

Developing Digital Literacy Among High School Civics Students

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**WE, THE UNDERSIGNED MEMBERS OF THE GRADUATE FACULTY OF
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*and hereby certify that in our opinion it is worthy of acceptance as partial fulfillment
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Chapter 1. Introduction

Throughout my youth, I was a part of a low-income family. Growing up poor was challenging. This was especially true in my schooling. In grade school the concept of being poor did not bother me. It was not until junior high and high school that I began to realize how much I struggled academically and I worried about what my friends would think of hanging out with the poor kid. What I lacked in money, I made up for with my personality. I also made the best of the resources provided; however, we did not have a computer at home. Many of the papers that my teachers preferred to be typed and printed; I would hand write on lined paper. My handwriting was neat and legible. Internet access was out of the question. Any time I needed to complete research for an assignment; I would use the computers in the library. However, they were only available during school hours and I would have to arrive early to school in order to have access before class. Otherwise, I would have to ask for special permission from my teacher to have computer access during class time.

Luckily, I graduated from school in the early 2000's. High speed internet was in its infancy and social media was a few years from making its debut. My first cellphone did not have a touchscreen and I had to endure having limited minutes. Text messaging was hardly a concept. The integration of technology in the classroom and lessons were limited. I still remember the overhead projector being the primary source that was used to convey information to the entire class. Handwritten notes were still passed between students as our way to coordinate messages to each other about where to meet up for lunch.

Fast forward twenty years, I am approaching my 40's and have chosen to return to school in order to continue my education. This is also picking up from where I left off after graduating with my Bachelor's in History ten years ago. One of my goals after graduating was to pursue a

teaching career. However, that goal was delayed after taking a job in a call center; working for a cell phone company. I worked for the same company for nearly nine years. It was a good job and I had developed into a great customer service representative. My ability to read policy and to retain it, only to recall it at a moment's notice when it was requested by a customer was the stuff of legends. I worked through the pandemic years and a couple years after. It was then I had decided I was burned out and did not want to continue my career there.

I took a leap and landed a job in the school district. I started out as an Instructional Assistant, working in a middle school. At first there was a bit of a culture shock. Each room was fitted with 80 inch smart televisions. This had taken the place of the old school projector and even the white board in many cases. And instead of carrying books, notebooks, pencils, and calculators; from class to class. These students were fashioned with touchscreen Chromebooks. I was also surprised to learn that students accessed their lessons using a program called Canvas. Officially, my mind was blown after seeing the amount of change that had taken place in school. School had become totally dependent on technology. Students were now required to complete their assignments online with the help of the internet. Therefore, if they do not have internet at home, their homework would need to be completed at school. Otherwise, it does not get done at all.

Additionally, I noticed that having worked in middle school and now as a student teacher in a high school; cell phones have become extraordinarily mainstream. From sixth graders to high school seniors, many students have a smart device. The predominant expectation from the school district is that the students should have their devices off and put away. However, many students disobey these instructions and attempt to get away with simply sliding their phone into their back pocket. The consensus is that cell phones create a distraction and affect the students

ability to connect with the lessons, teachers, and peers. However, they also provide a wealth of knowledge at their fingertips; along with their Spotify playlists and TikTok.

Another challenge that has become mainstream is fake news and misinformation. Often, hidden in the form of legit new articles and shared across social media; students (and adults) are fooled into clicking links or sharing them. Thus, misinformation is spread. Therefore, it is important to develop internet literacy and teach students the importance of research and evaluating sources. Internet literacy is crucial for developing students into responsible digital citizens. This is especially important as school curricula are becoming more technologically driven. It is equally important to teach our students how to navigate the internet and complete research.

Students have become experts at looking up games and sites they are not supposed to. However, when it comes to quality research students have difficulty. There are a select number of students that have adapted themselves. However, other students may require additional support. Techniques such as basic internet safety and ethical internet use are good building blocks for teaching internet literacy. Additionally, we should be teaching students how to find reliable sources online and to utilize critical thinking when on the internet. When students learn these basic techniques; they will potentially be better decision makers when choosing what to share on social media.

Guiding Pedagogical Theory

Digital literacy as a concept was first introduced by Gilster (1997). Initially, digital literacy referred to a person's "ability to understand and use information in multiple formats from a wide range of sources with it being presented via computers" (Gilster, 1997, p. 1). However, over time the definition of digital literacy has changed and includes teaching students how to be

more knowledgeable in an ever increasing digital world and to become more information literate. It now includes how students learn and interact with the world around them. Additionally, there has been a greater emphasis placed on teaching students about privacy, safety, and ethical use of technology. Technology has become a staple in the modern classroom and it has been integrated into the curriculum. Therefore, it is crucial that as educators, we must teach our students how to make sense of digital media and the internet. In other words if teachers can teach their students to adopt thoughtful and lasting consumption habits it will increase their ability to engage meaningfully and contribute to their communities (Heick, 2022). This means that students should be provided with frequent opportunities to interact with technology and digital media. The more they are exposed to digital media the goal will be that they develop competency and critical thinking.

There are four principles of digital literacy: comprehension, interdependence, social factors, and curation (Heick, 2022). The first principle is comprehension. This means that students should be able to analyze and extract ideas that are both inferred and clearly stated. Interdependence shows us how one source of media connects to another be it potentially, metaphorically, ideally, or literally (Heick, 2022). Essentially, media is created and is interconnected with other platforms. The third principle is social factors. This principle involves the success rate of a piece of digital media; based on how it is shared and with whom. Finally, the fourth principle is Curation. To avoid overwhelming potential users with excessive information or ‘digital hoarding,’ collaborative curation should be used. This allows people to work together to discover, gather, and organize information (Heick, 2022). Social media platforms such as twitter and instagram, among others, are filled with content that its users save in their timelines and share with the public.

In addition to the four principles of digital literacy, there are also five pillars of digital literacy. The information they both display regarding digital literacy compliment each other. As we educate ourselves and our students, mastering these five pillars will help to ensure competency. The first pillar is information and data literacy. This pillar includes developing the skills needed to be critical and use appropriate judgment when reviewing sources and content. It also bases competency on the ability to retrieve data and other information. The second pillar is communication and collaboration. The idea is to be mindful of cultural and generational differences while using digital technologies and work toward better engagement, communication, and collaboration (Evans, 2024) This pillar is essential to developing a positive digital image and reputation. Digital content creation is the third pillar of digital literacy. This pillar relies on the creation of new content and the ability to render it into a final product. However, it is also crucial to do so while ensuring that copyright laws are not violated. The fourth pillar of digital literacy is safety. The goal is to protect devices, content, personal data, and privacy in digital environments (Evans, 2024). Essentially, it is crucial to be vigilant of the information that is uploaded to the internet and the personal information that is shared. Finally, the fifth pillar is problem solving. This pillar is based on teaching our students how to be up to date with technology and use digital tools for innovation.

Looking back at my own education history, I have great empathy for students that are not well off socio-economically. And as the world of education becomes more technologically driven. It is surely going to leave some students behind. Some students lack access to internet devices outside of the classroom. Other students lack access to the internet outside of the school setting. Thus, they are at a great disadvantage when compared to their classmates who have access to all of the necessary resources and tools. As we recognize the digital divide is

expanding, and that students in the regions without access to the internet and technology face difficulties in participating economically and politically (Hick & Turner, 2013). Thus, as the digital gap continues to grow, lower income students are not as competitive in the digital age. However, just providing technology and the internet is not enough to become digital literate. In order for teachers to be effective, we must develop our own digital literacy to effectively support our students to develop their own digital literacy.

Digital literacy as a theory is appropriate to guide my study because technology in the classroom is most definitely here to stay. As educators, it is our responsibility to ensure that our students have the tools they need to succeed in the digital world. This means as a student in the classroom. However, it is also important to their long term development outside of the classroom. Digital literacy points out all of the competencies that students should learn. Additionally, it helps to point out discrepancies and sheds light on situations that require more support. Moreover, the overall goal is to establish ourselves and our students as global citizens. It is essential to understand your own identity and role in the world. This is beneficial for students to start gaining awareness of different perspectives (Bali and Brown, 2020). Teaching our students about digital literacy will help them become empathetic to the world around them. It will also help them develop critical thinking skills needed to navigate the digital world.

Connection to InTASC Standards

My instructional goal align with the following InTASC (2013) standards:

- Standard #2: Learning Differences

“The teacher designs instruction to build on learners’ prior knowledge and experiences, allowing learners to accelerate as they demonstrate their understanding” (p. 17).

“The teacher brings multiple perspectives to the discussion of content, including attention

to learners' personal, family, and community experiences and cultural norms" (p. 17).

- Standard # 3: Learning Environments

"The teacher develops learning experiences that engage learners in collaborative and self-directed learning and that extend learner interaction with ideas and people locally and globally" (p. 21).

- Standard #5: Application of Content

"The teacher facilitates learners' ability to develop diverse social and cultural perspectives that expand their understanding of local and global issues and create novel approaches to solving problems" (p. 27).

