

6.2 – Foundational Lesson Plan #2 – Digital Compass

Summary Description: Providing students with a direction in their use of technology.

Focus Question: Do students think about their technology use differently than adults?

Additional Questions:

1. How do we begin the discussion with students on what should be considered appropriate or not with regard to technology?
2. When should students learn about appropriate technology use?

Lesson Goal/Objectives:

To begin having students think about where they are with respect to technology usage.

Tools/Resources:

Warm-Up Activity - Maricopa Center for Learning and Instruction

<http://www.mcli.dist.maricopa.edu/show/what/warmup-act.html>

Activity Description:

1. Divide students into groups of two or three. Provide each group with a Digital Compass (for the activity and compass, see Figure 6.1) as well as a list of ten scenarios.
2. Provide opportunities for each group go through the ten scenarios and identify what direction they believe the actor in each of these scenarios is going. Each group also should come up with one or two situations of their own (about technology use or misuse) and identify those on the compass as well.
3. Have students explain why they thought the situation should be in one direction or another. They need to support why they choose a direction.
4. Discuss the six directions on the compass and find out how the students understand each of the directions.
5. Follow-up with how they as technology users need to think about how they use technology both in school and elsewhere.

Lesson Extension Ideas/Activities:

1. Have students create their own scenarios of appropriate and inappropriate technology use and have the class determine where they would place them on the compass.
2. Have students come up with appropriate punishments or consequences for those scenarios that are clearly inappropriate.

For more information about the basic concepts of Digital Citizenship see Chapter 2 (p. 8) or on the nine themes see Chapter 3 (p. 12). NETS standards: NETS*T – Standard VI, NETS*S – Standard 2 see p. 193 for the ISTE standards

Teaching Tips:

1. Prepare to have adults consider some of the scenarios to be inappropriate, while students will most likely have a different reaction.
2. Understand that there will be some students who will be unmoved by the effect of inappropriate activities have on others. Attempt to make it clear to students how inappropriate activities affect others.
3. Know that some students will choose a direction to get attention from others, and make sure students can explain why they are taking a certain position.

Digital Citizenship and the 21st Century Digital Compass Activity

Directions: Give each student a copy of the 21st Century Digital Compass. Read the following scenarios. Instruct students to point to the direction that matches their opinion. After everyone makes a choice, allow students to analyze their answers.

Scenario #1 – A student sends a harassing e-mail to another student. The receiving student retaliates with a “flaming e-mail.” *Is sending harassing and flaming e-mail messages wrong?*

Scenario #2 – When hanging out with friends, one of the students gets a cell phone call and conducts a loud conversation. *Is talking in a loud voice on a mobile phone in a public place right?*

Scenario #3 – A student logs on to a file sharing website and downloads the newest song. *Is downloading music from a file-sharing site wrong?*

Scenario #4 – A student follows a questionable link to a website and downloads a malicious script which releases a Trojan Horse virus on to the school network. *Is downloading material from unknown sites appropriate?*

Scenario #5 – An hour before class, a student remembers that a writing assignment is due. The student goes to the library, logs on to a website, and copies/pastes information without giving credit to the authors. *Is using Internet materials without giving credit to the authors wrong?*

Scenario #6 – At home, a student uses a software package to copy movies and games from DVD’s for his or her friends. *Is copying copyrighted materials right?*

Scenario #7 – A student logs into the schools’ course management system to download a copy of the course syllabus that they had lost. *Is online learning appropriate for K-12 students?*

Scenario #8 – Two students use text messaging on their cellular phones to pass information with each other during class. *Is it wrong to send text-messages during class?*

Scenario #9 – A team of students create a website for a teacher at school, but the website cannot be read by students with special needs (disabilities). *Is it right to make websites that are not accessible to students with disabilities?*

Scenario #10 – A student brings a USB flash drive to school with all their assignments. The student checks with the teacher before connecting the drive to the schools’ computer. *Is it appropriate for students to bring foreign materials to be connected to school property?*

Scenario #11 – During class, students uses their handheld computers to share answers to an assignment. *Is it wrong to share information during class?*

