citizenship education is employed in their classroom, then be emailed a link to complete a survey once their class has completed all grade specific digital citizenship lessons through the library.

• School administrators will be emailed a link to a survey once all grade levels have completed their digital citizenship education.

All surveys and questionnaires will be sent and collected electronically with a short introduction as to the nature of information being gathered and its purpose.

Once the data has been collected, reliability will be established through the cross-referencing of responses from each sub-group between corresponding questions. Multiple points of view on the same subject will provide a more comprehensive picture as to the overall perception of the Common Sense Media Digital Citizenship Curriculum. Where there is agreement across the board will validate the data collected, while disparities across subgroup survey responses will highlight a disconnect between the groups’ perception of efficacy. The quantitative data collected on student mastery of curriculum will provide a degree of insight as to perceptive skill level versus reality. This will also be compared to parent and teacher perception of student skill and their actual mastery of the concepts.
DESCRIPTION OF ASSESSMENT TOOLS

This study will gather the perceptions of multiple groups with varying levels of involvement in the digital citizenship curriculum implemented in the David Broom Learning Commons. Each group will have their own unique survey to complete that will target their understanding of digital citizenship, the topics covered by the Common Sense Media Curriculum, and their perception of the success of the program and its impacts on the future. Question content will align across subgroups, but utilize vocabulary tailored for maximum understanding of each audience.

- Student Surveys (Appendix F)
  - Each grade level will have questions customized with age appropriate language
    - Dichotomous questions will seek to identify student confidence in independently practicing skills presented and mastered through curriculum
    - Multiple Choice questions will measure content mastery of the skills taught throughout the curriculum
    - A mixture of multiple choice, Likert scale, dichotomous, and check all that apply questions will identify different aspects of student technology usage
  - Accumulation of all grade level surveys will show progression of learning through extent of Digital citizenship program
• Identify gaps & trends in learning

• Teacher Surveys (Appendix G)
  o Dichotomous questions with the option to explain will identify any supplemental digital citizenship education students are receiving outside of the Common Sense Media Curriculum implemented in the Learning Commons
  o Questions using the Likert scale will measure teacher confidence in each individual content area covered by the curriculum in terms of student application of skills
  o Multiple choice, Likert scale, check all that apply, and dichotomous questions will identify trends in technology implementation in classrooms as well as demographic data of teachers

• Parent Survey (Appendix H)
  o General survey for parents no matter the age level of their student
    ▪ Likert scale questions will measure perceived activity & conduct of their child online
      ▪ Aligned to topics covered in Common Sense Curriculum
      ▪ Multiple choice, Likert scale, check all that apply, and dichotomous questions will identify trends in comfort level with technology, monitoring habits and device access at home
Administrator Survey (Appendix I)

- Likert scale questions will measure confidence in the program in terms of student mastery in each unit of the curriculum.
- Multiple choice, Likert scale, check all that apply, and dichotomous questions will identify perceptions and expectations of teacher conduct when it comes to digital citizenship education and technology integration.

Since much of the data is based on perception, the largest risk to interpretation stems from the subjective nature of the surveys. Therefore, the inclusion of select quantitative data and careful comparison of the qualitative data is vital to the research.

**PLAN FOR ANALYZING THE DATA**

Individually, surveys will provide insight as to the degree in which each subgroup is confident of student behavior in the areas of digital citizenship. Once aligned, each group of questions will display which of the subgroups agree and disagree in the individual areas of the curriculum. Collectively, the surveys will create a more rounded perspective as to what trends exist across the board in online behavior and conduct, in addition to technology access and use.
CHAPTER FOUR

INTRODUCTION

David Broom Elementary School has a 1:1 student to Chromebook ratio from second through fifth grade. Devices are checked out to individual students to use for the duration of the school year and kept in classrooms. Use of student devices is at the discretion of the classroom teacher, with Digital Citizenship Education being the responsibility of the Library Media Specialist. Below represents teacher and administrator survey responses concerning the usage, comfort, and frequency of student access to technology and online materials while in the classroom at school.

<table>
<thead>
<tr>
<th>Classroom Technology Usage</th>
<th>Teacher Responses</th>
<th>Administrator Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often are students online in the classroom?</td>
<td>15% Frequently throughout the day</td>
<td>Frequently throughout the day</td>
</tr>
<tr>
<td></td>
<td>71% Some throughout the day</td>
<td></td>
</tr>
<tr>
<td></td>
<td>14% Weekly</td>
<td></td>
</tr>
<tr>
<td>How do students use technology in the classroom?</td>
<td>100% Research, Keyboarding</td>
<td>Research, Keyboarding,</td>
</tr>
<tr>
<td></td>
<td>86% Literacy, Math, Presentations</td>
<td>Literacy, Math, Presentations,</td>
</tr>
<tr>
<td></td>
<td>57% Group work</td>
<td>Group work, Reward, Daily 5,</td>
</tr>
<tr>
<td></td>
<td>29% Reward, Daily 5, Coding</td>
<td>Coding</td>
</tr>
<tr>
<td>How do teachers use technology in the classroom?</td>
<td>100% Interactive Activities, Google</td>
<td>Direct Instruction, Interactive</td>
</tr>
<tr>
<td></td>
<td>Education Suite</td>
<td>activities, Google Suite for</td>
</tr>
<tr>
<td></td>
<td>86% Direct Instruction</td>
<td>Education, Assessment</td>
</tr>
<tr>
<td></td>
<td>1% Collaboration, Assessment</td>
<td></td>
</tr>
<tr>
<td>How comfortable are you with technology?</td>
<td>57% Very Comfortable</td>
<td>Very Comfortable</td>
</tr>
<tr>
<td></td>
<td>29% Comfortable</td>
<td></td>
</tr>
<tr>
<td></td>
<td>14% Uncomfortable</td>
<td></td>
</tr>
<tr>
<td>How closely are students monitored on technology?</td>
<td>43% Constantly</td>
<td>Frequently</td>
</tr>
<tr>
<td></td>
<td>43% Frequently</td>
<td></td>
</tr>
</tbody>
</table>
Digital Citizenship

<table>
<thead>
<tr>
<th>Do you provide any Digital Citizenship education to supplement the curriculum taught by the LMS?</th>
<th>14% Occasionally</th>
<th>57% Yes</th>
<th>43% No</th>
<th>Additional Digital Citizenship Education is to be performed at the discretion of the teacher in correlation with student need and curriculum relevance.</th>
</tr>
</thead>
</table>

Students in second through fifth grade were asked their perception of how often their classroom teachers monitored their online activity.

| Student Perception of Teacher Monitoring |
|---|---|---|---|---|
| How often does your teacher monitor your online behavior? | 2nd Grade | 3rd Grade | 4th Grade | 5th Grade | Combined |
| 17% Constantly | 9% Constantly | 14% Constantly | 16% Constantly | 14% Constantly |
| 14% Frequently | 27% Frequently | 30% Frequently | 39% Frequently | 21% Frequently |
| 3% Occasionally | 33% Occasionally | 30% Occasionally | 33% Occasionally | 25% Occasionally |
| 14% Seldom | 10% Seldom | 9% Seldom | 3% Seldom | 9% Seldom |
| 52% Rarely | 21% Rarely | 18% Rarely | 10% Rarely | 25% Rarely |

Results show that 34% of students report their teachers frequently or constantly monitor their online behavior as compared to 86% of teachers reporting monitoring students either constantly or frequently.

Common Sense Media identifies eight categories in its cross-curricular framework. Six of these areas were presented in the surveys conducted: Privacy and Security, Digital Footprint and Reputation, Information Literacy, Creative Credit and Copyright, Internet Safety, and Relationships and Communication. All participants were asked their perception of student knowledge of specific skills representing the six areas in the Common Sense Media Framework. Students
were given polar perception questions while parents, teachers and administrators were given a 4-point Likert Scale. For the side by side comparison below, Agree and Strongly Agree responses were compiled and averaged to align with student ‘Yes’ responses. Only second through fifth grade students were surveyed. Their collective responses have been averaged to represent the student population below.

Students were additionally given questions that assessed their proficiency in the six categories from Common Sense Media’s Curriculum. These questions were adapted from the curriculum’s assessments that are included in teacher lesson materials for each topic.
Perception data was then aligned with student achievement scores in each of the six chose categories to illustrate the comparison between perceived knowledge and demonstrated proficiency.
Both perception and assessment data have been disaggregated in the following sections by grade level.

**2nd GRADE DATA**

Approximately 63 second grade students received digital citizenship education from the library media specialist over a six-week period. Lessons were 45 minutes long, occurring on a weekly basis. Fifty-seven second grade students were present to take the survey. Perception questions have been organized by their Common Sense Media Topic and placed side by side to the assessment questions that were used to determine proficiency.

### 2nd Grade Disaggregated Questions and Responses

<table>
<thead>
<tr>
<th>Common Sense Topic</th>
<th>Perception</th>
<th>Correct Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Privacy &amp; Security</strong></td>
<td>I know how to create a secure password.</td>
<td>73%</td>
</tr>
<tr>
<td></td>
<td>I know what kinds of information is ok to share online.</td>
<td>90%</td>
</tr>
<tr>
<td><strong>Digital Footprint &amp; Reputation</strong></td>
<td>I make smart choices when I am online.</td>
<td>86%</td>
</tr>
<tr>
<td></td>
<td>I know the difference between personal and private information.</td>
<td>64%</td>
</tr>
<tr>
<td><strong>Information Literacy</strong></td>
<td>I know how to tell if a website is trust-worthy.</td>
<td>56%</td>
</tr>
<tr>
<td><strong>Creative Credit &amp; Copyright</strong></td>
<td>I search for information safely.</td>
<td>79%</td>
</tr>
<tr>
<td><strong>Internet Safety</strong></td>
<td>I know what to do if I accidentally go to an inappropriate website.</td>
<td>76%</td>
</tr>
<tr>
<td></td>
<td>I know how to tell if a website is just right for me.</td>
<td>67%</td>
</tr>
</tbody>
</table>
### Digital Citizenship

**Question should you ask yourself?**

<table>
<thead>
<tr>
<th>Relationships &amp; Communication</th>
<th>I know the right way to talk to people online.</th>
<th>93%</th>
<th>How can you show respect to others?</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I treat others with respect online.</td>
<td></td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I know what to do when I see a cyberbully.</td>
<td>77%</td>
<td>Who is a cyber bully?</td>
<td>93%</td>
<td></td>
</tr>
</tbody>
</table>

![Fig. 4.6](image)

Below, perception scores have been placed side by side to those of teachers, administration, and parents.

![2nd Grade Aligned Perception Data](image)

Assessment scores for second grade students have been averaged and sorted according to Common Sense Media topic below.
Assessment results have been layered on top of the perception data to illustrate correlations and discrepancies between perceived knowledge and achieved proficiency.
3rd GRADE DATA

Approximately 69 third grade students received digital citizenship education from the library media specialist over a six-week period. Lessons were 45 minutes long, occurring on a weekly basis. Sixty-eight third grade students were present to take the survey. Third grade perception scores have been organized by Common Sense Media topic and placed side by side to the assessment questions that were used to determine proficiency.

