Are Students Ready for the Online World? The How and Why to Embed Digital Citizenship Skills in English Classrooms

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With the growth of technology, and, thus, research on its impact on society, the term "digital citizenship" continues to grow and take on more meaning. Digital citizenship encompasses all the expected behaviors and self-regulations that would make an individual successful in the digital world. Many of the behaviors that should be occurring in the real world, like sharing opinions politely and respecting others' belongings, are basic skills that students have been taught for decades. However, it is critical that they are intentionally taught how those appropriate behaviors should transfer from daily life into the online space.

Many researchers and organizations have developed different frameworks that define the components of digital citizenship. Ribble and Bailey (2007) built a framework consisting of nine components that have since been modified as their research has deepened. Nonetheless, their framework laid the foundation for the concept of digital citizenship to take root. While digital citizenship has been defined in a variety of ways, researchers emphasize the importance of quality digital citizenship education to meet the needs of our twenty-first century learners (Hollandsworth et al., 2017; Ribble et al, 2004).

In some cases, digital citizenship education can be tied to funding. However, many educators are not trained how to do this effectively when obtaining their degrees or in current professional development trainings (Ribble, 2012). We still see this as an issue: Madison (author 1) received no digital citizenship education training in her undergraduate classes between 2013 and 2017 and has not received professional developments in her time teaching in public schools since graduating from her undergraduate studies. During her time as a graduate student, there was an emphasis for

the need of digital literacies, but after researching digital citizenship, she realized that there was a lack of guidance and resources. She shared with Elsie (author 2) how there was a need in how to help middle school students navigate the digital world as a whole, going beyond multimodal texts and other digital literacies.

Current digital citizenship education is not being implemented properly. Many students are receiving isolated digital citizenship instruction that prevents them from adequately applying those skills later in the digital world. Digital citizenship education should be authentic and implemented across content areas so that students are versed with the skills they need to enter the current workforce. Reading about these inadequacies of digital citizenship education, and seeing it in her own school, made me curious about how the lack of digital citizenship education is impacting youths' self-efficacy in the digital age. Even more so, we both wanted to figure out how to better incorporate digital citizenship skills into a middle school English classroom.

Unfortunately, many educators believe that their responsibilities stop at warning their students of cyberbullying, predators, and other unsafe possibilities in the digital world. However, if schools continue to push students to put their cell phones away, then they are not learning how to properly balance technology use, which could impact their success in the real world.

In this essay we report on the subscales of Reasonable and Critical Decision Making and Academic Self-Efficacy as a major component of the following research questions:

1. What are youths' levels of digital citizenship?
2. What are youths' levels of self-efficacy?
3. What are the relationships between youths' levels of digital citizenship and youths' levels of self-efficacy?

We began by researching instruments that would allow us to identify the digital citizenship and self-efficacy levels of 7th grade students, ranging from 12 to 14 years old, who took part in the survey. The participants were found through convenient sampling as

participants in a volunteer-based after school "boost camp" through the Social Studies Department at Madison's school. While the school's 2018-2019 demographic data has not been posted publicly, the National Center for Educational Statistics reported for the 2016-2017 school year that the school in which the study was conducted, Indian Trails Middle School in Winter Springs, Florida, enrolled a total of 1,175 students. The population's ethnicity was less than 1% American Indian/Alaska Native, 3% Asian, 8% Black, 25% Hispanic, less than 1% Native Hawaiian/Pacific Islander, 61% White, and 3% with two or more races. There were 576 male students and 599 female students. Finally, 380 students (32%) were eligible for free lunch and 81 students (7%) were eligible for reduced lunch. These numbers give a picture of the demographic of the school and thus the participant pool in this study.

We decided on Kim and Choi's (2018) Digital Citizenship Scale (DCS) consisting of 18 questions distributed between 5 sub scales:

1. Ethics for Digital environment
2. Fluency for Digital environment
3. Reasonable/ Critical decisions
4. Self-identity in digital world
5. Social/cultural engagement

We also used Muris' (2001) Self-Efficacy Questionnaire for Children using three sub scales--academic self-efficacy, social self-efficacy, and emotional self-efficacy--with 8 items in each subscale.