Scenarios #12 – Students obtain a copy of the final exam for the teacher’s computer by "hacking" the password. *Is hacking into the teacher’s computer wrong?*

Interpreting the Answers

There is no easy answer for any of the scenarios. In most instances, students' responses are going to be varied. Why? Technology users are not always going to agree on what is "right and wrong." Often when using technology there are "shades of gray" depending on who interprets the question. When interpreting each scenario, users need to consider not only their feelings but feelings of others. Some users may have had poor role models, developed "bad habits", or perhaps a lack of thinking before acting. The purpose of the compass metaphor activity is to help students analyze the concept of technology use and misuse. The teacher should review the following compass directions in order to better understand student opinions:

Wrong Direction – When traveling in the wrong direction, the cause is often bad information. When a student chooses to go in the wrong direction with technology, it often has to do with a lack of training or not considering those around them. To get back on the right path, students need to learn about how their technology use can affect others.

It's an Individual Choice, So What's the Big Deal Direction – Often students don't consider how others may feel about their behavior, and they believe "if it doesn't bother me, why should it bother anyone else?" Students traveling in this direction can't understand what the "big fuss is all about." The teacher needs to help these students see beyond their own personal experience. As technology becomes more accessible, it becomes integrated in who we are. Because "my" cellular phone is mine, then what I do with it is "my" concern. These students believe that technology use is a right and not a privilege. Simply put, they don't want others to tell them how to use "their" technology.

As Long As I Don't Get Caught Direction – Those students choosing this direction believe that technology is there to be used and everything will be fine as long as no one else knows. The trouble with this attitude is that "what we do or do not do" can and often does affect others around us. Many students know that what they are doing is not right, but they believe that if no one knows, that makes it ok.

Depends on the Situation Direction – Some situations do lend themselves to new interpretations, but there is usually an overarching understanding of appropriate technology use. There are times when a student needs to know that some activities are appropriate in one situation but can be inappropriate in another.

I Don't Know If It's Right or Wrong Direction – Some students are given technology but fail to learn how to use it appropriately. But, ignorance of the rules cannot be used as a defense for technology misuse or abuse. Basic digital technology citizenship skills should be learned when using technology. This is the direction students go when they understand some aspects of technology but "only enough to be dangerous." Sometimes, this can be worse than having no training at all. When no digital citizenship training is provided, students learn from others and can get poor advice.

Right Direction – Traveling in the Right direction takes time and diligence on the part of the student. To follow this path the student needs to have a good understanding of the technology they are using. They also need to reflect on how they use technology on a daily basis. Those who follow the right direction take time to decide not only how their action affects them, but those around them.