<table>
<thead>
<tr>
<th>3rd Grade Disaggregated Questions and Responses</th>
<th>Perception</th>
<th>Correct Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Privacy &amp; Security</strong></td>
<td>I know how to create a secure password.</td>
<td>85%</td>
</tr>
<tr>
<td></td>
<td>I know what kinds of information is ok to share online.</td>
<td>94%</td>
</tr>
<tr>
<td><strong>Digital Footprint &amp; Reputation</strong></td>
<td>I am responsible when I am online.</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>I know the difference between personal and private information.</td>
<td>82%</td>
</tr>
<tr>
<td><strong>Information Literacy</strong></td>
<td>I know how to tell if a website is trust-worthy.</td>
<td>71%</td>
</tr>
<tr>
<td><strong>Creative Credit &amp; Copyright</strong></td>
<td>I search for information safely.</td>
<td>97%</td>
</tr>
<tr>
<td><strong>Internet Safety</strong></td>
<td>I know what to do if I accidentally go to an inappropriate website.</td>
<td>85%</td>
</tr>
</tbody>
</table>
I know how to tell if a website is just right for me. 77% To tell if a website is right for you, which question should you ask yourself? 93%

I know the right way to talk to people online. 93% How can you show respect to others? 100%

I treat others with respect online. 100%

I know what to do when I see a cyberbully. 81% Which would be the best way to respond to a mean message you got online? 97%

Below, third grade perception scores have been placed side by side to those of teachers, administration, and parents.

Assessment scores for third grade students have been averaged and sorted according to Common Sense Media topic below.
Assessment results have been layered on top of the perception data to illustrate correlations and discrepancies between perceived knowledge and achieved proficiency.
**4th GRADE DATA**

Approximately 54 fourth grade students received digital citizenship education from the library media specialist over a six-week period. Lessons were 45 minutes long, occurring on a weekly basis. Forty-four fourth grade students were present to take the survey. Fourth grade perception scores have been organized by Common Sense Media topic and placed side by side to the assessment questions that were used to determine proficiency.

### 4th Grade Disaggregated Questions and Responses

<table>
<thead>
<tr>
<th>Common Sense Topic</th>
<th>Perception</th>
<th>Correct Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Privacy &amp; Security</strong></td>
<td>I know how to create a secure password.</td>
<td>98%</td>
</tr>
<tr>
<td></td>
<td>I know what kinds of information is ok to share online.</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Digital Footprint &amp; Reputation</strong></td>
<td>I am respectful and responsible when I am online.</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>I know the difference between personal and private information.</td>
<td>98%</td>
</tr>
<tr>
<td><strong>Information Literacy</strong></td>
<td>I know how to tell if a website is trust-worthy.</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Creative Credit &amp; Copyright</strong></td>
<td>I search for information safely.</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Internet Safety</strong></td>
<td>I know what to do if I accidentally go to an inappropriate website.</td>
<td>98%</td>
</tr>
</tbody>
</table>
### Digital Citizenship

I know how to tell if a website is just right for me. 98%

<table>
<thead>
<tr>
<th>Question</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which answer is the most likely reason why the company chose a photo where the player looks like he is flying?</td>
<td>66%</td>
</tr>
<tr>
<td>I know the right way to talk to people online.</td>
<td>98%</td>
</tr>
<tr>
<td>How can you show respect to others?</td>
<td>100%</td>
</tr>
<tr>
<td>I treat others with respect online.</td>
<td>100%</td>
</tr>
<tr>
<td>I know what to do when I see a cyberbully.</td>
<td>96%</td>
</tr>
<tr>
<td>Which would be the best way to respond to a mean message you got online?</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Fig. 4.14**

Below, fourth grade perception scores have been placed side by side to those of teachers, administration, and parents.

**Fig. 4.15**

Assessment scores for fourth grade students have been averaged and sorted according to Common Sense Media topic below.
Assessment results have been layered on top of the perception data to illustrate correlations and discrepancies between perceived knowledge and achieved proficiency.
**5th GRADE DATA**

Approximately 70 fifth grade students received digital citizenship education from the library media specialist over a six-week period. Lessons were 45 minutes long, occurring on a weekly basis. Seventy fifth grade students were present to take the survey. Fifth grade perception scores have been organized by Common Sense Media topic and placed side by side to the assessment questions that were used to determine proficiency.

### 5th Grade Disaggregated Questions and Responses

<table>
<thead>
<tr>
<th>Common Sense Topic</th>
<th>Perception</th>
<th>Correct Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Privacy &amp; Security</strong></td>
<td>I know how to create a secure password.</td>
<td>96%</td>
</tr>
<tr>
<td></td>
<td>I know what kinds of information is ok to share online.</td>
<td>97%</td>
</tr>
<tr>
<td></td>
<td>I know what kinds of information is ok to share online.</td>
<td>97%</td>
</tr>
<tr>
<td><strong>Digital Footprint &amp; Reputation</strong></td>
<td>I am respectful and responsible when I am online.</td>
<td>99%</td>
</tr>
<tr>
<td></td>
<td>I know the difference between personal and private information.</td>
<td>94%</td>
</tr>
<tr>
<td><strong>Information Literacy</strong></td>
<td>I know how to tell if a website is trust-worthy.</td>
<td>87%</td>
</tr>
<tr>
<td><strong>Creative Credit &amp; Copyright</strong></td>
<td>I search for information safely.</td>
<td>97%</td>
</tr>
<tr>
<td>Internet Safety</td>
<td>I know what to do if I accidentally go to an inappropriate website.</td>
<td>97%</td>
</tr>
<tr>
<td>----------------</td>
<td>---------------------------------------------------------------</td>
<td>-----</td>
</tr>
<tr>
<td></td>
<td>I know how to tell if a website is just right for me.</td>
<td>93%</td>
</tr>
<tr>
<td>Relationships &amp; Communication</td>
<td>I know the right way to talk to people online.</td>
<td>96%</td>
</tr>
<tr>
<td></td>
<td>I treat others with respect online.</td>
<td>99%</td>
</tr>
<tr>
<td></td>
<td>I know what to do when I see a cyberbully.</td>
<td>88%</td>
</tr>
</tbody>
</table>

Fig. 4.18

Below, fifth grade perception scores have been placed side by side to those of teachers, administration, and parents.

Fig. 4.19

Assessment scores for fifth grade students have been averaged and sorted according to Common Sense Media topic below.
Assessment results have been layered on top of the perception data to illustrate correlations and discrepancies between perceived knowledge and achieved proficiency.
A Likert scale was utilized for portions of teacher, administrator and parent surveys. For each question, a point value was assigned to possible responses as follows: Strongly Agree = 4, Agree = 3, Disagree = 2, and Strongly Disagree = 1.

Results were averaged and placed into the table below.

<table>
<thead>
<tr>
<th>Perception of Student Performance</th>
<th>Parents</th>
<th>Teachers</th>
<th>Admin.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am confident that my students make safe responsible choices online</td>
<td>2.8</td>
<td>2.5</td>
<td>3.0</td>
</tr>
<tr>
<td>I trust that my students’ online behavior is age appropriate</td>
<td>2.8</td>
<td>2.7</td>
<td>3.0</td>
</tr>
<tr>
<td>My students understand the components of strong passwords</td>
<td>2.5</td>
<td>3.0</td>
<td>4.0</td>
</tr>
<tr>
<td>My students know what to do if they encounter inappropriate content online</td>
<td>N/A</td>
<td>3.2</td>
<td>4.0</td>
</tr>
<tr>
<td>My students are able to identify reliable websites</td>
<td>2.3</td>
<td>2.7</td>
<td>3.0</td>
</tr>
<tr>
<td>My students can search for information safely</td>
<td>2.7</td>
<td>2.8</td>
<td>3.0</td>
</tr>
<tr>
<td>My students know the difference between personal and private information</td>
<td>N/A</td>
<td>2.8</td>
<td>3.0</td>
</tr>
<tr>
<td>My students know what kinds of information is appropriate to share online</td>
<td>2.6</td>
<td>2.8</td>
<td>4.0</td>
</tr>
<tr>
<td>My students can communicate effectively while online</td>
<td>N/A</td>
<td>2.7</td>
<td>4.0</td>
</tr>
<tr>
<td>My students are respectful to others when communicating online</td>
<td>2.8</td>
<td>3.0</td>
<td>4.0</td>
</tr>
<tr>
<td>My students know how to tell if websites are age-appropriate</td>
<td>2.6</td>
<td>2.4</td>
<td>4.0</td>
</tr>
<tr>
<td>My students ethically use information found online</td>
<td>2.6</td>
<td>2.8</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Fig. 4.22
In addition to questions pertaining to Common Sense Media’s Curriculum, parents and students were asked to respond to questions regarding technology usage at home. Below represents the averaged results of all students in second through fifth grade that completed the survey side-by-side with averaged parent responses.

**TECHNOLOGY USAGE AT HOME**

<table>
<thead>
<tr>
<th><strong>Personal Devices and Screen Time</strong></th>
<th><strong>Students</strong></th>
<th><strong>Parents</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you have your own device at home?</td>
<td>95%</td>
<td>Does your child have their own device?</td>
</tr>
<tr>
<td>How much time do you spend on the internet at home?</td>
<td>49% 0-1hr 31% 2-4hrs 20% 5+ hrs</td>
<td>How much time does your child spend on the internet at home?</td>
</tr>
<tr>
<td>How do you use the internet at home?</td>
<td>84% games 55% chatting with family &amp; friends 36% school</td>
<td>How does your child use the internet at home?</td>
</tr>
<tr>
<td><em>3 highest averaged scoring responses</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How comfortable are you using the internet by yourself?</td>
<td>50% very comfortable 40% comfortable 8% uncomfortable 2% very uncomfortable</td>
<td>How comfortable are you using the internet?</td>
</tr>
<tr>
<td>How often does your parent monitor your behavior online?</td>
<td>17% constantly 16% frequently 24% occasionally 13% seldom 31% rarely</td>
<td>How often do you monitor your child’s behavior online?</td>
</tr>
</tbody>
</table>

Fig.4.23
Student data regarding device and technology usage at home has been disaggregated by grade level in the chart below.

### Technology Usage at Home By Grade Level

<table>
<thead>
<tr>
<th></th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>5th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you have your own device at home?</td>
<td>93%</td>
<td>99%</td>
<td>93%</td>
<td>94%</td>
</tr>
<tr>
<td>How much time do you spend on the internet at home?</td>
<td>63% 0-1hr 32% 0-1 hr 62% 0-1hr 39% 0-1hr</td>
<td>23% 2-4hrs 40% 2-4hrs 30% 2-4hrs 49% 2-4hrs</td>
<td>13% 5+hrs 28% 5+hrs 9% 5+hrs 13% 5+hrs</td>
<td></td>
</tr>
<tr>
<td>How do you use the internet at home?</td>
<td>73% games 81% games 87% games 96% games</td>
<td>30% chatting with family &amp; friends 43% chatting with family &amp; friends 66% chatting with family &amp; friends 81% chatting with family &amp; friends</td>
<td>13% school 28% school 52% school 51% school</td>
<td></td>
</tr>
<tr>
<td>How comfortable are you using the internet by yourself?</td>
<td>30% very comfortable 41% very comfortable 71% very comfortable 56% very comfortable</td>
<td>40% comfortable 53% comfortable 25% comfortable 40% comfortable</td>
<td>20% uncomfortable 6% uncomfortable 2% uncomfortable 4% uncomfortable</td>
<td>10% very uncomfortable 2% very uncomfortable 2% very uncomfortable 4% uncomfortable</td>
</tr>
<tr>
<td>How often does your parent monitor your behavior online?</td>
<td>14% constantly 10% constantly 30% constantly 14% constantly</td>
<td>3% frequently 19% frequently 16% frequently 24% frequently</td>
<td>10% occasionally 27% occasionally 16% occasionally 43% occasionally</td>
<td>21% seldom 12% seldom 11% seldom 6% seldom</td>
</tr>
</tbody>
</table>

![Fig. 4.24](image)

Though not represented in the chart above, it is important to note that 44% of 5th graders reported using the internet to engage in social media and 31% of 5th graders also reported using the internet for shopping. Furthermore, 15% of 4th
graders, 16% of 5th graders and 10% of 3rd and 2nd graders respectfully reported watching YouTube or using other websites to watch videos at home.