After administering the measurement instruments to the participants as an online survey, we completed two types of data analyses: descriptive statistical analysis and correlational statistical analysis (both Pearson and Spearman correlations dependent on statistical assumptions). From these analyses, we identified a subscale of the Digital Citizenship Scale that all teachers could imbed in their daily instruction: Reasonable and Critical Decision Making in the Digital World. The results indicated that students' mean score in this subscale was 3.95 on a 5-point scale with a standard deviation of .49. While this is

above average, the importance derives from the correlation this subscale has with students' self-efficacy. The Digital Citizenship subscale of Reasonable and Critical Decisions had a strong correlation with Academic Self-Sfficacy, $r_s = .302$, n = 69, p = .012. This finding is important because the correlation shows students who value making reasonable and critical decisions in digital spaces also conveyed a high regard for their academic potential.

We realized that while many of the participants recognized the importance of making reasonable and critical decisions online, their responses did not accurately portray if they knew how to do that effectively. For instance, the items focusing on Reasonable and Critical Decisions were as follows:

1. Students should express their emotions reasonably through communication when problems or inconveniences arise in the online digital environment.
2. Students should express their opinions online and learn and share their expertise.
3. Students should act in accordance with appropriate decisions when communicating in an online environment.

Students who agreed with the statements above also rated themselves highly on the items focusing on Academic Self-Efficacy:

1. How well can you get teacher to help you when you get stuck on schoolwork?
2. How well can you study when there are other interesting things to do?
3. How well can you study a chapter for a test?
4. How well do you succeed in finishing all your homework every day?
5. How well can you pay attention during every class?
6. How well do you succeed in passing all subjects?
7. How well do you succeed in satisfying your parents with your schoolwork?
8. How well do you succeed in passing a test?

If students who recognized and valued the benefits of making reasonable and critical decisions online also had high academic self-efficacy, then it would be worthwhile for teachers to provide them with an environment that fosters those skills in both the classroom and in online spaces. The majority of the population that I serve has access to devices and digital resources at home and has cellular devices on the school campus. Having the digital world around them constantly does not translate to their knowing how to use it. So, it is up to teachers to show them how to use these resources to heighten their ability to make critical decisions online.

How should digital citizenship skills be taught? Ribble (2008) recommends a four-stage framework on how to teach digital citizenship briefly summarized by the following:

1. Create awareness by engaging students with examples of being technology literate as well as examples of technology misuse
2. Provide frequent guided practice where students can explore and take risks while using technology
3. Model and demonstrate appropriate technology use from adults and allow a dialogue between adults and students to promote learning
4. Provide feedback and analysis on how students are using technology and how they can improve technology use in all aspects of life (p. 16). (See Figure 1)

Figure 1

Four-Stage Technology Learning Framework for Teaching Digital Citizenship

Jones and Mitchell (2008) recommend that digital citizenship education be separated from digital literacy education and cyber-bullying prevention to "instead be focused on using Internet resources to have youth (1) practice respectful and tolerant behaviors toward others and (2) increase civic engagement activities" (p. 3). Ribble (2008) recognizes that this practice is not limited to teachers, but should also be implemented at home and in the community. Again, students must be given authentic learning experiences on how to use technology appropriately and how to navigate the digital world.

In this study, we defined digital citizenship education as embedded instruction and real-world practice within all content areas that specifies how to appropriately behave in and navigate the online world in order to prepare students to be successful members of online communities. Unfortunately, many schools are not one-to-one with devices and, in many cases, the devices get pulled for testing. For instance, our students have approximately eight laptops that teachers may share and use in station rotations. However, they are pulled for various tasks throughout the quarter such as subject area exams, PSAT, FSA, District Level Writing assessments, infrastructure trails, and county surveys. The classrooms do have a projector that connects to the teacher's desktop, which tends to serve as the sole access to digital resources on a daily basis.

Regardless of the lack of availability of devices per student, it is critical that teachers find ways to incorporate online skills in their regular classroom. Just as we saw in our own classrooms, it is not enough for students to learn how to write emails, type, practice Microsoft Office programs, and build résumés in their computer electives. The problem was that these skills were not being translated into content area classes. For example, my students sent a number of emails that frequently needed feedback so they would learn how to communicate appropriately and effectively in that space, despite having isolated instruction on writing professional emails in an elective course. For example:

Mrs Gannon I have a question how did I get a d on the exam text codes and you should give me two grade points to bring my grade to a b 🤣❤️

can I get the work that I messed this week and in till tusday cuz I have out of school suspencion

Many of those assignments are part of a required elective in middle school. While these electives are meant to build students' skills in the digital world, they rush through the required assignments because they do not see how these outdated tasks will translate to the real world.