Digital Literacy fits into standard #2(c) and 2(d) because it is based on developing our students' background knowledge and building upon it. As students enter a secondary social studies classroom; it is presumed that they have some experience with using technology and the internet. And our goal is to build upon their foundation the building blocks to navigate the web critically and complete better research. Additionally, in order to become better digital citizens, it is important to teach our students to be curious about the world around them. Furthermore, digital literacy aligns with standard #3(g) by encouraging students to collaborate together in the classroom, but also digitally using social media. Social media platforms allow students to interact with other students across the globe and gain a deeper understanding of different cultures and perspectives. Finally, digital literacy aligns with standard #5(g) because as our students continue to develop their digital literacy skills, it is important that they also develop an understanding of the issues in their communities and the world. And as digital citizens, they work together to problem solve based on the perspectives they have learned.

Summary

Based on my personal journey in education both as a learner and an educator, I believe that digital literacy is very much needed. Throughout my education, it took me several years after graduating high school to develop the skill needed to be digital literate. And it is an ongoing process. The world around us is constantly changing and evolving. Technology is driving much of that evolution, and in order to become a digital citizen, it is crucial to evolve your own thinking. Public education is also among the areas that is constantly evolving. The demand for increasing technology in the classroom and curriculum is creating a situation where teachers are being made to adapt rather quickly. On the other hand, students are exposed to technology at earlier ages than in the past. However, their comprehension of digital literacy is lacking. Throughout this study, I will be using the InTASC standards to help my students increase their understanding of the world around them and to develop skills to become critical thinkers capable of discerning facts from fiction and problem solving effectively.

Chapter 2. Review of Relevant Research and Scholarship

The need to provide our students with an opportunity to learn digital literacy is extraordinarily important. As our classrooms and curriculum become more technologically driven, the need to develop our students' digital literacy increases. Over the course of my research, I am hoping to learn more about how other scholars have incorporated digital literacy into their instruction. The articles that I have selected deal with topics such as the impact of social media and misinformation on Facebook. I have selected other articles that discuss the digital divide and inequalities in communities/ classrooms. In these cases, their focus is the socioeconomic status of students and their families. I used articles that were accessible from Western Oregon's library. I used terms such as literacy, digital literacy, internet literacy, and digital citizenship. I chose the articles largely because of their titles and the content in their abstracts.

Annotated Bibliography

Tan, S. C., Voogt, J., & Tan, L. (2024). Introduction to digital pedagogy: A proposed framework for design and enactment. *Pedagogies: An International Journal*, 19(3), 327–336.
<https://doi.org/10.1080/1554480x.2024.2396944>

Tan et al (2024) investigate the use of digital pedagogy as it relates to the development of teachers and how they integrate technology into the classroom. The authors scoured over several articles regarding the subject and came to their conclusions empirically. Their findings were analyzed through the lens of digital technology pedagogy. The authors conclude that although digital technologies can be applied in classroom settings, the challenge is how digital pedagogy is taught. Additionally, they point out that a contributing factor to the success of digital pedagogy

is based on teachers' attitudes regarding technology in the classroom and their own willingness to develop their own digital competence.

This article was very impactful on my teaching and understanding of how digital pedagogy may be used in educational settings because it focuses on several aspects of teaching and learning digital pedagogy. The strengths of the article were the evidence they used to support their concepts and they provided several examples of the ways in which digital pedagogy can be implemented in the classroom. Thinking critically about the article, I would suggest that authors provide a better analysis of the role social-economics plays on digital pedagogy. It would be beneficial to point out the widening digital gap among students.

Fauville, G. (2015, march 28). *Can Facebook be used to increase scientific literacy? A case study of the Monterey Bay Aquarium Research Institute Facebook page and ocean literacy*. Computers & Education. <https://www.sciencedirect.com/science/article/abs/pii/S0360131514002504?via%3Dihub>

Fauville (2015) examined the effect of social media and how different platforms can influence digital literacy, particularly Facebook. The authors combined quantitative and qualitative methods such as discourse analysis and semi-structured interviews. Their findings were analyzed through a lens of sociocultural perspective of learning and knowing. The authors concluded that by communicating with the public via social media, it can have an impact on their ability to develop literacy skills. Additionally, they point that social media has the potential to raise the interest and engagement of its users regarding any particular topic for the sake of developing digital literacy.

This article was very impactful on my teaching and understanding of how social media may be used to influence digital literacy because it points out the benefit of having debate and

dialog in a public arena. And when dialogue and debate is fostered in a public space it can enhance critical thinking and communication skills. This article allowed me the opportunity to view social media platforms differently. They can serve as a vehicle for the exchange of diverse perspectives. And when social media platforms are approached thoughtfully, they can engage our students in purposeful conversations. This is important when the goal is to cultivate digital literacy and engagement.

Granruth, L. B., & Pashkova-Balkenhol, T. (2018). The Benefits of Improved Information Literacy Skills on Student Writing Skills: Developing a Collaborative Teaching Model with Research Librarians in Undergraduate Social Work Education. *Journal of Teaching in Social Work*, 38(5), 453–469. <https://doi.org/10.1080/08841233.2018.1527427>

Granruth and Pashkova-Balkenhol (2018) examined ways to strengthen the information literacy and writing skills of undergraduate students. The authors worked collaboratively with other librarians to develop a curriculum that emphasised information literacy skill development, writing as a process, and writing and information literacy as professional skills. They measured students' progress via pretest and post-test. Granruth and Pashkova-Balkenhol concluded that overall the students that participated in the survey showed improvement. Additionally, they are working to update their curriculum in order to incorporate assignments that are meant to improve their students ability to identify similarities and differences of scholarly sources.

This article was very impactful on my teaching and understanding of how important information literacy and writing skills are for students in academic settings. These skills are crucial for developing the skills needed to excel in a professional arena. This is especially true regarding teaching the skills that are necessary for navigating a world dominated by digital content. Additionally, the article highlighted the importance for students to develop the skills needed to source, evaluate, and summarize content. This will be beneficial as they begin to

communicate their ideas through writing. As students begin to equip these skills, it will be beneficial for their academic performance and translate to all areas of their life outside of academics.

Hicks, T., & Turner, K. H. (2013). No longer a luxury: Digital Literacy can't wait. *English Journal*, 102(6), 58–65. <https://doi.org/10.58680/ej201324042>

Hicks and Turner (2013) point out that there is a digital gap across a socioeconomic line. This gap in large part affects students' access to internet use and therefore it also impacts their digital literacy. Their findings were analyzed through a lens of digital literacy, with a great deal of emphasis on the digital divide among poorer schools/ districts. The authors concluded that the digital gap is split across a socioeconomic line and internet access is a big part of what allows students to grow their digital literacy. Additionally, they suggest that it is not enough to have the means and to use technology in schools. However, they point out that in order for teachers to be effective, we must also develop our own digital literacy.

This article was very impactful on my teaching and understanding of how digital literacy may be used in educational settings because it is important to understand the socioeconomic backgrounds of my students. This plays an essential role in how some students access and utilize different digital tools and other resources. Additionally, understanding the diverse backgrounds of students will allow me the opportunity to provide a variety of teaching strategies so that all students will have an opportunity to engage; regardless of their socioeconomic status. This article helped to reinforce the importance of taking the background of my students into consideration. Addressing economic disparities is crucial when developing a curriculum that strives to be both inclusive and equitable.

Kozyreva, A., Lewandowsky, S., & Hertwig, R. (2020). Citizens Versus the Internet: Confronting Digital Challenges With Cognitive Tools. *Psychological Science in the Public Interest*, 21(3), 103–156. <https://doi.org/10.1177/1529100620946707>

Kozyreva et al (2020) analyzed the role of psychology and the impact that the internet and digital landscapes have on average consumers. Their findings were analyzed through the lens of psychology. They emphasized personal anatomy regarding one's ability to use technology and create their own sense of digital literacy. The authors concluded that there are at least four aspects that will help to lead to a digital transformation. They believe that academics should be updated in order to compete with other communication apps. Speed plays an important role, as technology is constantly evolving. Thus, implication of changes to technology should be anticipated at a greater degree. And finally, they believe that there should be a greater degree of regulation regarding advancements in technology.

This article was very impactful on my teaching and understanding of the role psychology plays in digital literacy and how there is an imbalance of information and misinformation on the internet. Additionally, it shapes the ways in which we process and interact with information we read online. It also points out the role psychology plays when sourcing credible information compared to unreliable sources. This is based on cognitive biases, emotional responses and other influences regarding how students engage with material they find online. This article also points out the increasing imbalance between credible information and misinformation that we find online. Thus, it is important to prepare students to evaluate the information they find online in addition to helping them hone their digital literacy skills. It will be necessary to incorporate lessons on critical thinking and self-awareness in order to prepare students to be more mindful of the information they consume from the internet.

Pangrazio, L., Godhe, A.-L., & Gonza'lez Lopez Ledesma, A. (2020, July 30). *What is Digital Literacy? A comparative review of publications ...* Sage journals.
<https://journals.sagepub.com/doi/10.1177/2042753020946291>

Pangrazio et al (2020) analyzed the definition of digital literacy and how it has been conceptualized among scholarship. The authors used a systematic review process to determine three keys to digital literacy. They first identified relevant research for mapping. Secondly, they critiqued the research. Finally, they synthesized their findings. Their findings were analyzed through a lens of digital literacy. Pangrazio et al (2020) concluded that digital literacy should be approached from a critical pedagogy perspective. Additionally, they point out that digital literacy should be tailored to the needs of individual teachers and their students.