OVERALL PERCEPTIONS

<table>
<thead>
<tr>
<th>Perceived Effectiveness of Common Sense Media</th>
<th>Parents</th>
<th>Teachers</th>
<th>Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is effective</td>
<td>44%</td>
<td>43%</td>
<td>100%</td>
</tr>
<tr>
<td>Is somewhat effective</td>
<td>44%</td>
<td>43%</td>
<td>0%</td>
</tr>
<tr>
<td>Is not effective</td>
<td>12%</td>
<td>14%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Fig. 4.25

The data presented above will be analyzed in the following chapter to determine the efficacy of Common Sense Media Curriculum.
CHAPTER FIVE

Analysis of the Results of this Study

Technology Usage at School

To begin creating a well-rounded picture of technology in the classroom, it was important to assess teacher perception of current usage as well as administrator expectations. In this portion of the survey, participants were giving specific choices with the option to write in any additional responses. The administration at David Broom Elementary School has high expectations for both staff and students in regard to technology in the classrooms: believing that teachers should be very comfortable with technology, monitor students frequently, use technology in a variety of ways for instruction while also having students use devices frequently throughout the day for a multitude of purposes and tasks. A majority of teachers met or exceeded the expectations held, with the exception of frequency of student technology usage in the classroom. Only 15% of teachers identified as adhering to the expectations held by administration and frequently had students utilize technology throughout each day. This discrepancy is further seen in the perception data gathered on student proficiency in digital citizenship skills.

Since the administration at David Broom Elementary expects frequent daily usage, it makes sense that their perception of student mastery of digital citizenship skills is 100% across all Common Sense Media Curriculum subjects assuming that repeated exposure/usage would lead to more regular conversations between
students and teachers concerning online behavior as well as recurrent opportunities to practice and/or correct online behaviors. Teachers, on the other hand, may be more critical about their perceptions of student mastery knowing how much time is actually spent on technology in their respective classrooms, in addition to witnessing individual student behavior when online. Furthermore, teachers were present for digital citizenship lessons taught by the library media specialist so are much more familiar with the content than administration.

Parent responses were also considerably lower than administration perception of student mastery. With the exception of Digital Footprint and Reputation, parents had the lowest number of positive perception scores. Teachers represented a close second to lowest number in all except Privacy and Security. These two groups of participants are directly involved with students, while administration’s involvement is more distant. Student perception of their own levels of mastery is much closer to that of the administration than any of the other groups of participants.

Though administration expects teachers to monitor student activity frequently and teacher responses indicate an overwhelming majority meet or exceed this expectation, student responses are more varied. As a whole, only 35% of students claim that teachers monitor their technology usage either frequently or constantly. Second grade students represent the grade with the least perceived frequency of teacher monitoring with 31% of students responding that teachers frequently or constantly monitor online behavior. Student perception of monitoring
subsequently increases by grade level with 36% of 3rd graders, 44% of 4th graders, and 55% of 5th graders choosing frequently or constantly.

In addition to perception data gathered from participants, students were asked grade appropriate multiple-choice questions that corresponded with each Common Sense Media Curriculum topic taught in the digital citizenship unit. On average, Information Literacy presented the topic with the lowest percentage of student mastery while Relationships and Communication represented the highest. Surprisingly, as a whole, student perception data very closely aligned with assessment data, only showing slight differences between perceived and actual mastery of digital citizenship topics. Parent and teacher perception was often well below student assessment scores while administration perception was consistently above.

**Disaggregated Data by Grade Level**

Aligning grade specific student perception questions to their corresponding assessment questions allows for the direct comparison between the two sets of data. Further comparisons are illustrated through disaggregated graphs and charts lining up perception and assessment data of parents, teachers, administration, and each individual grade level.

**Second Grade Data**

For second grader, the largest discrepancy between perception and assessment scores was in Creative Credit and Copyright: 79% of students felt that they search for information safely while only 43% were able to identify the steps
for searching online. This particular topic also represents the lowest mastery scores of any digital citizenship topic for second grade. Digital Footprint averaged 79% mastery, Privacy and Security and Internet Safety each respectively averaged 85%, Information literacy averaged 86%, and Relationships and Communication achieved the highest levels of mastery with an average of 97%. Most notably, 100% of second graders claimed they treat others with respect online and 100% identified specific ways to show respect.

When compared to the perceptions of teachers, parents, and the administration, second grade perceptions were closest to those of teachers in Information Literacy, Creative Credit and Copyright, and Internet Safety while being closest to Parents in Privacy and Security and Creative Credit and Copyright. In the topic of Relationships and Communication, student perception was most closely aligned with the administration. According to the data gathered, all but administration hold the perception that students are the least proficient in Information Literacy. In contrast, this topic boasted the second highest mastery scores from the assessment portion of the second grade survey. In the area of Creative Credit and Copyright, the general perception was highly favorable, however, this topic represented the least amount of second grade students demonstrating mastery.

**Third Grade Data**

In third grade, there were two very notable discrepancies in student perception and assessment scores: Digital Footprint and Reputation and Privacy and Security.
One hundred percent of third graders responded that they were responsible online, yet only 22% were able to articulate the responsibilities they had to their larger online community. Furthermore, while third graders were able to identify powerful passwords, only 58% were able to identify personal information. In looking more closely at the data gathered under the Privacy and Security topic, I find it interesting that 58% correctly identified personal information, yet 91% were able to identify private information. Since questions were taken directly out of Common Sense Media’s Teacher Resources for the Curriculum, this leads me to believe the difference between personal and private information is not adequately addressed in the third grade lessons.

Students in this grade level over estimated their knowledge in four out of six of the Common Sense Media topics. The remaining two topics illustrated only slight differences between perceived mastery and assessed mastery. Parents, on the other hand, underestimated the knowledge of their students on four out of six topics, notably over estimating on Digital Footprint and Reputation mastery, the topic which represents the lowest assessment scores for third grade.

**Fourth Grade Data**

Fourth grade students exhibited the highest discrepancies in Internet Safety and Information Literacy as seen in the side-by-side comparison between perception and assessment questions. Under the topic of Internet Safety, 100% of students were able to identify the proper course of action if accidentally visiting and inappropriate website, however, only 66% of students were able to critically
analyze advertisements to identify the underlying motives of companies. Concerning Information Literacy, 100% of students held the perception that they knew how to tell if websites are trustworthy, yet 59% were actually able to identify common causes for computer viruses. The remaining comparisons between student perception and assessment resulted in very similar results, indicating that 4th grade students are confident, and generally capable, in their digital citizenship skills. Out of all the grades surveyed, fourth grade represented the age group with perception results most closely aligned to administration. Parents had the lowest confidence in student skill in all topics except for Digital Footprint and Reputation where teachers represented the lowest perception data.

Fifth Grade Data

For fifth grade, students were highly confident in their digital citizenship ability according to perception results and exhibited the highest assessment scores overall. Fifth grade students did struggle with Internet Security with only 70% being able to identify if a website protects user privacy and 56% of students bring able to critically analyze advertisements to identify the underlying motives of companies. Considering that 5th graders are most likely of the grades, according to the survey data, to participate in social media and online shopping, this statistic is alarming. Students are vulnerable to sharing private information, such as bank or credit card information, addresses, and more, through unreliable, untrustworthy sites and platforms. Similar to 4th graders, perception data gathered for 5th grade aligns closest to that of the administration at David Broom Elementary School.
Technology Usage at Home

Not surprisingly, a large majority of students and parents reported that the children in their households had access to their own personal technological devices. Parents on average believe their children to spend less than 4 hours a day on the internet at home, 63% reported that time spent was between 0-1 hour. The majority of students surveyed provided similar responses to the parent group, however 20% of students responded as spending 5 or more hours a day on the internet at home. This single statistic becomes much more alarming when combined with the subsequent data gathered identifying large discrepancies in the way the internet is utilized and the frequency of monitoring. The top three responses from parents for the question “How does your child use the internet at home?” were games, school, and reward. Students also reported games and school as one of the top three uses for internet usage at home, but 55% also reported chatting with family or friends. Paired with the 12% of parents reporting seldom or rarely monitoring online behavior as compared to the 44% of students choosing the same responses,

This combined data suggests that students are accessing technology and the internet without their parents’ knowledge/permission and communicating with other people, also without the knowledge or permission of their parents. This potentially poses a threat to the safety and security of the child’s wellbeing, while also making the private information of parents potentially vulnerable to online predators. By disaggregating the questions concerning online technology usage at
home by grade level, we see that in addition to communicating with others online, 44% of 5th graders are engaging in some form of social media (many of which require parental permission for users under specific ages). In itself, social media is not necessarily harmful for children, however, without education, adequate supervision and conversations around respectful and safe behavior, children may be at risk for cyber-bullying, identity theft, and exposure to content that is not age-appropriate.

Specific trends present themselves when the data concerning technology usage is disaggregated by grade level. Overall, as students progress through elementary school their comfort level increases. Furthermore, there are distinct trends in how students are using the internet when at home. Reports of gaming, chatting and school work all steadily increase from second through fifth grade. By the time students reach 5th grade, 81% are using the internet to chat with others. Surprisingly, within the student population surveyed, there is no real trend in the amount of time spent online outside of school.

**Perceived Effectiveness of Common Sense Media**

At the end of surveys sent to parents, teachers and the administration at David Broom Elementary School was a question concerning whether or not each participant felt that the Common Sense Media Curriculum used to educate students in digital citizenship was effective in meeting student needs. Administration’s perception was that the program is effective, while both the parent and teacher groups were less convinced. Parent perception indicated that 44%
chose that the program is effective, 44% chose somewhat effective, and 12% of parents believe that the Common Sense Media Curriculum is not effective. Similarly, 43% of teachers answered effective and somewhat effective respectively, and 14% chose not effective.

**Comparison to the Literature**

The importance of digital citizenship skills has only recently gained recognition from the masses as vital for students as technology availability continues to increase. Due to the relative newness of the topic overall, there have not been any similar studies published that critically evaluate the efficacy of a specific digital citizenship curriculum. However, multiple articles have been published on the importance of digital citizenship skills in general and ideal circumstances for successful implementation based on widely accepted education best practices. Paul Emerich France explains in his article, *Patterns of Interaction*, that digital citizenship “is also important from a young age. Lessons on technological conduct are being implemented in kindergarten. Although these lessons are necessary, it is more critical that they are contextualized and embedded into real-world activities, not offhandedly taught as an aside or touch-and-go lesson” (France, 2016).