Translating Classroom Instruction to the Digital World

Initially teachers can incorporate questioning that allows students to begin thinking about how their behaviors can be replicated in the online world. For example, if your students are determining an author's purpose of a text, a follow-up question would be, "What changes should the author make if this were shared on a different news platform or modified into a tweet? How would the word choices impact the new audience?" These types of questions would allow the conversation to progress to establishing norms of appropriate communication and sharing opinions online. When I implemented these types of questions and digital language in my classroom, I found that students were highly engaged in these discussions because the critical questions were more relevant to their digital lives.

Then, English teachers who want to focus on reasonable and critical decision making can intentionally modify their current methods of instruction that allow students to apply classroom discussion behaviors to the online environment. To begin, teachers could provide role-playing opportunities that require students to establish appropriate norms when communicating online while experiencing different scenarios. These scenarios could range from how to deal with an offensive post from a peer on social media to making decisions about what photos should be posted of oneself or friends. Breaking down these realistic and often problematic situations that occur when communicating on the Internet would provide a foundation that would allow them to make more critical decisions online. To progress to step two in Ribble's framework, teachers can create a classroom blog for students to practice the appropriate behaviors when responding to discussion posts connected to current content.

In a unit on social/class and coming of age, I created a similar scenario when creating discussion posts on the novel *The Outsiders* and on nonfiction texts that my 8th-grade standard level class had been reading. The class was expected to answer, with evidence from multiple texts, the following essential questions:

1. How do societal divisions affect communities?
2. How does one's environment impact his or her identity?
3. What determines loss of innocence and entrace into adulthood?

Prior to starting this discussion, I showed the class the flowchart by New Tech City (2014) (see Figure 2). Many were reluctant because they claimed that if a peer posted something that offended them, then they would just keep scrolling. However, I emphasized that the last row where they're asked to listen, respond, affirm, and contribute to online discussions is important because it allows them to add their thoughts and opinions to the conversation. They were then asked to write an extended response to one of the following three questions:
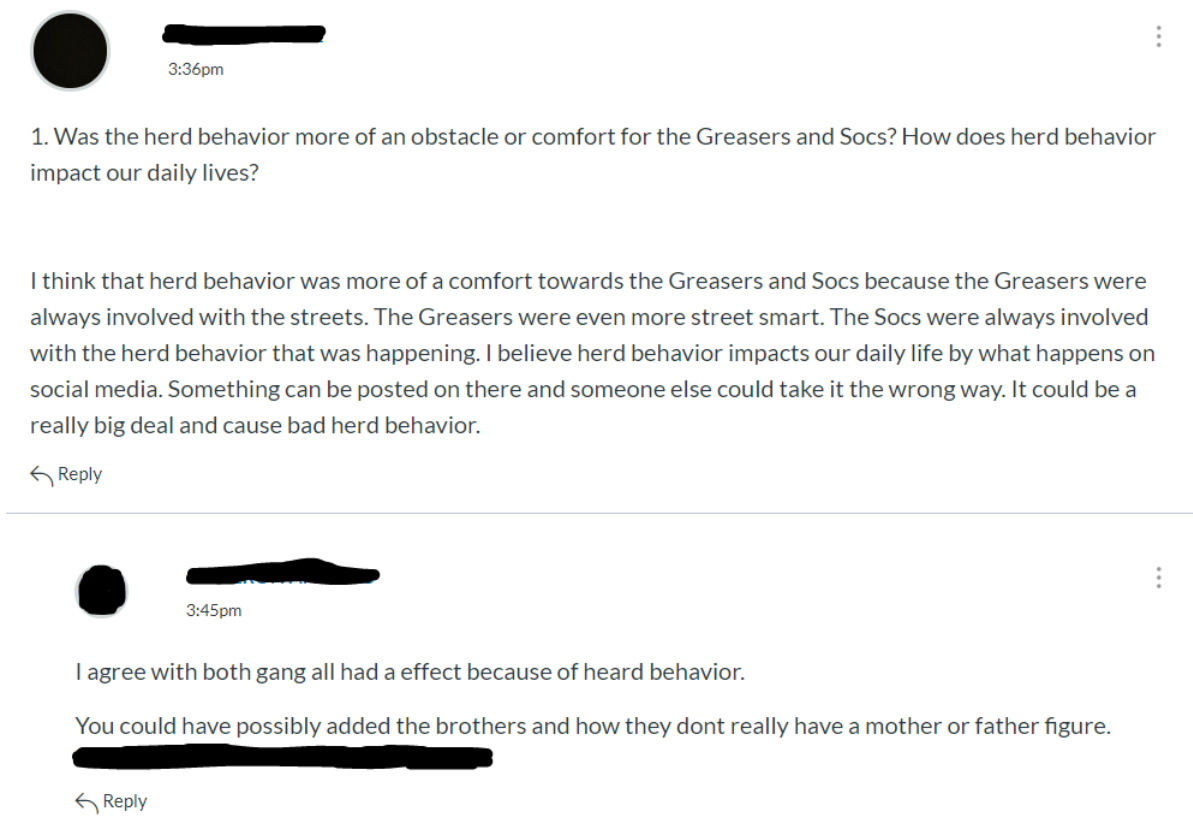
1. Was the herd behavior more of an obstacle or comfort for the Greasers and Socs? How does herd behavior impact our daily lives?
2. In context of the article "On Revenge," is revenge ever justified? Do you think revenge is justified in today's society?
3. Can education improve a person's situation? Explain.