Digital Compass for the 21st Century

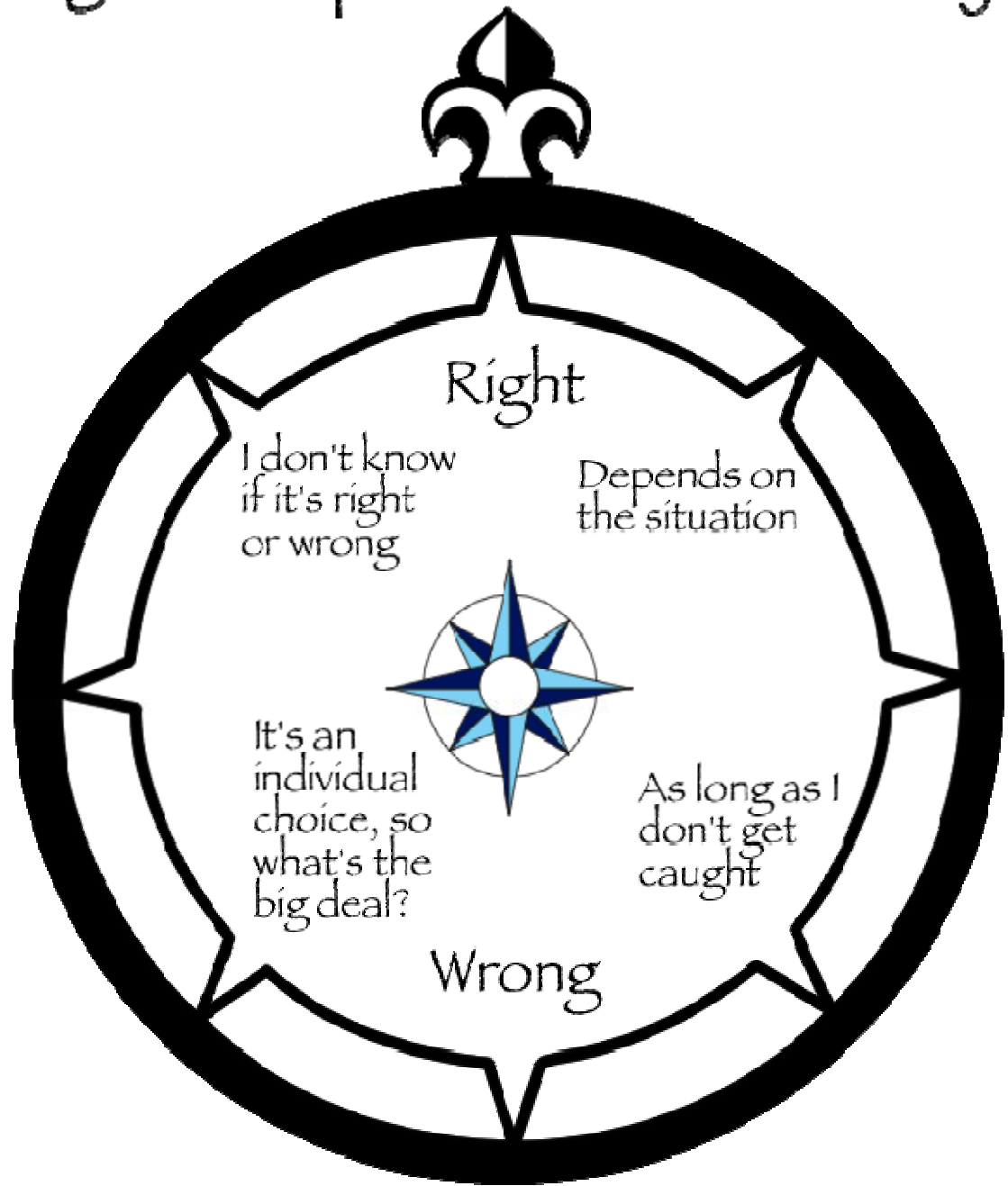


Figure 6.1

6.4 – Foundational Lesson Plan #4 – Digital Driver’s License

Summary Description: Providing a benchmark for students to use technology appropriately.

Focus Question: What basic information should students know about the appropriate use of technology?

Additional Question:

1. Should all students be able to use technology without knowing if they have some knowledge and understanding of Digital Citizenship?
2. When should students begin to learn about the appropriate use of technology?

For more information about the basic concepts of Digital Citizenship see Chapter 2 (p. 8) or on the nine themes see Chapter 3 (p. 12). NETS standards: NETS*T – Standard VI, NET*S – Standard 2 see p. 193 for the ISTE standards

Lesson Goals/Objectives:

To begin relating the needs of basic competency for technology usage, especially related to Digital Citizenship.

Tools/Resources Needed:

Get Your Web License – PBS Kids GO!

<http://pbskids.org/license/>

Junior Computer Drivers License – Danish Ministry of Education

<http://eng.uvm.dk/news/junior.htm?menuid=05>

Activity Description:

1. Discuss the need for students to have a basic understanding of what is considered appropriate or not when using technology. This instrument can help show if students understand the concept.
2. Administer the Digital Driver’s License exam for the particular level you are teaching (elementary for grades 4-6 and secondary for grades 7-10). Students should be able to complete the exam with an 80% or better score to be considered eligible for a license.
3. Allow students that have completed the exam to continue to learn more about appropriate technology use. Those with less satisfactory scores need to review the concepts of Digital Citizenship.

Lesson Extension Ideas/Activities:

1. Have students create their own exam questions. Let the students quiz others with their new exam.
2. Have the students create a “driving” test as a companion to this written exam. Have the students identify what skills would be most important.