At David Broom Elementary, digital citizenship is mainly the responsibility of the Library Media Specialist, though 57% of teachers responded on the survey as providing supplemental Digital Citizenship education in their classrooms as necessary. As the LMS, I do my best to collaborate with teachers to make these
specific units meaningful to students by integrating material from their classrooms; for example, when students begin research projects in their respective classrooms, we will discuss copyright infringement, safe searches, and reliable information. However, France suggests that these lessons would be more meaningful if discussions continuously take place, both at home and at school, as students are able to practice or experience the targeted content.

In addition to repeated meaningful exposure, the literature cited in Chapter Three highlights the importance of teamwork and adequate planning as precursors to successful program implementation. “For digital citizenship education to be successful, it requires a network of educators dedicated to collaboration, common language, and developing a horizontal and vertical alignment of gradually deepening skills” (Preddy, 2016). This can be said of any content subject, but as discussed in the Limitations section below, common language when it comes to digital citizenship skills is difficult to achieve without partnership and communication. With the rapid rate at which technology changes, terms become outdated as quickly as trends in popular apps do. What was seen in the Common Sense Media Curriculum was much confusion over the terms “personal information” and “private information” as the two are often interchangeable outside of the context of the curriculum.

Proper communication is also important to the successful implementation of any program. Clearly, the data illustrates a significant gap in the administration’s perception of student achievement and those held by most everyone else. David
Broom Elementary consistently scores above average on all state testing of core content subjects; subject in which there are ample amounts of longitudinal, historical data on student achievement, specialists that target interventions if necessary, research proven programs, etc. Digital Citizenship has none of that. Having used Common Sense Media as the digital citizenship curriculum for years, I have noticed confusing language, inadequate scaffolding, and gaps in instructional topics. With relatively little turnover at David Broom Elementary School, the teachers have also witnessed this education first hand year after year and seen student behavior reflect potential gaps, or lack of quality in the digital citizenship instruction. It would not be feasible to expect the administration to observe each lesson offered to each grade for digital citizenship. However, if communication concerning the limitations of the digital citizenship curriculum increased, the perceptions may more closely align to those of teachers and parents.

Limitations

Perhaps the largest limitation of this study is present in the nature of surveys themselves. The data heavily relies on the perception of each group of participants and this type of information can be highly unreliable as well as not truly representative of a population. Though student participation was more regulated as classes completed the survey with the supervision of the Library Media Specialist or teacher, I have doubts as to whether the language of student surveys was age appropriate. Parent participation was much less consistent; parents were
sent a link through the school’s bi-weekly E-news as well as given the opportunity to complete the survey on Parent Teacher Conference nights. Neither of these offerings delivered high amounts of participation, and the actual number of parents that took the survey pales in comparison to the number of families that have students enrolled in David Broom Elementary School. In addition, slightly over half of teachers participated in the survey. The version sent out to classroom teachers was done so that responses were anonymous, in hopes of encouraging teachers to respond honestly. Though reminder emails were sent out to the whole, there was no way to identify and target those teachers who had yet to complete the survey.

Since the topic of digital citizenship is still relatively new, there is not any longitudinal data to analyze as exists with other subjects. For example, third grade literacy statistics are often cited as predictors for success later in life, as fourth grade literacy transitions from learning to read to reading to learn. There are no such trends that identify a specific age or digital citizenship skill that serves as a marker for students in need of critical intervention. Moreover, technology has been rapidly evolving, creating a generational gap between students (Digital Natives) and parents (Digital Immigrants). Generally speaking, today’s parents did not always have personal technology devices available at home. Social media did not exist and digital education consisted of fear-based tactics to discourage kids and teens from talking to anyone online. Students today are growing up in a very
different world where technology is integrated into almost all aspects of everyday life.

Further analysis of the assessment portion of the student surveys, reveal that this portion of the data may not be any more reliable than the survey results. Since the questions were directly taken from the Common Sense Media’s Curriculum resources for teachers, they are tailored to assess the mastery of the lesson, not necessarily the mastery of the skill in the context of application. This means, a student may be able to answer a question about safe searches, responsible sharing, or cyberbullying but might not apply this behavior in their personal online experiences.

Again, though students overall performed well on the assessment portion of the survey, the digital citizenship curriculum provided by Common Sense Media may not be the contributor to their success. Survey results show a very technology rich environment outside of David Broom Elementary, which in itself has a 1:1 ratio of student to Chromebook devices in 2nd through 5th grade. The survey questions to parents are limited to the frequency of monitoring and does not include any opportunity for them to identify or discuss how digital citizenship is handled within their household. There is a portion of students that attend child care before and after school sponsored by the district where technology is available for student use. The survey did not take into account if any digital citizenship skills or curriculum were being implemented in this setting either.
Recommendations

First and foremost, additional research is needed. Useful data that would impact the scope of this study would come in the form of discipline referrals and other behavioral data related to online behavior and technology usage. This information would assist in determining if students were practicing the skills taught in the digital citizenship curriculum solidifying application, rather than just being able to regurgitate terminology to answer assessment questions accurately. Additionally, this data along with perception and assessment statistics would need to be tracked over time, through middle and high school, to compare the impact early education has on digital citizenship skills, knowledge and behavior over time. This collective information would be compared to historical behavioral statistics to identify if situations involving technology usage and behavior increased or decreased. Perception data could also be gathered on teachers who have been in district long enough to identify positive or negative trends since the implementation of digital citizenship classes/curriculum.

Reflecting on the surveys created, they were entirely too lengthy. This probably accounts for the poor participation of both the parent and teacher subgroups. Furthermore, the Likert Scale utilized for questions provided limited understanding of results. I believe that incorporating interviews would help to validate and expand perception survey data. For maximum impact, interviews should be conducted to individuals in each sub group of participants as well as small groups or panels. I believe the panel interview portion would allow
participants to feed off each other, potentially bringing to light trends in how digital citizenship is addressed, thoughts about what is necessary and appropriate, as well as concerns about usage. Administration should be present for the panel interviews in order to hear from subgroups and connect more with the current reality of digital citizenship education in the building.

In retrospect, though the surveys were already too long, I wish that I had included more demographic identifying questions on the parent and teacher surveys to further disaggregate the data that was collected. It would have been helpful to be able to match specific grade level teacher perceptions with that of their students instead of just the whole of the teacher population to each disaggregated grade level. I would also have liked to see if teacher comfort level had any impact on their perceptions of student mastery and their perception of effectiveness of the Common Sense Media Curriculum. This too could be compared to the age and number of years of experience. Likewise, it would be more meaningful to align parents of students in specific grade levels to the teacher and student data in that specific grade.

Further research and analysis of available curriculums would benefit this study. With the ever-changing landscape of technology and technology usage in the classroom and beyond, it’s important to take into account the relevance of topics covered by digital citizenship curriculums. Before this year, Common Sense Media had not updated their curriculum since its initial publishing in 2010. For instance, as social media has evolved from solely a place to connect with friends
to an outlet for news, a platform for social justice movements, a marketplace, find micro-communities (those based on interest or life experience that aren’t geographically limited) and more, it’s imperative to keep curriculum current to prepare students to face the barrage of people and situations they face each time they access the internet.

Moving forward, communication will be the primary focus in regard to digital citizenship at David Broom. In an attempt to address the discrepancies between groups in perception survey results, this next year will include a strategic plan to specifically engage parents, teachers, and the administration in meaningful conversations about current digital citizenship curriculum, areas of need, questions, concerns, and overall student progress under each topic. Hypothetically, this will have multiple benefits among which would result in more unified results if an additional perception survey were to be requested. Increased communication would more proactively involve these subgroups in the digital citizenship education of students at David Broom Elementary School, providing increased opportunities for proactive, rather than reactive, interventions targeting specific areas of concern (cyberbullying, social media, etc.).

In addition, a secondary focus will be based on the curriculum itself, specifically those assessment questions on which students performed lowest. Though Common Sense Media’s Digital Citizenship Curriculum will continue to serve as the foundation, additional resources will be brought in to supplement lessons to expose students to a more varied approach to digital citizenship.
education. Such resources will include Google’s Be Internet Awesome for grades 3-5, as well as collaborative lessons with the school counselor using material from Tolerance.org which will address online self-image, identity, and more.

Looking at the big picture, David Broom Elementary, overall, does a fair job of educating students. However, communication as shown by the results of the perception survey, are inconsistent in regard to digital citizenship education. I recommend that this also be a focus for the school as a whole. As the literature states, “For digital citizenship education to be successful, it requires a network of educators dedicated to collaboration, common language, and developing a horizontal and vertical alignment of gradually deepening skills” (Preddy, 2016). Increased communication will not only unify staff, administrations, as well as the student, but will also reinforce skills taught and practice within David Broom at home, as parents will be communicated the tools and language necessary to do so.

My recommendation for the Franklin Howard School District, surrounding districts in Missouri, and all school districts is to develop and integrate a uniform curriculum that addresses the digital citizenship needs of their specific communities. This plan should include carefully constructed curriculum, a cross-curricular implementation plan to ensure continuous exposure to digital citizenship topics in meaningful applications, assessment tools, professional development opportunities for teachers and administrators, common language, and parent outreach. Most importantly, a system for continuous improvement and updating
should be incorporated to ensure that digital citizenship education does not become stagnant or inapplicable to the lives of students.
REFERENCES


Bolkan, J. (2014). 13 resources to help you teach digital citizenship: these websites and books can guide districts in developing a comprehensive acceptable use policy that will give students the tools they need to succeed in school and beyond. *TH E Journal (Technological Horizons In Education)*, (12). 21.


Iste.org. (2017). Infographic: Citizenship in the digital age. [online] Available at:


Noonoo, S. (2014). Digital citizenship for the real world: the digital driver's license is helping students prove that they're ready to navigate the hazards of the Internet. THE Journal (Technological Horizons In Education), (4). 17.


*The Common Sense Census: Media Use by Kids Zero to Eight.* (2017) (pp. 1-64).


1. Creativity and innovation
   Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
   a. Apply existing knowledge to generate new ideas, products, or processes
   b. Create original works as a means of personal or group expression
   c. Use models and simulations to explore complex systems and issues
   d. Identify trends and forecast possibilities

2. Communication and collaboration
   Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
   a. Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media
   b. Communicate information and ideas effectively to multiple audiences using a variety of media and formats
   c. Develop cultural understanding and global awareness by engaging with learners of other cultures
   d. Contribute to project teams to produce original works or solve problems

3. Research and information fluency
   Students apply digital tools to gather, evaluate, and use information.
   a. Plan strategies to guide inquiry
   b. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
   c. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks
   d. Process data and report results

4. Critical thinking, problem solving, and decision making
   Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.
   a. Identify and define authentic problems and significant questions for investigation
   b. Plan and manage activities to develop a solution or complete a project
   c. Collect and analyze data to identify solutions and/or make informed decisions
   d. Use multiple processes and diverse perspectives to explore alternative solutions

5. Digital citizenship
   Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
   a. Advocate and practice safe, legal, and responsible use of information and technology
   b. Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity
   c. Demonstrate personal responsibility for lifelong learning
   d. Exhibit leadership for digital citizenship

APPENDIX A

ISTE Standards
Students

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ISTE STANDARDS
FOR EDUCATORS

Empowered Professional

1. Learner

Educators continually improve their practice by learning from and with others and exploring proven and promising practices that leverage technology to improve student learning. Educators:

a. Set professional learning goals to explore and apply pedagogical approaches made possible by technology and reflect on their effectiveness.

b. Pursue professional interests by creating and actively participating in local and global learning networks.

c. Stay current with research that supports improved student learning outcomes, including findings from the learning sciences.