Figure 2
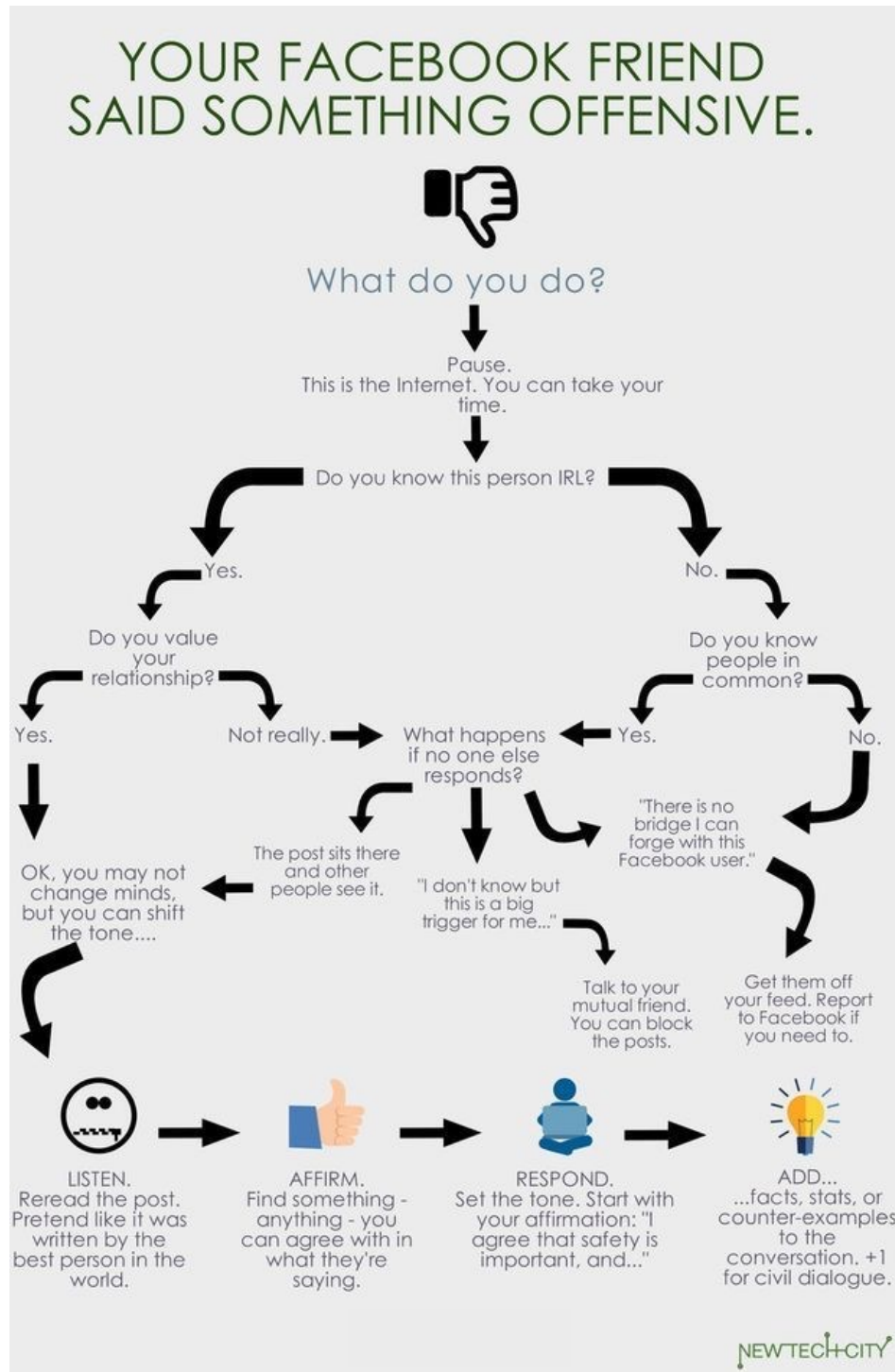
After writing their responses, they responded further to each other by using the method proposed in the last line of the flow chart. Below are some of the posts (Figures 3 and 4) that they made with names and images removed to protect their identities:

Figure 3

3:36pm

1. Was the herd behavior more of an obstacle or comfort for the Greasers and Socs? How does herd behavior impact our daily lives?

I think that herd behavior was more of a comfort towards the Greasers and Socs because the Greasers were always involved with the streets. The Greasers were even more street smart. The Socs were always involved with the herd behavior that was happening. I believe herd behavior impacts our daily life by what happens on social media. Something can be posted on there and someone else could take it the wrong way. It could be a really big deal and cause bad herd behavior.
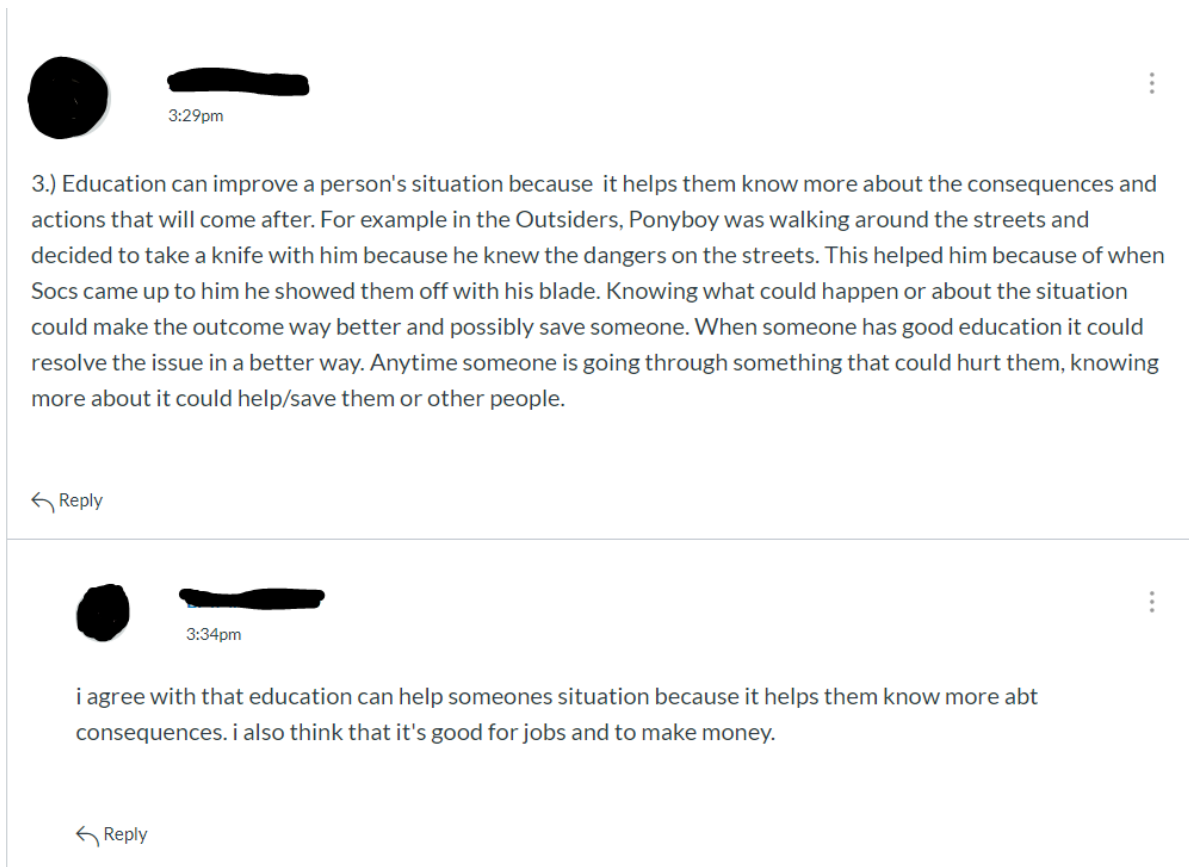
↩ Reply

3:45pm

I agree with both gang all had a effect because of heard behavior.