This article was very impactful on my teaching and understanding of how digital literacy may be used in educational settings because it can be integrated into curriculum and tailored to students' needs. The article pointed out the benefits of digital literacy and how it can be a skill that is included in the curriculum. One benefit of digital literacy in curriculum is that it can be tailored to fit the needs of several students who may need differentiated instruction. For example, when incorporating digital tools such as providing access to the powerpoints during direct instruction; students will have options available to them to stay engaged in the content. Additionally, digital literacy is not limited to one kind of support, however it can be customized to fit many unique accommodations and learning styles. Other supports that can be offered are to help students navigate research databases or support to critically evaluate the sources they find online. Essentially speaking, when digital literacy is used thoughtfully, it can be tailored to the different needs of students and used as a powerful tool.

Punjani, K. K., & Mahadevan, K. (2022). Transitioning to online learning in higher education: Influence of Awareness of COVID-19 and Self-Efficacy on Perceived Net Benefits and

Intention. *Education and Information Technologies*, 27(1), 291–320.
<https://doi.org/10.1007/s10639-021-10665-2>

Punjani and Mahadevan (2022) examined the effects that COVID-19 had regarding online learning and the impacts that it had on student computer and internet self-efficacy. They also looked into the perceived net benefits of students' online communication self-efficacy. Punjani and Mahadevan reviewed the data of 1023 students across multiple universities in India. Their findings were analyzed through a lens of structural equation modeling. The authors concluded that there were several variables such as shutdowns related to COVID-19 and the students being from higher education that could have impacted the study. However, the results showed that there was a net benefit for the self-efficacy of students completing online learning.

This article was very impactful on my teaching and understanding of how COVID-19 impacted online learning. Educators and students across multiple countries were having to take on extra responsibilities because of shutdowns. The article pointed out that the shift to online learning was met with challenges for both instructors and students; on their academic, social, and emotional wellbeing. This was attributed to the lack of face-to-face interaction and isolation from their peers and teachers. Additionally, there were many students that did not have access to technologies that left them at a disadvantage. Some students struggled with access to the internet and suitable learning environments at home. COVID-19 created an opportunity that displayed a need for digital literacy and it prompted a reflection of the traditional methods of teaching.

Sun, C., Liu, J., & Xu, Y. (2023). Who Benefits More from Online Learning? An Empirical Study on Postgraduates' Online Knowledge- Sharing Behavior. *Frontiers of Education in China*, 18(3), 267-. <https://doi.org/10.3868/s110-008-023-0022-5>

Sun et al (2023) investigated digital literacy by reviewing online knowledge sharing. They focused on social structure and individual initiative. Sun et al analyzed 501 surveys they received over the course of three months. Their findings were analyzed through a lens of information literacy. The authors concluded that online knowledge sharing was based on a few factors related to their upbringing. Additionally, if the student grew up with access to technology, they displayed more attributes for online learning.

This article was very impactful on my teaching and understanding of how online learning may be used in educational settings to help my students build upon their digital literacy skills. The strengths of the article were drawing on the evidence they received from the student surveys and making the connection to their knowledge sharing. They also highlight some disadvantages that some students may face based on their lack of internet access growing up. The lack of internet attributes to significant disadvantages for students and their development of digital skills. This article also points out there is a need for discussions regarding equity and access to education in public schools. Finally, this article showed that through the socioeconomic disadvantages, it is crucial to create learning environments that are more inclusive for all students.

Tirado-Morueta, R., Aguaded-Gómez, J. I., & Hernando-Gómez, Á. (2018). The socio-demographic divide in Internet usage moderated by digital literacy support. *Technology in Society*, 55, 47–55. <https://doi.org/10.1016/j.techsoc.2018.06.001>

Tirado-Morueta et al (2018) point out that socioeconomic status plays an important role in the access to the internet; in turn affecting digital literacy. They completed their study by using quota sampling. Their findings were analyzed through a lens of statistical analysis while focusing on the socioeconomic status of their sample. The authors concluded that internet literacy of those sampled was based on having physical access to the internet, if it was used in their daily life, or

if they used it for more complex activities. Additionally, their access to the internet was based on their socioeconomic status.

This article was very impactful on my teaching and understanding of how the digital divide and access to the internet affects my students and their digital literacy. Additionally, the article points out that having access to technology and a reliable internet connection is crucial for students as they develop their digital literacy skills. Students that have limited or no access to the internet at home have an increased risk of challenges when attempting to be engaged in online learning, getting assignments completed, and developing essential digital literacy skills. Essentially, the students without internet access miss out on crucial practice needed to increase their critical thinking skills and are less adept at navigating digital spaces. The unfortunate outcome of the digital gap is that student digital literacy suffers as the world becomes more dependent on technology. As educators, it is becoming increasingly crucial to develop an inclusive curriculum that is inclusive and accessible to all; and helps to bridge the gap between the digital divide.

Vorobel, O., Voorhees, T. T., & Gokcora, D. (2021). Language learners' digital literacies: Focus on students' information literacy and reading practices online. *Journal of Computer Assisted Learning*, 37(4), 1127–1140. <https://doi.org/10.1111/jcal.12550>

Vorobel et al (2021) investigated the use of technology and the internet as it pertains to language learners' literacy. The authors completed the study over a period of three months. Their sample included five English language learners. Their findings were analyzed through an ecological perspective lens. The authors concluded that language learners utilized technology to search for information online. Using this same method, they were evaluated based on their engagement and reading practices.

This article was very impactful on my teaching and understanding that technology may be used in educational settings because of the impact it has for English language learners. It points out that using technology as a tool in the classroom typically has a positive impact on our ELL students. While using technology in the classroom, ELL students have an enhanced rate of language acquisition and deeper engagement. ELL students who can understand the content in the classroom while using translation tools will have an easier time bridging language gaps. Additionally, when we encourage the use of technology in the classroom, ELL students can work at their own pace, return to prior lessons, and practice their language skills with more accessibility. Translation tools that are made available to ELL students for class assignments can also increase peer to peer collaboration; which will help both their language practices and their social interactions.

Summary

The common thread that ties these articles together is digital literacy. Additionally, another commonality is that of socioeconomic status. In several of the articles, they point out that access to both technology and internet access is based on one's socioeconomic status. It is not enough to have a computer at home, if you can not afford to have internet access. Or if you live in an area that does not have access as a whole; such as rural areas. However, for those that have access to the internet, it will typically help to lead to higher levels of digital literacy and a deeper understanding of internet literacy. Additionally, by integrating technology in the classroom, it will help to increase engagement and language proficiency among ELL students.

In my classroom all of the students have been provided access to Chromebooks. They get to use their devices in the classroom and in their homes as needed. One way that I am attempting to increase my students' digital literacy and technology skills is by integrating technology into

the majority of their daily learning activities. For instance, my classroom has a large smart tv positioned in the front of the room. I use this screen daily when displaying the daily agenda and powerpoints for direct instruction. Recently, I had my students decorate their notebook covers. The instructions were to create a collage using either google slides or canva. I was very impressed with several of the students' covers. Many of them appeared to use Canvas relatively effortlessly; whereas others required more hands-on instruction. Another way that technology is integrated into the classroom is through the learning management system. We use Canvas. It allows for all lessons and direct instruction to be posted prior to class. Students have access to preview lessons and review during class; the benefit is it allows students to follow along at their own pace while still taking in the lecture.

Chapter 3. Methods

Action research is the process of collecting and analyzing data through a reflection process, under the guise of problem solving. Sagor states (2000) that action research is a teaching practice that relies on reflections by teachers through the lens of a pedagogical theory in their teaching environment and data collection. One best practice to ensure that teachers are continuously sharpening their teaching practices is through research. Additionally, Sagor (2000) points out seven steps for completing action research: selecting a focus, clarifying theories, identifying research questions, data collection, data analysis, and reporting. By selecting a focus this gives teachers an opportunity to confirm what they believe to be a challenge in the classroom.

Selecting a focus is where the action research starts (Sagor (2000)). The focus is going to be the topic and major theme of the research. It is our job to select what we identify as an area that needs improvement. By selecting this focus our goal will be to enhance or change it through our teaching practices and how it impacts our learning environment. The next step is to clarify our theories. This step requires us to identify the theoretical perspectives and how they relate to our central focus. The third step is to identify the research questions. In this step our goal is to select the questions that will be guiding our research. Collecting data is step four. The author points out that, “professional educators always want their instructional decisions to be based on the best possible data” (p. 4). During the data collection process, one best practice is to collect as much data as possible and avoid relying on a single source. Next teachers will analyze their data. The goal here is to identify trends and patterns. Step six is to report the results. In this step teachers will collaborate with other teachers either one on one, in meetings, or during conferences. Finally, the seventh step is to take informed action. In other words, to establish a

routine in the classroom based on finding the initial area that was in need of improvements and work towards improving it.