2. Leader

Educators seek out opportunities for leadership to support student empowerment and success and to improve teaching and learning. Educators:

a. Shape, advance and accelerate a shared vision for empowered learning with technology by engaging with education stakeholders.

b. Advocate for equitable access to educational technology, digital content and learning opportunities to meet the diverse needs of all students.

c. Model for colleagues the identification, exploration, evaluation, curation and adoption of new digital resources and tools for learning.

3. Citizen

Educators inspire students to positively contribute to and responsibly participate in the digital world. Educators:

a. Create experiences for learners to make positive, socially responsible contributions and exhibit empathetic behavior online that build relationships and community.

b. Establish a learning culture that promotes curiosity and critical examination of online resources and fosters digital literacy and media fluency.

c. Mentor students in the safe, legal and ethical practices with digital tools and the protection of intellectual rights and property.

d. Model and promote management of personal data and digital identity and protect student data privacy.
APPENDIX B

Learning Catalyst

4. Collaborator
Educators dedicate time to collaborate with both colleagues and students to improve practice, discover and share resources and ideas, and solve problems. Educators:

a. Dedicate planning time to collaborate with colleagues to create authentic learning experiences that leverage technology.
b. Collaborate and co-learn with students to discover and use new digital resources and diagnose and troubleshoot technology issues.
c. Use collaborative tools to expand students’ authentic, real-world learning experiences by engaging virtually with experts, teams and students, locally and globally.
d. Demonstrate cultural competency when communicating with students, parents and colleagues and interact with them as co-collaborators in student learning.

5. Designer
Educators design authentic, learner-driven activities and environments that recognize and accommodate learner variability. Educators:

a. Use technology to create, adapt and personalize learning experiences that foster independent learning and accommodate learner differences and needs.
b. Design authentic learning activities that align with content area standards and use digital tools and resources to maximize active, deep learning.
c. Explore and apply instructional design principles to create innovative digital learning environments that engage and support learning.

6. Facilitator
Educators facilitate learning with technology to support student achievement of the 2016 ISTE Standards for Students. Educators:

a. Foster a culture where students take ownership of their learning goals and outcomes in both independent and group settings.
b. Manage the use of technology and student learning strategies in digital platforms, virtual environments, hands-on makerspaces or in the field.
c. Create learning opportunities that challenge students to use a design process and computational thinking to innovate and solve problems.
d. Model and nurture creativity and creative expression to communicate ideas, knowledge, or connections.

7. Analyst
Educators understand and use data to drive their instruction and support students in achieving their learning goals. Educators:

a. Provide alternative ways for students to demonstrate competency and reflect on their learning using technology.
b. Use technology to design and implement a variety of formative and summative assessments that accommodate learner needs, provide timely feedback to students and inform instruction.
c. Use assessment data to guide progress and communicate with students, parents and education stakeholders to build student self-direction.

For more information, contact standards@iste.org. ISTE Standards for Educators, ©2017, ISTE® (International Society for Technology in Education), Iste.org. All rights reserved.
APPENDIX C

According to DigitalCitizenship.net (2017), the unabridged Nine Themes of Digital Citizenship are as follows:

1. **Digital Access:** *full electronic participation in society.*

Technology users need to be aware that not everyone has the same opportunities when it comes to technology. Working toward equal digital rights and supporting electronic access is the starting point of Digital Citizenship. Digital exclusion makes it difficult to grow as a society increasingly using these tools. Helping to provide and expand access to technology should be goal of all digital citizens. Users need to keep in mind that there are some that may have limited access, so other resources may need to be provided. To become productive citizens, we need to be committed to make sure that no one is denied digital access.

2. **Digital Commerce:** *electronic buying and selling of goods.*

Technology users need to understand that a large share of market economy is being done electronically. Legitimate and legal exchanges are occurring, but the buyer or seller needs to be aware of the issues associated with it. The mainstream availability of Internet purchases of toys, clothing, cars, food, etc. has become commonplace to many users. At the same time, an equal amount of goods and services which are in conflict with the laws or morals of some countries are surfacing (which might include activities such as illegal downloading, pornography, and gambling). Users need to learn about how to be
effective consumers in a new digital economy.


One of the significant changes within the digital revolution is a person’s ability to communicate with other people. In the 19th century, forms of communication were limited. In the 21st century, communication options have exploded to offer a wide variety of choices (e.g., e-mail, cellular phones, instant messaging). The expanding digital communication options have changed everything because people are able to keep in constant communication with anyone else. Now everyone has the opportunity to communicate and collaborate with anyone from anywhere and anytime. Unfortunately, many users have not been taught how to make appropriate decisions when faced with so many different digital communication options.

4. Digital Literacy: *process of teaching and learning about technology and the use of technology.*

While schools have made great progress in the area of technology infusion, much remains to be done. A renewed focus must be made on what technologies must be taught as well as how it should be used. New technologies are finding their way into the work place that are not being used in schools (e.g., Videoconferencing, online sharing spaces such as wikis). In addition, workers in many different occupations need immediate information (just-in-time information).
APPENDIX C

This process requires sophisticated searching and processing skills (i.e., information literacy). Learners must be taught how to learn in a digital society. In other words, learners must be taught to learn anything, anytime, anywhere. Business, military, and medicine are excellent examples of how technology is being used differently in the 21st century. As new technologies emerge, learners need to learn how to use that technology quickly and appropriately. Digital Citizenship involves educating people in a new way— these individuals need a high degree of information literacy skills.

5. Digital Etiquette: *electronic standards of conduct or procedure*. Technology users often see this area as one of the most pressing problems when dealing with Digital Citizenship. We recognize inappropriate behavior when we see it, but before people use technology they do not learn digital etiquette (i.e., appropriate conduct). Many people feel uncomfortable talking to others about their digital etiquette. Often rules and regulations are created or the technology is simply banned to stop inappropriate use. It is not enough to create rules and policy, we must teach everyone to become responsible digital citizens in this new society.

6. Digital Law: *electronic responsibility for actions and deeds*  
Digital law deals with the ethics of technology within a society. Unethical use manifests itself in form of theft and/or crime. Ethical use manifests itself in the form of abiding by the laws of society. Users need to understand that stealing or
APPENDIX C

causing damage to other people’s work, identity, or property online is a crime. There are certain rules of society that users need to be aware in a ethical society. These laws apply to anyone who works or plays online. Hacking into others information, downloading illegal music, plagiarizing, creating destructive worms, viruses or creating Trojan Horses, sending spam, or stealing anyone’s identity or property is unethical.


Just as in the American Constitution where there is a Bill of Rights, there is a basic set of rights extended to every digital citizen. Digital citizens have the right to privacy, free speech, etc. Basic digital rights must be addressed, discussed, and understood in the digital world. With these rights also come responsibilities as well. Users must help define how the technology is to be used in an appropriate manner. In a digital society these two areas must work together for everyone to be productive.


Eye safety, repetitive stress syndrome, and sound ergonomic practices are issues that need to be addressed in a new technological world. Beyond the physical issues are those of the psychological issues that are becoming more prevalent such as Internet addiction. Users need to be taught that there are
APPENDIX C

inherent dangers of technology. Digital Citizenship includes a culture where technology users are taught how to protect themselves through education and training.


In any society, there are individuals who steal, deface, or disrupt other people. The same is true for the digital community. It is not enough to trust other members in the community for our own safety. In our own homes, we put locks on our doors and fire alarms in our houses to provide some level of protection. The same must be true for the digital security. We need to have virus protection, backups of data, and surge control of our equipment. As responsible citizens, we must protect our information from outside forces that might cause disruption or harm.
APPENDIX D

1. **Inquire, think critically, and gain knowledge.**

   1.1 **Skills**
   
      1.1.1 Follow an inquiry-based process in seeking knowledge in curricular subjects, and make the real-world connection for using this process in own life.
      
      1.1.2 Use prior and background knowledge as context for new learning.
      
      1.1.3 Develop and refine a range of questions to frame the search for new understanding.
      
      1.1.4 Find, evaluate, and select appropriate sources to answer questions.
      
      1.1.5 Evaluate information found in selected sources on the basis of accuracy, validity, appropriateness for needs, importance, and social and cultural context.
      
      1.1.6 Read, view, and listen for information presented in any format (e.g., textual, visual, media, digital) in order to make inferences and gather meaning.
      
   1.1.7 Make sense of information gathered from diverse sources by identifying misconceptions, main and supporting ideas, conflicting information, and point of view or bias.
      
   1.1.8 Demonstrate mastery of technology tools for accessing information and pursuing inquiry.
      
   1.1.9 Collaborate with others to broaden and deepen understanding.
      
   1.2 **Dispositions in Action**
   
      1.2.1 Display initiative and engagement by posing questions and investigating the answers beyond the collection of superficial facts.
      
   1.2.2 Demonstrate confidence and self-direction by making independent choices in the selection of resources and information.
      
   1.2.3 Demonstrate creativity by using multiple resources and formats.
      
   1.2.4 Maintain a critical stance by questioning the validity and accuracy of all information.
      
   1.2.5 Demonstrate adaptability by changing the inquiry focus, questions, resources, or strategies when necessary to achieve success.
      
   1.2.6 Display emotional resilience by persisting in information searching despite challenges.
      
   1.2.7 Display persistence by continuing to pursue information to gain a broad perspective.
      
   1.3 **Responsibilities**
      
      1.3.1 Respect copyright/intellectual property rights of creators and producers.
      
      1.3.2 Seek divergent perspectives during information gathering and assessment.
      
      1.3.3 Follow ethical and legal guidelines in gathering and using information.
      
      1.3.4 Contribute to the exchange of ideas within the learning community.
      
      1.3.5 Use information technology responsibly.
      
   1.4 **Self-Assessment Strategies**
   
      1.4.1 Monitor own information-seeking processes for effectiveness and progress, and adapt as necessary.
      
      1.4.2 Use interaction with and feedback from teachers and peers to guide own inquiry process.
      
      1.4.3 Monitor gathered information, and assess for gaps or weaknesses.
      
      1.4.4 Seek appropriate help when it is needed.
2.1 Skills
2.1.1 Continue an inquiry-based research process by applying critical-thinking skills (analysis, synthesis, evaluation, organization) to information and knowledge in order to construct new understandings, draw conclusions, and create new knowledge.

2.1.2 Organize knowledge so that it is useful.

2.1.3 Use strategies to draw conclusions from information and apply knowledge to curricular areas, real-world situations, and further investigations.

2.1.4 Use technology and other information tools to analyze and organize information.

2.1.5 Collaborate with others to exchange ideas, develop new understandings, make decisions, and solve problems.

2.1.6 Use the writing process, media and visual literacy, and technology skills to create products that express new understandings.