You could have possibly added the brothers and how they dont really have a mother or father figure.

↩ Reply

Figure 4

> 3.) Education can improve a person's situation because it helps them know more about the consequences and actions that will come after. For example in the Outsiders, Ponyboy was walking around the streets and decided to take a knife with him because he knew the dangers on the streets. This helped him because of when Socs came up to him he showed them off with his blade. Knowing what could happen or about the situation could make the outcome way better and possibly save someone. When someone has good education it could resolve the issue in a better way. Anytime someone is going through something that could hurt them, knowing more about it could help/save them or other people.
>
> ← Reply
>
> i agree with that education can help someones situation because it helps them know more abt consequences. i also think that it's good for jobs and to make money.
>
> ← Reply

Elsie and I found that by asking students to respond to each other using this method, they were more inclined to think more deeply about their peers' posts in order to know how to respond and determine what they wanted to add. Although their responses seem brief, they show more evidence of critical thinking than their previous responses of "I agree" that occurred before being shown this method. By using this response technique, they added their own thoughts and posed critical questions that go beyond simple affirmation. This is just one way to incorporate Ribble's second step to teaching digital citizenship.

To meet step three, teachers should provide model answers or scenarios with the post that guide students toward meeting the expectations when responding to others with conflicting few points. We found it beneficial for this stage to occur multiple times and in multiple ways when implementing digital citizenship education. Finally, allowing students to reflect on the experience would further establish effective online behaviors in

order for them to determine their strengths and areas of improvement. When teachers plan lessons, if they strive to incorporate any of these steps, dependent on the students' needs and targeted learning goals, then they will be supporting students' abilities to make critical and reasonable decisions in the digital world.

The embedded instruction does not have to be solely online. Rather, it should have students consider how it would translate to the digital world. Take this lesson for example: Begin by providing the class with opinion or informational articles and prompt them to discuss the main claim or stance in each one and how effectively it came across. Depending on standard of focus, steer the conversation toward the diction and how it impacts the tone, or if the language is too vague or too technical for the audience. Then discuss the types of arguments and the reasoning and support that the author provided. This type of analysis requires comprehension, but it also meets the expectations of state standards. Finally, through a digital extension, require the students to post responses to the article to the comments sections. Doing this would expose them to communicating critically online and require them to practice delivering clear and appropriate communication beyond the classroom environment. This type of lesson strengthens English lessons because it bridges the gap between the digital and real world for our 21st century students. The implementation of digital citizenship instruction, particularly within the subscale of reasonable and critical decision making online, can broaden instruction from just standards and testing to real world benefits.

References

Hollandsworth, R., Donovan, J., & Welch, M. (2017). Digital citizenship: You can't go home again. *TechTrends, 61*, 524–530. http://doi.org/10.1007/s11528-017-0190-4

Jones, L., & Mitchell, K. (2016). Defining and measuring youth digital citizenship. *New Media & Society, 18*(9), 2063-2079. http://doi.org/10.1177/1461444815577797

Kim, M., & Choi, D. (2018). Development of youth digital citizenship scale and implication for educational setting. *Educational Technology & Society, 21*(1), 155–171. Retrieved from the Academic OneFile database. (Accession No. edsgcl.524180837)

Muris, P. (2001). A brief questionnaire for measuring self-efficacy in youths. *Journal of Psychopathology and Behavioral Assessment, 23*, 145–149. https://doi.org/10.1023/A:1010961119608

National Center for Education Statistics. (2018-2019). *Common Core of Data, Indian Trails Middle School*. Retrieved from https://nces.ed.gov/

Ribble, M. (2008). Passport to digital citizenship: Journey toward appropriate technology use at school and at home. *Learning & Leading with Technology, 36*(4), 14-17. Retrieved from the ERIC database. (Accession No. EJ904288)

Ribble, M. (2012). Digital citizenship for educational change. *Kappa Delta Pi Record, 48*(4), 148–151. https://doi.org/10.1080/00228958.2012.734015

Ribble, M. & Bailey, G. D. (2007). *Digital citizenship in schools*. International Society of Technology in Education.

Ribble, M., Bailey, G. D. & Ross. T. W. (2004). Digital citizenship: Addressing appropriate technology behavior. *Learning & Leading with Technology, 32*(1), 6-9. Retrieved from the ERIC database. (Accession No. EJ695788)