As I have entered into my clinical year, I have reviewed the classroom since the beginning of the school year. Initially, I felt like an outsider as I looked in and just observed the classroom. Now that I have taken a more active role in the classroom and have built positive relationships with my students, I am interested in improving the internet literacy of my students. I am currently assigned to an American Government and Civics class. A large portion of the curriculum is developing a sense of civic responsibility and completing research projects/ current events. From my observations, I have seen that my students currently have all the skills needed to complete effective research and to cultivate sources. The following research questions will be guiding my study:

- How does teaching students about internet literacy impact their ability to conduct quality research?
- How does quality internet literacy skills develop students into responsible civic and digital citizens?

Context of the Study

I am currently a teacher candidate at North South High (NSH) in an urban area of Oregon. According to the Oregon Department of Education report card (2024), the school has approximately 1,700 students. The school hosts a diverse student body, however, the majority of students are white. They make up 63.5% of the student population. There are also several ethnicities represented in the school. Hispanic/ Latino students make up the next largest group of students at 23.5% of the school population. Asian students make up 3%, Black/African American students make up 1.6%, Pacific Islander students make up 1.3%, and Native American students

make up 1% of the student population. Additionally, NSH has 34 languages spoken by its students at school. The population of English Language Learners is 13%. The school sees students from 9th to 12th grades. According to the Oregon Department of Education report card, NSH has 21% of its students who are experiencing poverty. The classroom for my study has 19 students with one 12th grader and eighteen 11th graders. Thirteen of the students identify as male and six of the students are female. The demographics of the classroom are 15 white students, 2 Hispanic/latino students, and 2 students with two or more ethnicities. There are two students who are identified as talented and gifted and two students who have a IEP/504 plan.

This group of students in my class are very much what you might expect out of any typical high class. There are students who quickly bonded over aspects of their life outside of school. There is a group of boys who bonded over video games and board games. They have since become assets for one another in class and help and encourage each other during structured work time. There is another group of boys who were all three teammates on the NSH football team. They bonded over their love of sports and brought that same enthusiasm to the classroom, although, admittedly, conversations can get off topic. There is a group of girls who bonded over their taste in music and that they are both artistic and love to draw. There is even a pair of twin boys in the class. After meeting them, I discovered that they were born in Hawaii, moved to Las Vegas and have now relocated to Oregon. Academically, the majority of students are meeting at grade level and a few are excelling above grade level. A couple of my students are on track to graduate as juniors. There are two TAG students in the class who have turned out to be great models for academic behavior and they work very well and thrive in small groups. Ironically, the two boys who are on IEP/504 plans are paired up with the two TAG boys and they help each other quite a bit.

I have been at NSH since the beginning of the 2024-2025 school year. I have had the privilege to work with several different and talented students since then. However, the most recent group of students that I am working with, I have had in class since the start of NSH's second term in February of 2025. I will continue to work with them for the remainder of the school year. My strengths include building relationships. I am working toward being a warm demander. However, I am very kind and approachable. I find that students gravitate toward me. I am also a great advocate for my students and I have developed a very inclusive classroom environment. For the areas that I could use some improvement, those include some minor behavioral management issues. I am working on being more teacherly and bringing necessary conversations to a one on one basis. Another area of improvement is developing a deeper understanding of my students outside of the classroom and reaching out to families for more cultural awareness of their students.

Data Collection and Analysis

Over the course of collecting data from my students, I have been focusing on collecting as many types of data that I can. Sagor (2000) points out that, "various kinds of teacher records are valuable sources of data" (p. 76). The majority of the data that I have collected has been throughout the school year, however, the unit plans and student data will be from February to June 2025. This unit will cover what was taught over a two week period. It will include data such as notebook entries, reflections, summaries, and exit tickets. I believe that this data will be valuable to show the depth of students' learning and improvement as the unit becomes more student centered. More data will be collected later on throughout the term as we move into more research driven assignments and projects.

I will be focusing on using *triangulation* for collecting and analyzing data. This means that I will be using multiple independent data sources to analyze my findings (Sagor, 2000). In addition to using the unit plan and data collected from that; I will also be reviewing data collected from my own observations and the notes that I have collected. I will also be completing interviews with the students and collecting data from surveys. When it comes time to analyze the data collected, I will be sorting and categorizing the information and critiquing it for what the story is my data tells me and who might the story be explained (Sagor, 2000). Once that section is complete, I will have my clinical site teacher and my university supervisor to review my work. Then I may begin action planning. Which is to say how I will implement my pedagogical theory and work toward improving my student's performance. In addition, I reviewed how my students' socioeconomic demographic affected their access to the internet at home, different resources that are available to them outside of school, and the frequency that they are utilizing the resources provided to them outside of school.

Researcher Personality

I am a white cis-gendered male from a low-income family. I have spoken to my students about my background in order to humanize myself and relate to them. I attended public school and grew up in the same town as the school I am teaching in right now. I also grew up in a single mother household and I had an older brother and two younger siblings. I was one of those students who found a home at school among my friends, fellow classmates, and the teammates I had. Growing up without a father figure was challenging. Therefore, I looked up to many of the coaches I had between football and wrestling as role models. Now that I am stepping into the same role, as a teacher and a coach, I wish very much that my students and athletes will look up to me like I did my teachers and coaches.

I believe that my background will help me to relate to my students' fund of knowledge and some of their cultural backgrounds. I have always been open with my students about where I come from in an effort to make connections with them. I think it is important for them to see that I understand their struggles and experience and I hope this encourages them to allow me to meet them where they are. With the hope to help them elevate their self-esteem and confidence in the classroom. With having a similar upbringing to some of my students, I believe it will be helpful with my data collection and analysis.

Chapter 4. Findings

There were three major themes that emerged from analyzing the data. They are enhancing and integrating digital literacy in the classroom, developing digital citizens, and internet literacy and research. Each theme is discussed with supportive data.

Integrating Digital Literacy in the Classroom

One theme that remained constant throughout my clinical practice was finding new ways to integrate digital literacy in the classroom. As I began taking over more responsibilities in the classroom; I also had to decide how each unit would be taught. A decision that I made early on was that I was going to make use of the smart TV and the online classroom shell. I did this by publishing the daily lectures and activities. This provided my students with access to the materials before class; if they desired to take a sneak peak. Additionally, this provided an opportunity for students who were absent from class access to the notes and activities. I encouraged my students to make up work on their own when absent from class. For students in class, they have access to the lecture and Google Slides which gives them the opportunity to follow along with the notes at their own pace. This was made possible because of the school district having provided every student with a Chromebook to use throughout the school year.

Another way that I integrated digital literacy into the classroom was by having my student complete mini research exercises. One routine that I developed over the course of the year was reflections and summaries. As we began our unit on the Three Branches of Government, every section of notes began with a warm up question. I used this as a way to assess my students prior knowledge on the topic we were about to study. On the first day of this unit, I wanted to gauge what my students had learned from the last unit regarding their study habits and expectations of the class. I did this by having them complete a unit reflection. The

prompt was; “How did your understanding or performance improve from the first unit to the next during this term? What changes did you make in how you studied, participated, or approached the class that helped you grow?” The answers I received were varied. Some of my students took their time and wrote out long thoughtful responses. Other students hurried their response and only wrote a sentence or two. One response that I received was; “I liked taking notes at my own pace. I changed by learning how to write faster and how to keep my notes more organized...”(Student A). Another student reflected by saying; “last unit I did not pay attention because I wouldn’t take notes of lectures at my old school. I have learned how to do that. I started to review the slideshows presented at home and I would try to come to class with energy and an open mind...” (Student B)

This unit reflection was helpful because it helped me understand how my teaching style was impacting my students' learning. It also helped me to understand that the routine of providing the slides before class was beneficial. Additionally, this reflection helped me to see my students' academic growth from the first unit of the term to the next. Several students wrote in their reflections about how they had become more confident in class and that they had developed a better understanding of the classroom and lesson expectations. For some students, the reflection showed me where they still had opportunities and it allowed me to have one on one conversations with them about their grades and goals for the remainder of term.

Another way that we practiced digital literacy in the classroom was through current events. Nearly every Monday would be devoted to having a handful of students present a current event and lead a belief class discussion. The goal of current events was to condition students to be interested in the news surrounding politics and break up the monotony of lecturing every day. When I introduced this assignment, I began by having a class discussion around the question;

“what are current events?” Being that many of my students were juniors and seniors, they were not strangers to the idea of current events as they had participated in other classes that used a similar method in an attempt to have students be informed. I asked the students where they would typically find and consume the news. I was not surprised when I received answers that were generic like, “the internet.” Other responses were more predictable as to where they consumed their news. These responses included several social media platforms such as; Facebook, Instagram, Youtube, and Twitter/X. After discussing where they found their news, we began discussing how to tell if a source is credible when selecting their news article.