2.2 Dispositions in Action
2.2.1 Demonstrate flexibility in the use of resources by adapting information strategies to each specific resource and by seeking additional resources when clear conclusions cannot be drawn.

2.2.2 Use both divergent and convergent thinking to formulate alternative conclusions and test them against the evidence.

2.2.3 Employ a critical stance in drawing conclusions by demonstrating that the pattern of evidence leads to a decision or conclusion.

2.2.4 Demonstrate personal productivity by completing products to express learning.

2.3 Responsibilities
2.3.1 Connect understanding to the real world.

2.3.2 Consider diverse and global perspectives in drawing conclusions.

2.3.3 Use valid information and reasoned conclusions to make ethical decisions.

2.4 Self-Assessment Strategies
2.4.1 Determine how to act on information (accept, reject, modify).

2.4.2 Reflect on systematic process, and assess for completeness of investigation.

2.4.3 Recognize new knowledge and understanding.

2.4.4 Develop directions for future investigations.
3. Share knowledge and participate ethically and productively as members of our democratic society.

3.1 Skills
3.1.1 Conclude an inquiry-based research process by sharing new understandings and reflecting on the learning.
3.1.2 Participate and collaborate as members of a social and intellectual network of learners.
3.1.3 Use writing and speaking skills to communicate new understandings effectively.
3.1.4 Use technology and other information tools to organize and display knowledge and understanding in ways that others can view, use, and assess.
3.1.5 Connect learning to community issues.
3.1.6 Use information and technology ethically and responsibly.

3.2 Dispositions in Action
3.2.1 Demonstrate leadership and confidence by presenting ideas to others in both formal and informal situations.
3.2.2 Show social responsibility by participating actively with others in learning situations and by contributing questions and ideas during group discussions.
3.2.3 Demonstrate teamwork by working productively with others.
3.3 Responsibilities
3.3.1 Solicit and respect diverse perspectives while searching for information, collaborating with others, and participating as a member of the community.
3.3.2 Respect the differing interests and experiences of others, and seek a variety of viewpoints.
3.3.3 Use knowledge and information skills and dispositions to engage in public conversation and debate around issues of common concern.
3.3.4 Create products that apply to authentic, real-world contexts.
3.3.5 Contribute to the exchange of ideas within and beyond the learning community.
3.3.6 Use information and knowledge in the service of democratic values.
3.3.7 Respect the principles of intellectual freedom.

3.4 Self-Assessment Strategies
3.4.1 Assess the processes by which learning was achieved in order to revise strategies and learn more effectively in the future.
3.4.2 Assess the quality and effectiveness of the learning product.
3.4.3 Assess own ability to work with others in a group setting by evaluating varied roles, leadership, and demonstrations of respect for other viewpoints.
APPENDIX D

4

Pursue personal and aesthetic growth.

4.1 Skills
4.1.1 Read, view, and listen for pleasure and personal growth.
4.1.2 Read widely and fluently to make connections with self, the world, and previous reading.
4.1.3 Respond to literature and creative expressions of ideas in various forms and genres.
4.1.4 Seek information for personal learning in a variety of formats and genres.
4.1.5 Connect ideas to own interests and previous knowledge and experience.
4.1.6 Organize personal knowledge in a way that can be called upon easily.
4.1.7 Use social networks and information tools to gather and share information.
4.1.8 Use creative and artistic formats to express personal learning.

4.2 Dispositions in Action
4.2.1 Display curiosity by pursuing interests through multiple resources.
4.2.2 Demonstrate motivation by seeking information to answer personal questions and interests, trying a variety of formats and genres, and displaying a willingness to go beyond academic requirements.
4.2.3 Maintain openness to new ideas by considering divergent opinions, changing opinions or conclusions when evidence supports the change, and seeking information about new ideas encountered through academic or personal experiences.

4.3 Responsibilities
4.3.1 Participate in the social exchange of ideas, both electronically and in person.
4.3.2 Recognize that resources are created for a variety of purposes.
4.3.3 Seek opportunities for pursuing personal and aesthetic growth.
4.3.4 Practice safe and ethical behaviors in personal electronic communication and interaction.

4.4 Self-Assessment Strategies
4.4.1 Identify own areas of interest.
4.4.2 Recognize the limits of own personal knowledge.
4.4.3 Recognize how to focus efforts in personal learning.
4.4.4 Interpret new information based on cultural and social context.
4.4.5 Develop personal criteria for gauging how effectively own ideas are expressed.
4.4.6 Evaluate own ability to select resources that are engaging and appropriate for personal interests and needs.
Appendix E

Our K-12 Digital Citizenship Curriculum

Kids and teens today are using the immense power of digital media to explore, connect, create, and learn in ways never before imagined. With this power, young people have extraordinary opportunities, and yet they face potential pitfalls, too. Meanwhile, schools are dealing with the associated ramifications — like cyberbullying, digital cheating, and safety and security concerns. These issues underscore the need for students to learn — and for teachers to teach — digital literacy and citizenship skills.

Common Sense Education’s FREE Digital Citizenship Curriculum empowers students to think critically, behave safely, and participate responsibly in our digital world. These 21st-century skills are essential for students to harness the full potential of technology for learning. Taught by classroom teachers, librarians, technology specialists, health educators, and guidance counselors around the world, our K-12 curriculum:

- Introduces reliable, research-based information to students about digital media and their impact
- Offers a comprehensive yet balanced approach in addressing safety and security concerns, including ethics and behavior issues, as well as digital literacy skills
- Includes research-based lessons based on the work of Howard Gardner and the GoodPlay Project at the Harvard Graduate School of Education
- Provides student-centered, media-rich lesson materials that emphasize skill building, critical thinking, ethical discussion, media creation, and decision making to students of all ages
- Addresses the whole community by providing materials to educate parents and families about digital citizenship
- Satisfies criteria for CIPA E-rate compliance
- Aligns to the Common Core State Standards, the International Society for Technology in Education’s National Education Technology Standards (ISTE’s NETS•S), and the American Association of School Librarians (AASL) Standards
- Includes rich professional development resources such as tutorials, videos, and webinars

There are 80 lessons in the full K-12 curriculum, with supporting materials such as student handouts, assessments, educational videos, family tip sheets, and professional development resources. We suggest starting with our Scope & Sequence to determine which approach is right for your students.

Our Scope & Sequence consists of three units for grade bands K-2, 3-5, and 6-8 and four units for Grades 9-12. Each unit is comprised of five lessons, which spiral to address a cross-curricular approach. The units build on each other by reinforcing developmentally appropriate topics. You can use the units either sequentially by grade or at any grade level within this band.

Our curriculum is made available to educators and schools FREE thanks to the generous support of our funders. Browse our educator site to find a plethora of curricular materials. Our education program brings students, families, and educators together to create world-class digital citizens for the 21st-century.
Appendix E

Cross-Curricular Framework

**Privacy & Security**
Students learn strategies for managing their online information and keeping it secure from online risks such as identity thieves and phishing. They learn how to create strong passwords, how to avoid scams and schemes, and how to analyze privacy policies.

**Digital Footprint & Reputation**
Students learn to protect their own privacy and respect others' privacy. Our digital world is permanent, and with each post, students are building a digital footprint. By encouraging students to self-reflect before they self-reveal, they will consider how what they share online can impact themselves and others.

**Self-Image & Identity**
These lessons are designed to help students explore their own digital lives, focusing on their online versus their offline identity. Students learn the benefits and risks of presenting themselves through different personas and the effects on their sense of self, their reputation, and their relationships.

**Creative Credit & Copyright**
Living in a “copy/paste" culture, students need to reflect on their responsibilities and rights as creators in the online spaces where they consume, create, and share information. From addressing plagiarism to piracy, students learn about copyright and fair use.

**Relationships & Communication**
Students reflect on how they can use interpersonal and interpersonal skills to build and strengthen positive online communication and communities. They delve into the concept of digital citizenship and digital ethics, and they reflect on their online interactions.

**Information Literacy**
Information literacy includes the ability to identify, find, evaluate, and use information effectively. From effective search strategies to evaluation techniques, students learn how to evaluate the quality, credibility, and validity of websites, and give proper credit.

**Cyberbullying & Digital Drama**
Students learn what to do if they are involved in a cyberbullying situation. They explore the roles people play and how individual actions—both negative and positive—can impact their friends and broader communities. Students are encouraged to take the active role of upstander and build positive, supportive online communities.

**Internet Safety**
Students explore how the Internet offers an amazing way to collaborate with others worldwide, while staying safe through employing strategies such as distinguishing between inappropriate contact and positive connections. These foundational skills are just the beginning!
Appendix E

GRADES K-2

Scope & Sequence Digital Citizenship Curriculum

Our Scope & Sequence consists of three units for grade bands K-2, 3-5, and 6-8 and four units for grades 9-12. Each unit is composed of five lessons, which spiral to address a cross-curricular approach. The units build on each other by reinforcing developmentally appropriate topics. You can use the units either sequentially by grade or at any grade level within a grade band. Our cross-curricular approach covers:

- Internet Safety
- Privacy & Security
- Relationships & Communication
- Digital Footprint & Reputation
- Self-Image & Identity
- Information Literacy
- Cyberbullying & Digital Drama
- Creative Credit & Copyright

> GET TRAINED: Use our Digital Citizenship Tutorial and professional development resources to learn best practices for teaching digital citizenship to your students.

> TEACH LESSONS: UNIT 1

1. GOING PLACES SAFELY How do you go places safely on the computer?
2. A-Z SEARCHING How can you use the alphabet to find things online?
3. KEEP IT PRIVATE What kinds of information should you keep to yourself when you use the Internet?
4. MY CREATIVE WORK How can you give credit to your own creative work?
5. SENDING EMAIL How do you connect with others through email?

> GIVE ASSESSMENT*

> TEACH LESSONS: UNIT 2

1. STAYING SAFE ONLINE How do you stay safe when you visit a website?
2. FOLLOW THE DIGITAL TRAIL What information is OK to have in your digital footprint?
3. SCREEN OUT THE MEAN What can you do when someone is mean to you online?
4. USING KEYWORDS Which keywords will give you the best search results?
5. SITES I LIKE What makes a website the right site for you?

> GIVE ASSESSMENT*

> TEACH LESSONS: UNIT 3

1. POWERFUL PASSWORDS How do you create a secure password?
2. MY ONLINE COMMUNITY How does the Internet connect you to others?
3. THINGS FOR SALE How do some websites try to get you to buy things?
4. SHOW RESPECT ONLINE How can you make sure your emails are clear and respectful?
5. WRITING GOOD EMAILS How is writing an email similar to or different from writing a letter?

> GIVE ASSESSMENT: Assess your students’ learning of lesson objectives and gauge their understanding and attitudes through Interactive Unit-Level Assessments.

> ENGAGE FAMILIES: Invite parents into the conversation with our Connecting Families program and resources.

www.commonsensemedia.org/educators/scope-and-sequence
## Appendix E

**Grades 3-5**

**Scope & Sequence Digital Citizenship Curriculum**

Our Scope & Sequence consists of three units for grade bands K-2, 3-5, and 6-8 and four units for grades 9-12. Each unit is composed of five lessons, which spiral to address a cross-curricular approach. The units build on each other by reinforcing developmentally appropriate topics. You can use the units either sequentially by grade or at any grade level within a grade band. Our cross-curricular approach covers:

- Internet Safety
- Privacy & Security
- Relationships & Communication
- Digital Footprint & Reputation
- Self-Image & Identity
- Information Literacy
- Creative Credit & Copyright
- Cyberbullying & Digital Drama

**GET TRAINED:** Use our Digital Citizenship Tutorial and professional development resources to learn best practices for teaching digital citizenship to your students.