Teaching Tips:

1. Work with students prior to giving the license exam to help them identify situations which would be considered inappropriate use of technology.
2. Show students that learning how to use technology appropriately is to their advantage because, they will be more informed and protected from possible problems.
3. Understand that the exam is not the primary focus. The students need to realize that just like driving a car, technology use is a privilege not a right.
4. Provide more information in the classroom than just the ideas on the test. Students need instruction on the appropriateness of technology use.

Elementary Driver's License

Digital Manners (Etiquette)

1. Having your cell phone turned on during school hours is:
 - a. a bad idea because it might disturb others.
 - b. a good idea for keeping in touch with parents.
 - c. no "big deal" because everyone else does it.
 - d. your choice if it doesn't affect anyone else

Digital Messages (Communication)

2. When writing on a blog, should I share my secrets?
 - a. sure, a blog is like a diary, so this is where I should put them.
 - b. it doesn't matter, only my friends read my blog.
 - c. no, the blog is open to anyone who has access to the Internet.
 - d. as long as no one knows my true identity.

Digital Learning (Literacy)

3. When learning about technology in school, it is important for you to know:
 - a. the rules for using technology.
 - b. how to work with others when using the technology.
 - c. how the different technologies are used.
 - d. all the above.

Digital Inclusion (Access)

4. Students with disabilities (those who aren't able to see, hear, or walk):
 - a. can't use technology.
 - b. should have the same opportunities as others to use technology.
 - c. are not able to understand and learn about technology.
 - d. have no reason to use technology.

Digital Business (Commerce)

5. If your parents allow you to buy things on the Internet, you should:
 - a. think twice about buying online, because all sites are dangerous.
 - b. follow what your friends say about where to buy.
 - c. find the first site with what you want and buy it.
 - d. first check to see if the site is safe and secure when buying something.

Digital Trust (Law)

6. When looking graphics and text from the Internet:
 - a. take whatever you want because the purpose of the Internet.
 - b. ask your friends for places to find material you can copy.
 - c. ask for permission to use the information before using them.
 - d. avoid it because all the information on the Internet is false.

Digital Privileges (Rights & Responsibilities)

7. When using a new technology in class, you should:
- a. do what ever you want because no one ever checks.
 - b. ask teachers and parents about what can be done.
 - c. figure out ways that you can have fun with it.
 - d. ask your friends because they know about technology.

Digital Protection (Health/Wellness)

8. How I work with technology (i.e., sitting, laying, stooping at the desk, floor, or sofa):
- a. doesn't matter as long as I am comfortable.
 - b. depends on where I am.
 - c. isn't something that I need to be concerned about.
 - d. shouldn't be ignored.

Digital Precaution (Security)

9. When dealing with people online, giving personal information is:
- a. okay as long these people live far away.
 - b. never a good idea, no matter the reason.
 - c. fine as long as the people are nice.
 - d. nothing to worry about.

Answer Sheet for Elementary Driver's License Quiz

#1 - Correct Answer: A Many schools are allowing students to have cell phones in schools for safety, but are requiring that they be turned off or silenced during the school day. This keeps students focused on doing the right things in school.

#2 - Correct Answer: C Blogs are open to anyone on the Internet. Many users think that they are like diaries (and used as such) that students should share their thoughts on the blog. Blogs can be useful tools to share information, but users need to be careful what they share.

#3 - Correct Answer: D Technology affords many opportunities for students to learn beyond the classroom. But there must be an understanding of how to use the technologies first.

#4 - Correct Answer: B Students with disabilities should have opportunities to work and learn with technology. Some students may need special technology tools to provide this opportunity (e.g., screen readers, special input devices, speech to text converters).

#5 - Correct Answer: D Purchasing goods and services online needs to be taken seriously. People can gain information about you and your family from information that you provide. Make sure the site is secure by checking it over (e.g., does it have secure access only, ask only questions that are appropriate for the purchase, have alternate ways to contact the company).

#6 - Correct Answer: C Students need to realize that when "borrowing" anything from the Internet that its use is restricted by the owner (unless stated otherwise). All content taken from the web should be cited appropriately.

#7 - Correct Answer: B All users have certain rights and responsibilities when using technology. It is important to know what is appropriate and what is not appropriate before using technology.