This discussion led into an impromptu lesson about finding sources and utilizing currency, reliability, authority, accuracy, and purpose (CRAAP test). As a class I demonstrated looking up articles with a simple Google search. I modeled the information we were looking for to determine if a source was credible or not. After a couple of demonstrations and discussion, I released the students to find their own sources and use the test to determine if they were credible sources. Their goal was to find three news articles using the CRAAP test and write down their findings. Next they were tasked with writing a brief summary of one of their articles and to practice writing discussion questions. From my observations I noticed that many of my students caught on to which sites should be used compared to others, when looking up news articles. I noticed that many of the students were using sites that ended in a .gov or .org. Finally, as a class we compiled a list of credible websites that considered reliable sources for sourcing articles that could relate back to the American government. The students then signed up for the Monday that they would present their current event.

Developing Digital Citizens

A second theme that was reoccurring during my data collection was the need to develop digital citizenship among my students. Essentially, as the semester progressed I noticed that another of my goals would be to teach students how to be responsible, ethical, and informed participants in an increasingly digital world. Thus, teaching them to understand their rights and responsibilities online, how to engage respectfully, and use technology to participate in a civil manner. Besides the fact that technology in the classroom is here to stay, I noticed the need to develop my students' digital citizenship after having them complete an internet survey for the class. The survey was designed to understand student habits, knowledge, and critical thinking skills when using the internet. The emphasis was on civic engagement, news, and research.

As I was administering the survey I made certain to ask my students to be honest with their answers and that there would be no judgement or negative repercussions. Based on the results, I believe that some students were more honest than others, but the results were interesting to say the least. The survey consisted of thirteen questions; twelve multiple choice and one short answer. Several of the multiple choice questions allowed the students to check all that applied. During the day the survey was completed in class there were fifteen students in attendance and four absent students. I asked the students how many hours per day they would typically spend online, excluding school hours. In Figure 1 below, the reader will see results how

students answered the survey.

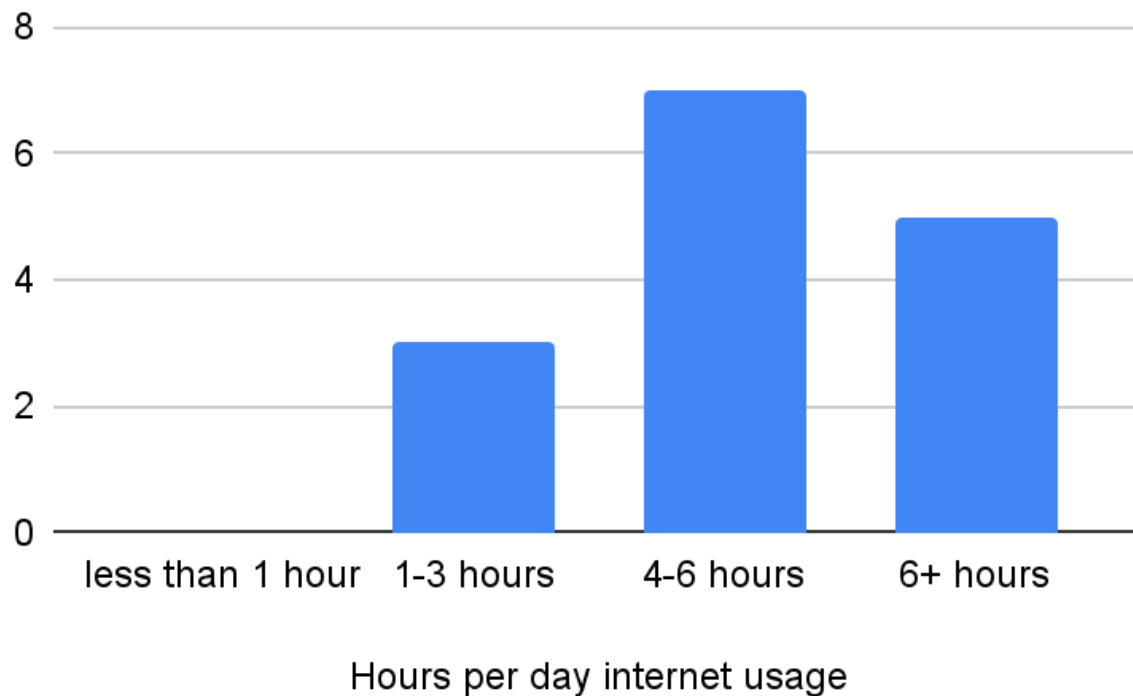


Figure 1: student internet usage

The reader will notice that the majority of the students surveyed admitted that they use the internet, outside of school, more than 4 hours or more each day. I found this statistic to be interesting but I was not surprised by the results.

The next question allowed students to select all that applied for the activities they participated in online. While creating this survey I imagined the activities that my students spent the majority of their time doing. This was based on my observations in addition to my own online habits. These habits include watching videos, playing games, using social media, and reading news articles. I also added a selection for research and homework. Figure 2: shows the results of this question and how my students spend their time online.

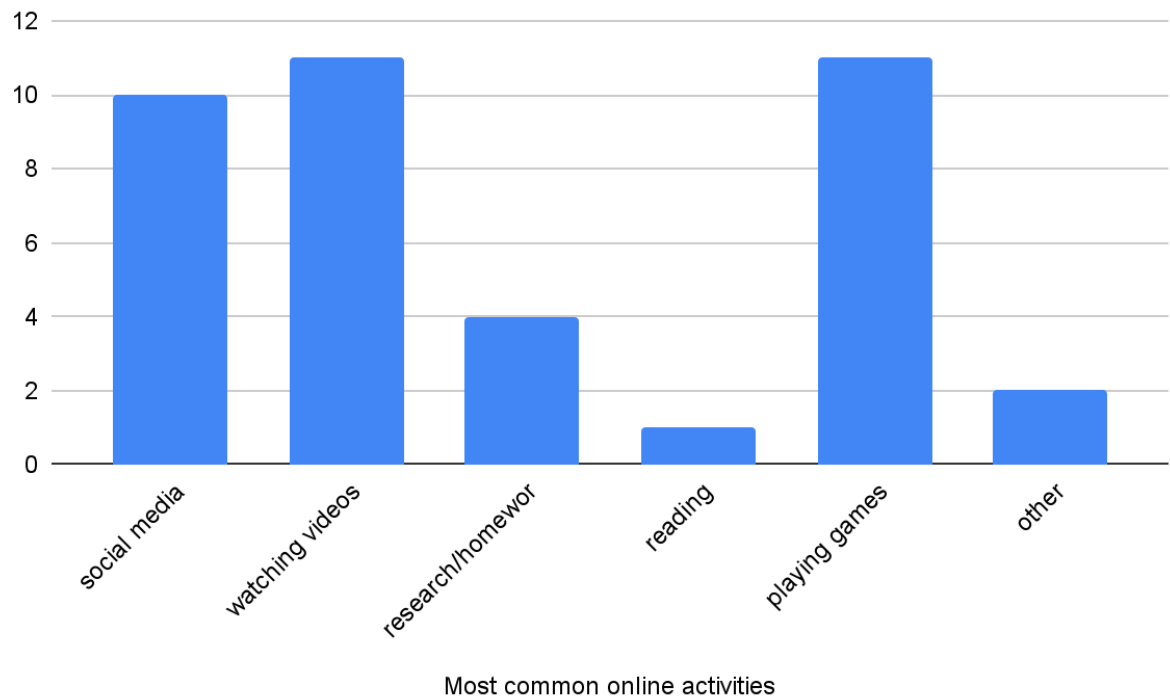


Figure 2: online activities

The reader will notice that the majority of students spend their time between social media, watching videos, and playing games while online. Out of the fifteen students that participated in the survey only four of them said they use their time online to complete research for homework. These results were interesting because they were predictable. As I observed students during class work time, I found that when students would get off task they were either playing a game on their Chromebook or watching videos. I also noticed that students were quick to change their screens as I circulated the classroom and interacted with different students.

One statistic that I found particularly interesting is that when asked what type of devices they use to access the internet; 80% said they only use their smartphones. Of the fifteen students surveyed, only three of them mentioned that they do not have a smartphone. Therefore, they use a tablet or their school provided Chromebook to access the internet outside of school. Table 1

shows the results of a survey that asked students which type of devices they used to access the internet outside of school hours.

Devices	Number of Students	Percentage
Smartphones	12	80%
Laptop	5	33%
Desktop	2	13%
Tablet	2	13%
Other i.e. Chromebook, Gaming system	3	20%

Table 1: Internet devices most often used by students outside of school

The reader will notice that most students use smartphones disproportionately compared to other internet devices.

The next questions in the survey focused on information evaluation. When asked about whether they can identify if a website/ article is trustworthy; the majority of the students I surveyed said they were somewhat confident of their abilities. Figure 3 shows the breakdown of how students self rate their abilities. Only four of the students said they were ‘very confident’

and one student said they were ‘not confident at all’.