**ONBOARD STUDENTS:** Introduce students to Digital Passport, our award-winning suite of games that help onboard students to the foundational skills of digital citizenship and internet safety.

### TEACH LESSONS: UNIT 1

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rings of Responsibility</td>
<td>What kinds of responsibilities does a good digital citizen have?</td>
</tr>
<tr>
<td>2</td>
<td>Private and Personal Information</td>
<td>How can you protect yourself from online identity theft?</td>
</tr>
<tr>
<td>3</td>
<td>The Power of Words</td>
<td>What should you do when someone uses mean or scary language on the Internet?</td>
</tr>
<tr>
<td>4</td>
<td>The Key to Keywords</td>
<td>Which keywords will give you the best search results?</td>
</tr>
<tr>
<td>5</td>
<td>Whose is it, Anyway?</td>
<td>How can you show respect for other people's work?</td>
</tr>
</tbody>
</table>

**GIVE ASSESSMENT**

### TEACH LESSONS: UNIT 2

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strong Passwords</td>
<td>How can a secure password help you protect your private information?</td>
</tr>
<tr>
<td>2</td>
<td>Digital Citizenship Pledge</td>
<td>How do you create a positive online community?</td>
</tr>
<tr>
<td>3</td>
<td>You've Won a Prize!</td>
<td>What is spam, and what can you do about it?</td>
</tr>
<tr>
<td>4</td>
<td>How to Cite a Site</td>
<td>How do you cite different types of online sources?</td>
</tr>
<tr>
<td>5</td>
<td>Picture Perfect</td>
<td>How can photos be changed on the computer, and how can that affect your feelings about the way you look?</td>
</tr>
</tbody>
</table>

**GIVE ASSESSMENT**

### TEACH LESSONS: UNIT 3

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Talking Safely Online</td>
<td>What's the difference between Internet friends and in-person friends?</td>
</tr>
<tr>
<td>2</td>
<td>Super Digital Citizen</td>
<td>How can people help others be good digital citizens?</td>
</tr>
<tr>
<td>3</td>
<td>Privacy Rules</td>
<td>How do you know if a website protects your private information?</td>
</tr>
<tr>
<td>4</td>
<td>What's Cyberbullying?</td>
<td>What is cyberbullying, and how do you deal with it?</td>
</tr>
<tr>
<td>5</td>
<td>Selling Stereotypes</td>
<td>How do we learn stereotypes of boys and girls from media messages?</td>
</tr>
</tbody>
</table>

**GIVE ASSESSMENT**

Assess your students’ learning of lesson objectives and gauge their understanding and attitudes through Interactive Unit-Level Assessments.

**ENGAGE FAMILIES**

Invite parents into the conversation with our Connecting Families program and resources.

[www.commonsensemedia.org/educators/scope-and-sequence](http://www.commonsensemedia.org/educators/scope-and-sequence)
Appendix F

Student Survey Questions

- 2nd grade
  o I know how to create a secure password.
    ▪ Yes – No
  o I know how to tell if a website is just right for me.
    ▪ Yes – No
  o I make smart choices when I am online.
    ▪ Yes – No
  o I know what to do if I accidentally go to an inappropriate website.
    ▪ Yes – No
  o I know how to tell if a website is trustworthy.
    ▪ Yes – No
  o I search for information safely.
    ▪ Yes – No
  o I know the difference between personal and private information.
    ▪ Yes – No
  o I know what kinds of information is ok to share online.
    ▪ Yes – No
  o I know the right way to talk to people online.
    ▪ Yes – No
  o I treat others with respect when online
    ▪ Yes – No
  o I know what to do when I see a cyber bully.
    ▪ Yes – No
  o Which is the MOST powerful password?
    ▪ Cats – password – tomsComputer – H1ghF1v3!
  o To tell if a website is right for you, which questions should you ask yourself?
    ▪ Do I like the subject? – Do I like the pictures? – What can I buy?
  o Who could you talk to online?
    ▪ Short answer
  o How do you stay safe on the internet?
    ▪ Only talk to people you know – look for trouble – tell an adult if you think something is wrong – follow rules – ignore problems
  o What should you do if you come across a website that is inappropriate?
    ▪ Don’t tell anyone – close the page & tell an adult – save the page – click on links on the page
  o What is one trick that websites use to get you to buy their products?
    ▪ Dictionary – keywords – homework – games
  o What are the steps for searching online? Put the steps in correct order.
- Type keywords into the search box – open a search site – click the search button
  - What kinds of information is ok to share online?
    - Personal information – private information
  - What information is ok to share online?
    - Your username – home address – birthday – favorite color
  - What information is not ok to share online?
    - Your username – home address – birthday – favorite color
  - How can you show respect to others?
    - Take turns talking – make fun of people – Say Thank you
  - Who is a cyber bully?
    - A teacher who gives you an online homework assignment – a friend who sends you a photo of a tiger – a person who writes a mean joke about you online – a neighbor who invites you to her birthday party
  - Do you have your own device at home? (ipad, tablet, laptop/computer, phone)
    - Yes – No
  - How much time do you spend on the internet at home?
    - 0-1 hour a day – 2-4 hours a day – 5+ hours a day
  - How do you use the internet at home? Check all that apply
    - School work – chatting with friends/family – games – shopping – social media – other (explain)
  - How comfortable are you using the internet by yourself?
    - Very comfortable – Comfortable – Uncomfortable – Very Uncomfortable
  - How often does your teacher monitor your online behavior?
    - Constantly – Frequently – Occasionally – Seldom - Rarely
  - How often do your parents monitor your online behavior?
    - Constantly – Frequently – Occasionally – Seldom - Rarely

  [3rd]
  - I know how to create a secure password.
    - Yes – No
  - I know how to tell if a website is just right for me.
    - Yes – No
  - I am responsible when I am online.
    - Yes – No
  - I know what to do if I accidentally go to an inappropriate website.
    - Yes – No
  - I know how to tell if a website is trust-worthy.
    - Yes – No
- I search for information safely.
  - Yes – No
- I know the difference between personal and private information.
  - Yes – No
- I know what kinds of information is ok to share online.
  - Yes – No
- I know the right way to talk to people online.
  - Yes – No
- I treat others with respect when online
  - Yes – No
- I know what to do when I see a cyber bully.
  - Yes – No
- Which is the MOST powerful password?
  - Cats – password – tomsComputer – H1ghF1v3!
- To tell if a website is right for you, which questions should you ask yourself?
  - Do I like the subject? – Do I like the pictures? – What can I buy?
- What responsibilities do you have to your LARGER COMMUNITY online?
  - Standing up to cyberbullying – protecting my password – not giving out my phone number – giving credit for the information I find online
- What information could an identity thief use to steal your identify?
  - Credit card number – street address – favorite class
- What should you do if you come across a website that is inappropriate?
  - Don’t tell anyone – close the page & tell an adult – save the page – click on links on the page
- What is one trick that websites use to get you to buy their products?
  - Dictionary – keywords – homework – games
- Which keywords would work best to search for information about ‘Healthy Eating’?
  - Nutrition – hits – music – recipes
- What kinds of information is ok to share online?
  - Personal information – private information
- Which information is personal?
  - Favorite food – dog’s name – phone number – street address
- Which information is private?
  - Favorite food – dog’s name – phone number – street address
- How can you show respect to others?
  - Take turns talking – make fun of people – Say Thank you
- Which would be the BEST way to respond to a mean message you got online?
- Argue with the sender face to face – share the message with your friends – send a mean message back to the sender – talk to a parent or family member about the message

- Do you have your own device at home? (ipad, tablet, laptop/computer, phone)
  - Yes – No

- How much time do you spend on the internet at home?
  - 0-1 hour a day – 2-4 hours a day – 5+ hours a day

- How do you use the internet at home? Check all that apply
  - School work – chatting with friends/family – games – shopping – social media – other (explain)

- How comfortable are you using the internet by yourself?
  - Very comfortable – Comfortable – Uncomfortable – Very Uncomfortable

- How often does your teacher monitor your online behavior?
  - Constantly – Frequently – Occasionally – Seldom - Rarely

- How often do your parents monitor your online behavior?
  - Constantly – Frequently – Occasionally – Seldom - Rarely

- I know how to create a secure password.
  - Yes – No

- I know how to tell if a website is just right for me.
  - Yes – No

- I am respectful and responsible when I am online.
  - Yes – No

- I know what to do if I accidently go to an inappropriate website.
  - Yes – No

- I know how to tell if a website is trust-worthy.
  - Yes – No

- I search for information safely.
  - Yes – No

- I know the difference between personal and private information.
  - Yes – No

- I know what kinds of information is ok to share online.
  - Yes – No

- I know the right way to talk to people online.
  - Yes – No

- I treat others with respect when online
  - Yes – No

- I know what to do when I see a cyber bully.
  - Yes – No
Which answer is the MOST LIKELY reason why the company chose a photo where the player looks like he is flying?
- It is the best way to show an image of the shoes – kids might think that the shoes will make them jump very high – it looks like a real basketball game – it shows that the model is a good basketball player

What should you NOT include in your password?
- Numbers – symbols – your first name – nonsense words

As a member of an online community, you should be ______ to others.
- Mean – respectful – perfect - quiet

How does a good digital citizen act in an online community?
- Teases others online – communicates kindly with others – uses others’ work without giving credit – respects others’ ideas – stands up to cyberbullying

What should you do if you come across a website that is inappropriate?
- Don’t tell anyone – close the page & tell an adult – save the page – click on links on the page

What can cause your computer to get a virus?
- Turning it on and off too much – not cleaning it – playing your favorite game on it – clicking on an unknown email link

Which keywords would work best to search for information about ‘Healthy Eating’?
- Nutrition – hits – music – recipes

What kinds of information is ok to share online?
- Personal information – private information

Which information should always be kept private?
- Favorite color – home address – favorite animal – hobbies – school name – full name

Which information is OK to share?
- Favorite color – home address – favorite animal – hobbies – school name – full name

How can you show respect to others?
- Take turns talking – make fun of people – Say Thank you

Which would be the BEST way to respond to a mean message you got online?
- Argue with the sender face to face – share the message with your friends – send a mean message back to the sender – talk to a parent or family member about the message

Do you have your own device at home? (ipad, tablet, laptop/computer, phone)
- Yes – No
o How much time do you spend on the internet at home?
  ▪ 0-1 hour a day – 2-4 hours a day – 5+ hours a day

o How do you use the internet at home? Check all that apply
  ▪ School work – chatting with friends/family – games – shopping – social media – other (explain)

o How comfortable are you using the internet by yourself?
  ▪ Very comfortable – Comfortable – Uncomfortable – Very Uncomfortable

o How often does your teacher monitor your online behavior?
  ▪ Constantly – Frequently – Occasionally – Seldom - Rarely

o How often do your parents monitor your online behavior?
  ▪ Constantly – Frequently – Occasionally – Seldom - Rarely

  5th
  o I know how to create a secure password.
    ▪ Yes – No
  o I know how to tell if a website is just right for me.
    ▪ Yes – No
  o I am respectful and responsible when I am online.
    ▪ Yes – No
  o I know what to do if I accidently go to an inappropriate website.
    ▪ Yes – No
  o I know how to tell if a website is trust-worthy.
    ▪ Yes – No
  o I search for information safely.
    ▪ Yes – No
  o I know the difference between personal and private information.
    ▪ Yes – No
  o I know what kinds of information is ok to share online.
    ▪ Yes – No
  o I know the right way to talk to people online.
    ▪ Yes – No
  o I treat others with respect when online
    ▪ Yes – No
  o I know what to do when I see a cyber bully.
    ▪ Yes – No
  o What should you NOT include in your password?
    ▪ Numbers – symbols – your first name – nonsense words
  o Which answer is the MOST LIKELY reason why the company chose a photo where the player looks like he is flying?
    ▪ It is the best way to show an image of the shoes – kids might think that the shoes will make them jump very high – it looks like a real
basketball game – it shows that the model is a good basketball player

○ As a member of an online community, you should be ______ to others.
  ▪ Mean – respectful – perfect – quiet

○ How does a good digital citizen act in an online community?
  ▪ Teases others online – communicates kindly with others – uses others’ work without giving credit – respects others’ ideas – stands up to cyberbullying

○ What should you look for when deciding if a website protects your privacy?
  ▪ Look for a link to the privacy policy – look for games and pictures – look for a link to contact someone if you have questions about privacy – look for a chat room where you can share your private information – look for a seal of approval

○ What can cause your computer to get a virus?
  ▪ Turning it on and off too much – not cleaning it – playing your favorite game on it – clicking on an unknown email link

○ Which keywords would work best to search for information about ‘Healthy Eating’?
  ▪ Nutrition – hits – music – recipes

○ What kinds of information is ok to share online?
  ▪ Personal information – private information

○ Which information should always be kept private?
  ▪ Favorite color – home address – favorite animal – hobbies – school name – full name

○ Which information is OK to share?
  ▪ Favorite color – home address – favorite animal – hobbies – school name – full name

○ How can you show respect to others?
  ▪ Take turns talking – make fun of people – Say Thank you

○ What advice could you give to a friend who is being cyberbullied?
  ▪ Block the cyberbully from your friends list – don’t tell anyone because it’s tattling – post mean messages about the cyberbully online – save and print the cyberbullying messages – talk to your real friends for support

○ Do you have your own device at home? (ipad, tablet, laptop/computer, phone)
  ▪ Yes – No

○ How much time do you spend on the internet at home?
  ▪ 0-1 hour a day – 2-4 hours a day – 5+ hours a day

○ How do you use the internet at home? Check all that apply
- School work – chatting with friends/family – games – shopping – social media – other (explain)
  - How comfortable are you using the internet by yourself?
    ▪ Very comfortable – Comfortable – Uncomfortable – Very Uncomfortable
  - How often does your teacher monitor your online behavior?
    ▪ Constantly – Frequently – Occasionally – Seldom - Rarely
  - How often do your parents monitor your online behavior?
    ▪ Constantly – Frequently – Occasionally – Seldom - Rarely
Appendix G

**Teacher Survey Questions**

- I am confident that my students make safe, responsible choices online.
  - o Strongly Agree – Agree – Disagree – Strongly Disagree
- I trust that my students’ online behavior is age appropriate.
  - o Strongly Agree – Agree – Disagree – Strongly Disagree
- My students understand the components of strong passwords
  - o Strongly Agree – Agree – Disagree – Strongly Disagree
- My students know how to tell if websites are age-appropriate
  - o Strongly Agree – Agree – Disagree – Strongly Disagree
- My students know what to do if they encounter inappropriate content online
  - o Strongly Agree – Agree – Disagree – Strongly Disagree
- My students are able to identify reliable websites
  - o Strongly Agree – Agree – Disagree – Strongly Disagree
- My students ethically use information found online
  - o Strongly Agree – Agree – Disagree – Strongly Disagree
- My students can search for information safely online
  - o Strongly Agree – Agree – Disagree – Strongly Disagree
- My students know the difference between personal and private information
  - o Strongly Agree – Agree – Disagree – Strongly Disagree
- My students know what kinds of information is appropriate to share online
  - o Strongly Agree – Agree – Disagree – Strongly Disagree
- My students can communicate effectively while online
  - o Strongly Agree – Agree – Disagree – Strongly Disagree
- My students are respectful to others when communicating online
  - o Strongly Agree – Agree – Disagree – Strongly Disagree
- On average, how often are your students online in your classroom?
  - o Frequently throughout the day – Some throughout the day – Seldom throughout the day – Weekly – Rarely
- How do students use the internet/technology in your classroom? Check all that apply.
- How do you use the internet/technology in your classroom? Check all that apply.
  - o Direct Instruction – Interactive Activities (for example SMARTboard) – Google for Education Suite (Google Classroom or similar online meeting platform) – Other (explain)
- How comfortable are you with integrating technology into your classroom practices?
  - o Very Comfortable – Comfortable – Uncomfortable – Very Uncomfortable
- How closely do you monitor your students’ behavior when using technology?
Constantly – Frequently – Occasionally – Seldom - Rarely

• How long have you been teaching?
  o 0-3 years – 4-6 years – 6-10 years – over 10 years

• Do you provide any digital citizenship education to supplement the Common Sense Media Curriculum taught by the LMS?
  o No - Yes (if so explain)

• I believe the Common Sense Media Digital Citizenship Curriculum
  o Is effective in teaching my students digital citizenship
  o Is somewhat effective in teaching my students digital citizenship
  o Is not effective in teaching my students digital citizenship
Appendix H

**Parent Survey Questions**

- I am confident that my child makes responsible choices online.
  - Strongly Agree – Agree – Disagree – Strongly Disagree
- I trust that my child’s online behavior is age appropriate.
  - Strongly Agree – Agree – Disagree – Strongly Disagree
- My child understands the components of strong passwords
  - Strongly Agree – Agree – Disagree – Strongly Disagree
- My child knows how to tell if websites are age-appropriate
  - Strongly Agree – Agree – Disagree – Strongly Disagree
- My child knows what to do if they encounter inappropriate content online
  - Strongly Agree – Agree – Disagree – Strongly Disagree
- My child is able to identify websites with reliable information
  - Strongly Agree – Agree – Disagree – Strongly Disagree
- My child ethically uses information found online (cites sources, does not download illegally, etc.)
  - Strongly Agree – Agree – Disagree – Strongly Disagree
- My child can search for information safely online
  - Strongly Agree – Agree – Disagree – Strongly Disagree
- My child knows the difference between personal and private information
  - Strongly Agree – Agree – Disagree – Strongly Disagree
- My child knows what kinds of information is appropriate to share online
  - Strongly Agree – Agree – Disagree – Strongly Disagree
- My child is respectful to others when communicating online
  - Strongly Agree – Agree – Disagree – Strongly Disagree
- On average, how often is your child online when at home?
  - 0-1 hour a day – 2-4 hours a day – 5+ hours a day
- How does your child use the internet/technology while at home? Check all that apply.
  - Reward – game/ free time – homework – other (explain)
- How comfortable are you with technology?
  - Very Comfortable – Comfortable – Uncomfortable – Very Uncomfortable
- How closely do you monitor your child’s behavior when using technology?
  - Constantly – Frequently – Occasionally – Seldom - Rarely
- I believe the Common Sense Media Digital Citizenship Curriculum provided at Daniel Boone
  - Is effective in teaching my child digital citizenship
  - Is somewhat effective in teaching my child digital citizenship
  - Is not effective in teaching my child digital citizenship
- My child has their own device or access to a device that they can use to get on the internet
  - Yes - No
Appendix I

Admin Survey Questions

- I am confident that students at my school make safe, responsible choices online.
  - Strongly Agree – Agree – Disagree – Strongly Disagree
- I trust that students at my school’s online behavior is age appropriate.
  - Strongly Agree – Agree – Disagree – Strongly Disagree
- Students at my school understand the components of strong passwords
  - Strongly Agree – Agree – Disagree – Strongly Disagree
- Students at my school know how to tell if websites are age-appropriate
  - Strongly Agree – Agree – Disagree – Strongly Disagree
- Students at my school know what to do if they encounter inappropriate content online
  - Strongly Agree – Agree – Disagree – Strongly Disagree
- Students at my school know the difference between personal and private information
  - Strongly Agree – Agree – Disagree – Strongly Disagree
- Students at my school know what kinds of information is appropriate to share online
  - Strongly Agree – Agree – Disagree – Strongly Disagree
- Students at my school can communicate effectively while online
  - Strongly Agree – Agree – Disagree – Strongly Disagree
- Students at my school are respectful to others when communicating online
  - Strongly Agree – Agree – Disagree – Strongly Disagree
- On average, how often do you think students are online while at school?
  - Frequently throughout the day – Some throughout the day – Seldom throughout the day – Weekly – Rarely
- How do students use the internet/technology in your building? Check all that apply.
- How do teachers use the internet/technology in your building? Check all that apply.
• Direct Instruction – Interactive Activities (for example SMARTboard) – Google for Education Suite (Google Classroom or similar online meeting platform) – Other (explain)
• How comfortable do you believe teachers are with integrating technology into classroom practices?
  o Very Comfortable – Comfortable – Uncomfortable – Very Uncomfortable
• How closely do teachers monitor students’ behavior when using technology?
  o Constantly – Frequently – Occasionally – Seldom - Rarely
• I expect teachers to provide supplemental digital citizenship education in addition to the Common Sense Media Curriculum taught by the LMS.
  o No - Yes (if so explain)
• I believe the Common Sense Media Digital Citizenship Curriculum
  o Is effective in teaching my students digital citizenship
  o Is somewhat effective in teaching my students digital citizenship
  o Is not effective in teaching my students digital citizenship
Appendix J

FRANCIS HOWELL SCHOOL DISTRICT
4545 Central School Road ▪ St. Charles, MO 63304-7113
Phone: 636-851-4000 ▪ Fax: 636-851-4093 ▪ www.fhschools.org

June 20, 2018

Meredith Bates
12882 Somerton Ridge Dr.
Creve Coeur, MO 63141

Dear Meredith,

You have permission to conduct a research study within the Francis Howell School District to evaluate the digital citizenship curriculum provided by Common Sense Media. Your explanation highlighted why there was a professional need to research digital education programs to determine if students are receiving foundational skills to be successful in an ever growing technological society. As you outlined in your request, you will include the use of surveys of students, parents, teachers, and administrators at Daniel Boone Elementary School.

You have indicated that your research will involve student use of the digital resource, Common Sense Media, during normally scheduled library class time. You have indicated that this resource has been used as part of your lessons conducted during learning commons time, previously. You also indicated that all data collected that may reveal the names of parents, students, staff, and school buildings will be removed and kept confidential.

I wish you the best on your study, which promises to provide valuable research information to the field of education in general and to the Francis Howell School District in particular.

Sincerely,

David Brothers
Director of Assessment and Summer Programs
Francis Howell School District

CC: Nicole Whitesell, Chief Academic Officer

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