Confidence for telling if a website is credible

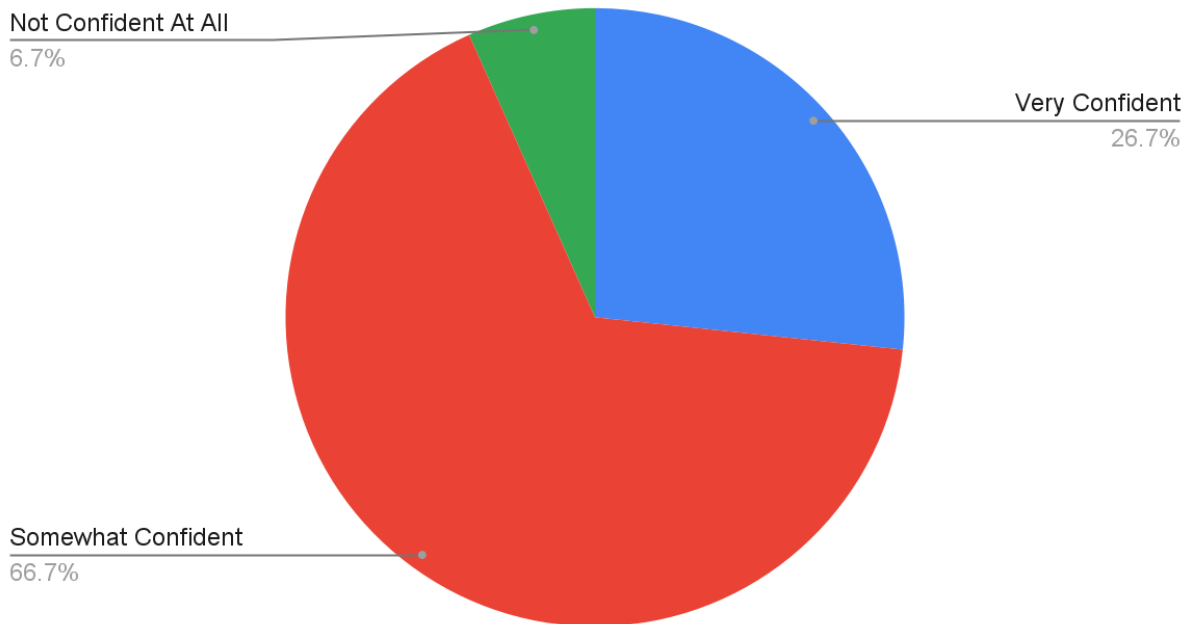


Figure 3: Confidence determining website credibility

The reader will notice that based on the students' self reporting; they were not fully confident in their ability to determine the credibility of websites when conducting research.

The next question asked students what strategies they used to check if information online was reliable. Students were allowed to select multiple answers regarding the strategies they use. The strategies made available to choose from were checking the author's credentials, comparing multiple websites/sources, checking the URL, etc. Figure 4 shows the breakdown of the strategies my students said they use while validating what they are seeing on the internet.

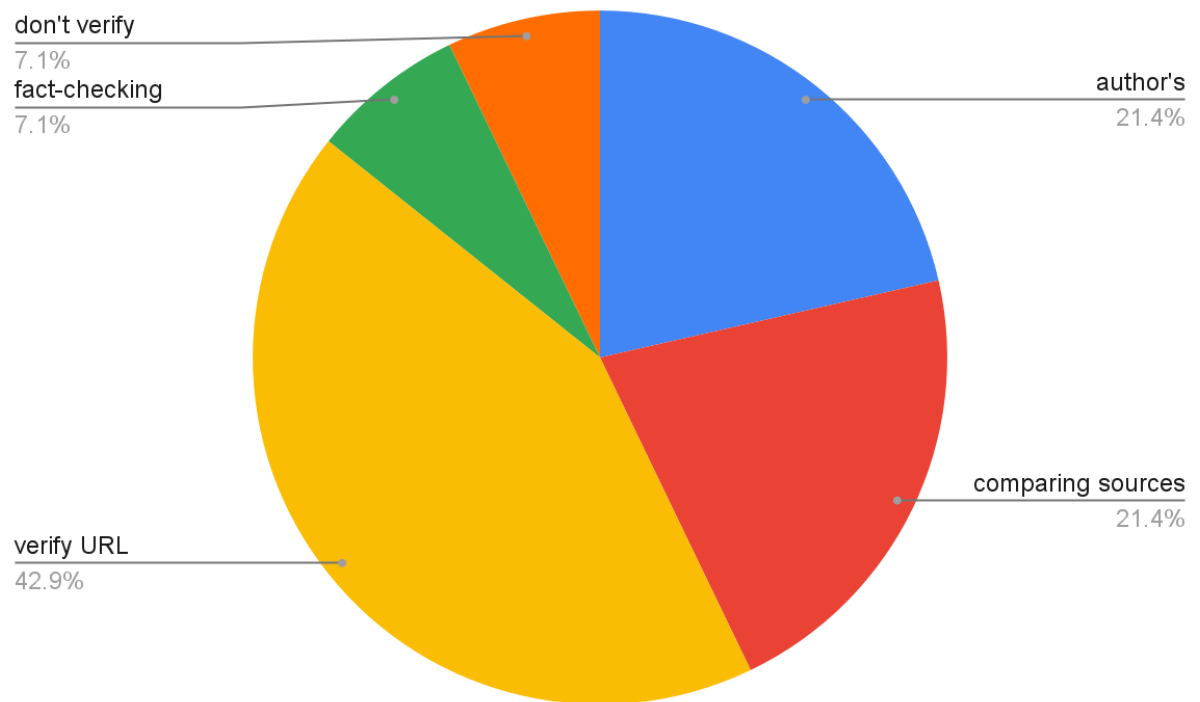


Figure 4: Strategies for validating website credibility

The reader will notice that the primary way of validating the credibility of websites is by checking the URL. The students also said they compare multiple websites/sources and the author's credibility at the same rate. I found it interesting that only 7% of my students mentioned that they will actively fact-check the information they are reading online.

The final question in this section asked students if they had ever accidentally shared or believed false information online. This question was meant to be straightforward and students were asked to answer yes or no; with a third option being 'not sure'. Additionally, the question was open ended and allowed the students to infer the ways in which they either knowingly or incidentally shared/believed misinformation. Figure 5 shows the results of this survey question.

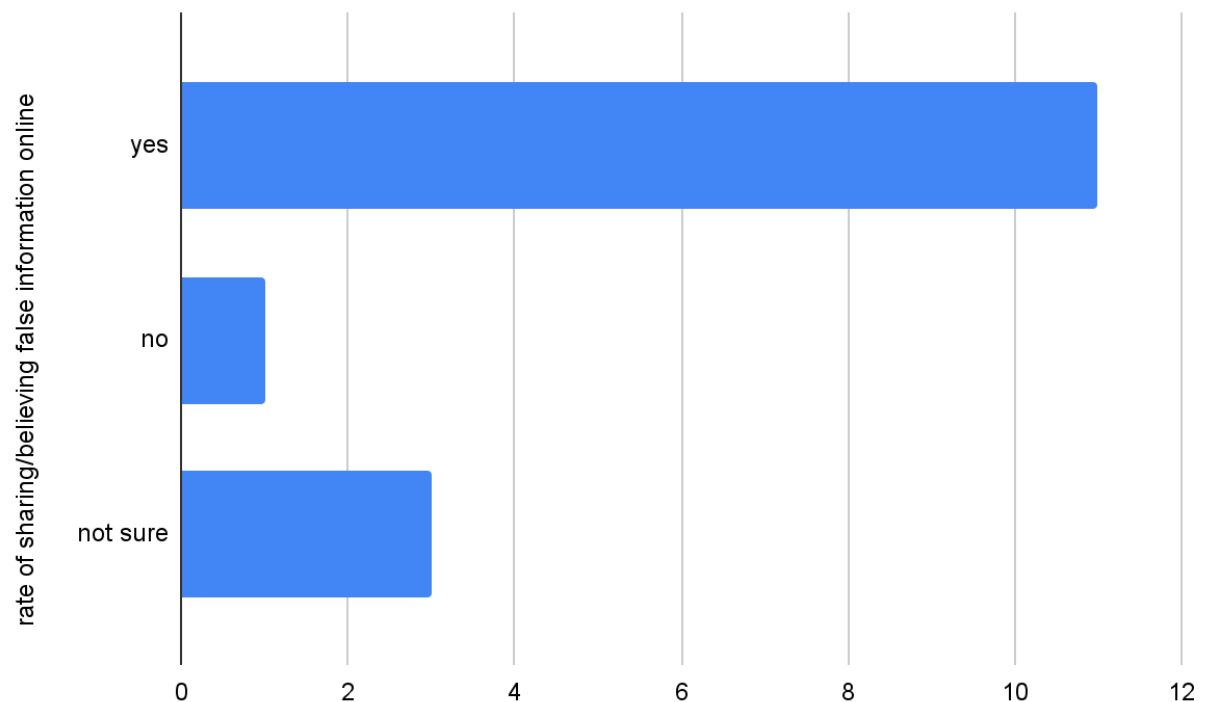


Figure 5: sharing/believing false information

The reader will notice that of the fifteen students surveyed, nearly all of them stated yes to this question about either sharing or believing in false information they had read online.

The following section of the survey inquired about the student's civic engagement online. The first question in this section was about using the internet specifically to learn about social or political issues. There was a split between the students who said they frequently or occasionally do. The remainder of the class said they only rarely use the internet to look up political/ social issues. Figure 6 shows how the class was split for those surveyed.

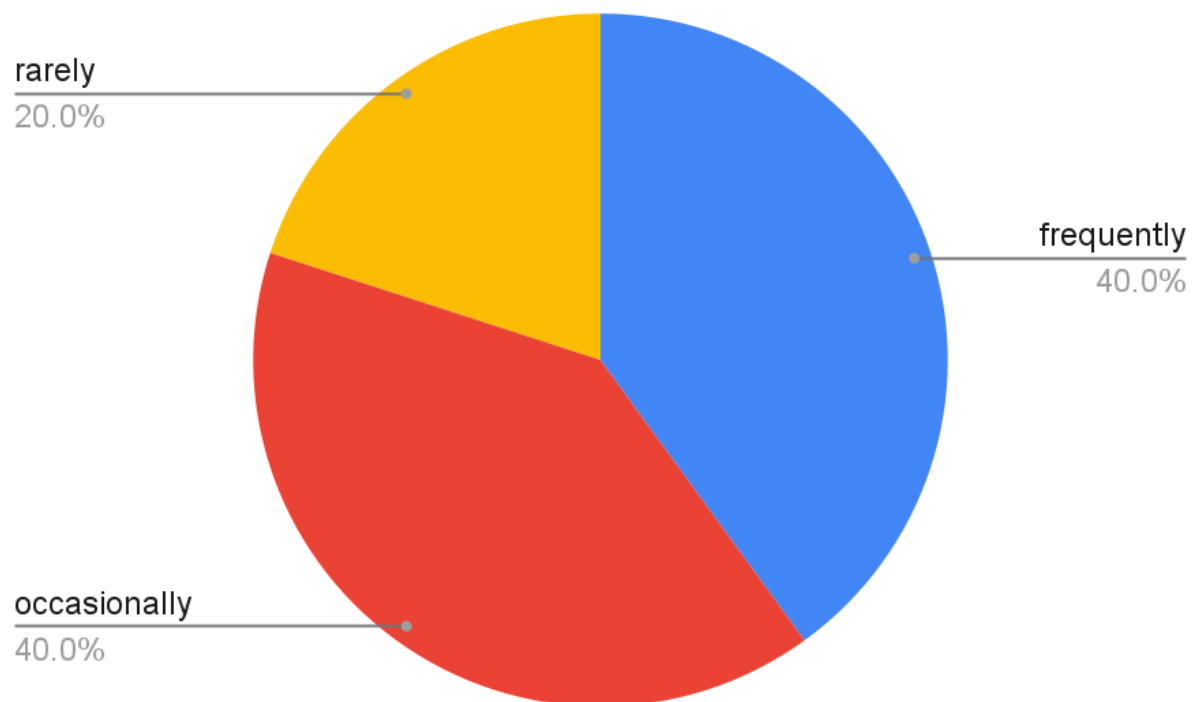


Figure 6: Using the internet to learn about political/social issues

The reader will notice that frequently and occasionally are evenly split and rarely make up a much smaller percentage.

Additionally, for the question regarding their participation in online civic actions, 73% said no and 27% said yes. The final question in this section asked the students how often they verify the political or social claims before sharing them on social media. A third of the students (five students) said they always verify and the other third of students said they never verify claims before sharing political/social claims.

The final multiple choice section is asking about digital literacy they may have already received as a part of their education. When asked if they received any formal instruction in school about evaluating information online; 53% of students said they had received formal instruction. 40% said they were not sure if they received any formal instruction about digital

literacy in school. When asked if they believe schools should spend more time teaching internet/digital literacy; 74% of students either strongly agree or agree with this statement. 20% of students said they were neutral and one student said they strongly disagree. The last question in this section asked the students what topics they would like to learn more about in school regarding digital literacy. The topics ranged from learning privacy and digital safety to identifying misinformation and fake news. Students were offered an opportunity to select multiple topics they would like to learn. In figure 7; it shows the range of answers and how they were dispersed among the students.

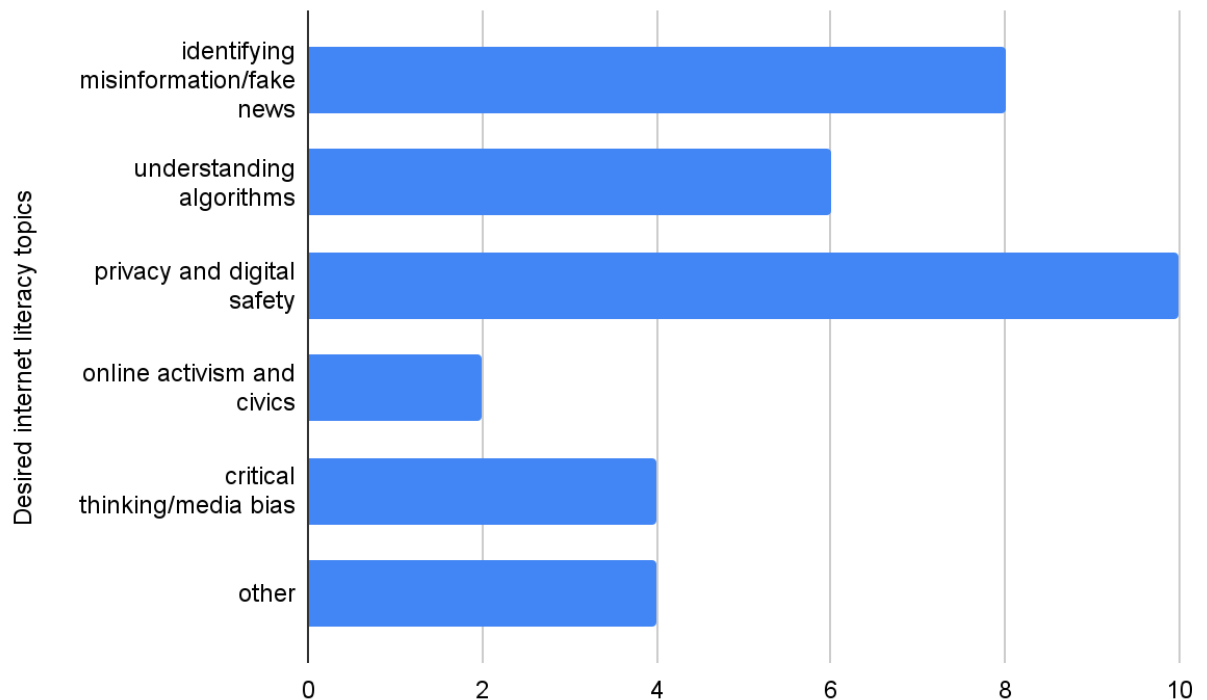


Figure 7: Disbursement of desired internet literacy topics

The reader will notice that privacy/digital safety, identifying missing information, and understanding algorithms make up the top three topics students would like to learn more about. Additionally, four different students selected Other as an option and wrote in answers. The

write-ins ranged from learning about taxes and finances to internet history and basic internet skills.

The final question in the survey was a short answer question. The first question asked students to explain, in their own words, why it is important for young people today to have internet literacy. I really liked this question because it allowed the students to relate on a more personal level and the responses were genuine. One student responded to this question by saying, “internet literacy is important because that’s the world we live in. So much information is available [and] we need to be able to use online sources safely, responsibly, and be able to identify reality from fiction”(Student C). This next student brought their answer back full circle when answering and said, “because it’s good to know what’s fake. If you’re writing a paper, you don’t want to put false information in it”(Student D). Another student responded by saying, “we use the internet for almost everything nowadays. It’s pretty important to know how to identify what is valuable and trustworthy instead of walking around blind”(Student E). All three of these responses pointed out that the internet is a utility that is more necessary than ever and that learning how to decipher between false and true information is crucial to being a digital citizen.

Internet Literacy and Research

The final theme that emerged during my data collection was internet literacy and research. Internet literacy refers to the ability to critically search for, evaluate, and use information that is found online. The ways in which I tailored it to my high school civics class was through lessons, discussions, and projects. Each of the lessons would have a component of definitions built into the lecture. Over time as students became familiar with my routine, they knew which parts were necessary to write in their notebooks. Additionally, I used discussions as a way to stimulate conversation among my students. This is a great way to introduce students to

the topic that is going to be taught during the lesson. However, a brief warm up discussion is a great way to pre assess for their background knowledge and to tailor toward needed differentiation. For example, during the lesson on the Executive Branch, I opened the lesson with a warm up question; “If you were President for one day, what would be your top priority and why?” What I found out about my student’s prior knowledge about the powers of the President were very limited. I knew then that I was going to need to augment the lesson so that we could spend more time developing their understanding of what the President’s roles and powers are. I provided reading material and time for them to work in their table groups and then we completed a “T-Chart” as a class. Lastly, I found that projects were the best way to get students engaged in the unit and topic. Traditionally, I encourage students to work in groups, typically in a group of two. And depending on the scope of the project’s objectives, a group of three or four students. I enjoy the aspect of allowing students to work together and collaborate.

During the final portion of the unit for the Three Branches of Government, I wanted to ensure that my students were provided opportunities to work together but also work independently. We had previously discussed internet literacy as a class and the best ways to properly check for credible sources. I wanted to give my students more practice using their search skills. At first, I would provide them with some sources that I had found and knew were credible. I noticed that the students were able to effectively locate relevant information to use. I used this method as a way for my students to get to know the state of Oregon members of Congress. They were tasked with using the sources I provided in order to complete their exit tickets. The students would answer a series of questions in their notebooks that were aligned with the provided sources.

As the unit moved into the Executive Branch of government, I used this as an opportunity for students to have more autonomy. After we concluded the lesson, I made sure to leave ample time in the remaining minutes of class for students to complete the next activity. Each of the students was provided a handout titled, “Exploring the Executive Branch Departments”. The objective of this assignment was to understand the structure, function, and responsibilities of the executive departments of the U.S. government. I challenged the students to select one of the departments within the executive branch and complete the brief research necessary to complete a one page, either typed or handwritten. Figure 8 is an activity that was assigned in class that required students to rely on the internet to research and determine if the sources they chose were credible. Finally, they were to answer the questions on the worksheet and site the sources they used.

Exploring the Executive Branch Departments

Objective:

Understand the structure, function, and responsibilities of the executive departments of the U.S. federal government.

Assignment Instructions:

1. **Choose one executive department** from the U.S. Cabinet (e.g., Department of Justice, Department of Agriculture, Department of Education, etc.):
2. **Research the following information:**
 - The **main purpose and functions** of the department
 - When and why it was **established**
 - The name of the current **Secretary** (or department head)
 - One or two **major programs or initiatives**
 - How the department **impacts citizens' daily lives**
3. **Use at least two credible online sources** (such as .gov or .edu websites). Avoid Wikipedia as a primary source.
4. **Create a one-page summary** (typed or neatly handwritten) that includes:
 - Clear, organized information
 - A **list of your sources** at the bottom

Figure 8: Exploring the Executive Branch Departments handout

The reader will note that in addition to the research, the students were also required to cite their sources (#4) and they must use a minimum of two credible online sources (#3).

The final project for this unit was to research a supreme court case and to incorporate all three branches of government. The goal was to show how each branch of government had a role when enforcing laws and court cases. For this project, I wanted students to work in groups with up to three students in each group. The students were given full autonomy to complete their research using the internet literacy skills they developed from the discussions and the prior lessons. Their goal was to fact check for accuracy, bias, credibility, and purpose. Additionally, they would need to avoid misinformation and use their skills to recognize fake news, clickbait, and propaganda. Finally, at the end of our presentation day, I asked the students to reflect on the project, their work, their partners work, and their confidence while finding sources.

Conclusion

Throughout this term and especially this most recent unit, it was very rewarding to see the growth of my students. They navigated learning about the three branches of government and developed a set of digital literacy skills. These skills will be beneficial to have as they continue their education and inevitably interact with the world around them. One of my goals was to integrate digital literacy into the classroom and encourage my students to become curious learners. Overall, as their digital literacy skills grew, so did their engagement in class discussions and willingness to participate. I think that their overall confidence in their quality of work increased too. This was a clear change from earlier in the unit and after completing the digital citizen survey. After some scaffolding and group work, my students were able to review websites for misinformation, bias, and determine the best credible sources. Finally, as they have learned to

navigate the internet, my students displayed that they are capable of critically engaging with online information. This will prepare them for life outside of the classroom.

Chapter 5. Discussion, Limitations, and Conclusion

Throughout the duration of this project my goal was to teach and integrate digital literacy to my students. The setting was my high school civics classroom. I used several different strategies in order to accomplish this goal. For instance, Tan et al (2024) pointed out that in order for digital literacy to be successful in the classroom, teachers must develop a willingness to develop their own digital literacy skills. Therefore, as I began teaching this class, I chose to look for different avenues in which I could also be learning digital literacy. I did this while also incorporating digital literacy into the class. I utilized the online classroom to keep students engaged and up to date with daily activities and assignments. Students were also given access to all of the lectures ahead of and during class. This provided them with an opportunity to preview the agenda for the day and keep up with instruction at their own pace. Additionally, I challenged myself to utilize technology in the classroom everyday. At the beginning of each class period I would greet my students at the door and direct them to review the instructions on the screen. I built a routine of displaying the daily agenda on the large smart TV hung at the front of the room. I included different gifs and jokes of the day, along with instructions. From my observations, I found this to be a great way to increase student engagement. I noticed that over time the students had become accustomed to seeing the daily reminders and expectations.

Another goal of this project was to create an equitable and inclusive classroom environment. I worked on this goal by taking my student's socioeconomic backgrounds into consideration when planning my lessons and projects. Both Hicks and Turner (2013) and Tirado-Morueta et al (2018) pointed out that the socioeconomic status of students plays an important role in developing digital literacy. The point being that students without high speed internet at home will have more difficult opportunities to practice their digital literacy.

Additionally, they would have more difficulty completing assignments outside of the classroom. Hicks and Turner (2013) refer to a digital gap that affects some students from accessing digital technology and internet access. This deficit in turn impacts digital literacy across socioeconomic lines. Therefore, I designed lessons and assignments to be completed during structured class time. Homework was not something that would necessarily be required. I knew that as long as my students had their Chromebooks in class, they would have access to the internet provided by the school. However, I was not able to control their access to the internet outside of school. Tirado-Morueta et al (2018) compliments their argument by pointing out that students who have access to in their daily lives and use it in more complex ways will have higher levels of digital literacy. I noticed from my observations that the majority of my students had smartphones and Chromebooks at their disposal daily. This provided opportunities for them to have internet access any moment that had cell phone service and/or wifi.

Finally, another goal of this project was to teach my students about digital literacy. A large part of the curriculum that I developed included various individual/ small group projects. These projects required my students to complete research and develop argument/reasoning. Additionally, I allowed them to utilize any sources they found, as long as they validated and cited their sources. Pangrazio et al (2020) pointed out that digital literacy for academic success involves relevant research, critical analysis, and synthesis findings. During the beginning of the term I used scaffolding to assist my students with websites they could use to find government related articles. And for our unit project on supreme court cases, I pointed them to other credible sites. However, I slowly released control and allowed my students to take more control of their research and where they source their information. From my observations, I found that my students were using similar sites and techniques that we had practiced earlier in the term. These

were things such as; looking for sites that were from dot gov or dot org and using multiple sources rather than relying on one source to complete the entire assignment. I observed that allowing students to have more freedom over their research and developing projects to be student directed was beneficial for participation and engagement.

Limitations

A theoretical limitation of this study could be found in implementing digital literacy in my classroom. I attempted to implement technology everyday early in the term, however, I found myself having to learn different aspects of the Canvas shell. Additionally, I had difficulty remembering to publish lectures and other materials. There was a lot of trial and error that went into learning how to use the technology provided to me as a student teacher. This led to students entering class without having the agenda displayed on the screen. An implication of this resulted in my students having more repetitive questions and loss of the daily structure. Sadly, this would also lead to the class being less engaged and I would have to reel them back in once I had published the necessary lectures. As the term continued and a routine was built, it became easier to remember to publish powerpoints and display the agenda for the day.

As I completed my research for this project, there were a few methodological limitations that became apparent. First, the sample of students in my class was limited. There were nineteen students in class and they were also limited to one person of color. Additionally, throughout my study there was inconsistent attendance. On a near daily basis, there would be between six or seven absent from class. An implication of this was during the days that I surveyed my students, I was not getting a full class of participants. Therefore my numbers and percentages were skewed. Finally, there was limited time to collect data for this study. The data collection occurred over a two week period. This led to my collection and processing of data feeling rushed. Had I

been able to complete this study over the course of the entire year or semester, the data would have felt more complete and comprehensive for a proper study.

Regarding the practical limitations of my study, I feel like my pedagogical approach could be imitated by other educators. Teaching and implementing digital technology and digital literacy into the curriculum and classroom may come easier to a more seasoned educator. Based on their experience using the tools that I had access to, they may find their approach to be more straightforward. However, the tactics used to gain student engagement may be different depending on different personalities. I found myself using humor and pop culture to obtain my student's buy-in and increase their engagement. I focused a lot on providing my students with the freedom to choose their work partners and methods of gathering information for their projects. As I observed my students during this study, I found that providing them with scaffolding prior to relinquishing control was beneficial. The results were requiring minimal intervention and allowed me to focus on my student's attributes in a positive manner.

Conclusion

My action research project confirmed a need to integrate digital literacy into a high school civics classroom. In order to be most effective, digital literacy should be taught by combining the teacher's willingness to learn, an intentional use of technology, and student-centered learning. Additionally, to create an inclusive and engaging classroom environment it is beneficial to model digital literacy, incorporate it in daily routines, and design equitable technology supported lessons. Overall, by promoting digital literacy in the classroom it can help foster digital competency and stimulate student agency, equity, and engagement. Moving forward as technology continues to grow we are left asking; what is the long-term impact of promoting digital citizenship have on student behavior and civic engagement outside

of the classroom? And how can digital literacy instruction be differentiated to support all students with varying levels of internet access and research skills?

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