#8 - Correct Answer: D Users often don't think about safety physical habits until they hurt themselves. How you use technology today can have a big impact on how you are going to be able to use it in the future.

#9 - Correct Answer: B It is easy to act differently online than face-to-face. Students need to make sure that private information remains private.

Secondary Driver's License

Digital Etiquette: *electronic standards of conduct or protocol.*

1. During school hours the correct cell phone ringer setting is:
 - A. low
 - B. vibrate
 - C. specialized ring tone
 - D. high

2. Handheld computers and smartphones should be used in class for:
 - A. exchanging ideas from class discussion
 - B. helping friends get the answers
 - C. playing games
 - D. sending notes during a teacher's lecture

Digital Communication: *electronic exchange of information.*

3. E-mail messages should be:
 - A. long and full of details
 - B. sent to as many recipients as you can
 - C. short and to the point
 - D. sent without a subject line

4. Instant Messaging (IM) is a good tool for:
 - A. sharing what happened in class with friends
 - B. discussing class topics
 - C. talking to friends when bored in class
 - D. inviting people outside the school into the discussion

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

5. The most appropriate use of technology in schools is to:
 - A. do research only
 - B. find resources to help learn the class topics
 - C. write class papers only
 - D. play games during class

6. Online learning is:
 - A. difficult and not worth the time
 - B. not well understood by students
 - C. like trying to take a class without a teacher
 - D. being tested in many school districts

Digital Access: *full electronic participation in society regardless of gender, race, age, ethnicity, and physical or mental challenges.*

7. Assistive technologies for people with disabilities are:
 - A. necessary for some users to access information
 - B. seen as just an additional expense
 - C. expensive relative to regular technology
 - D. needed for a few students

8. The differences between those with access to digital technology and those without is:
 - A. not a big deal because all technology is a luxury
 - B. something that can never be fixed
 - C. a concern that needs to be addressed by the school/district
 - D. not a priority for school/districts

9. Digital technology-based assignments should be:
 - A. avoided because some students may not have access to technology at home
 - B. integrated into the classroom
 - C. approached cautiously for fear of offending someone
 - D. assigned for out-of-class work only

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

10. Purchasing goods and services online is:
 - A. a waste of time because goods sold on the Internet are a scam
 - B. something that everyone has learned at home
 - C. not a skill to be overlooked by schools
 - D. not needed by students in schools

11. Searching for information about products online before buying is:
 - A. should not be ignored when looking for the best price
 - B. too time consuming
 - C. a lot of work and not very informative
 - D. not helpful, because it is difficult to find products online

Digital Law: *electronic responsibility for actions and deeds which is either ethical or unethical.*

12. Information on the Internet is:
 - A. available for anyone to use as they want
 - B. copyrighted and should be treated as someone else's property
 - C. easy to copy and paste into your own document
 - D. unreliable and should be held suspect

13. Sharing music or copyrighted material online:
- A. doesn't hurt anyone because musicians and actors make enough money
 - B. is caused by greedy companies
 - C. is illegal and should not be done
 - D. keeps the musician or actor popular

Digital Rights & Responsibilities: *those freedoms extended to every student, administrator, teacher, parent or community member.*

14. If someone puts copyrighted material on the Internet and another person wants to use it, that person should:
- A. use it, if it is for educational use
 - B. take it, and use it as they want
 - C. not use the information because it is too much trouble
 - D. ask permission from the author or at least cite the source
15. In schools, students should:
- A. have the ability to do whatever they want online
 - B. follow the Acceptable Use Policies of the school/district
 - C. look at other student's e-mail if they have the password
 - D. come up with rules with their friends for using technology

Digital Health/Wellness: *physical and psychological well-being in an digital technology world.*

16. Physical injuries related to technology use:
- A. is not a big deal and is not a major concern
 - B. will not happen for many years, so should not be a priority
 - C. can have dramatic and painful effects on your body
 - D. is not a concern for schools
17. Furniture and chairs for technology should be:
- A. the right height and size for using that technology
 - B. any size because it doesn't matter to students
 - C. bigger than the students to allow them to stretch
 - D. soft and flexible so the students can be comfortable

Digital Security: *taking necessary precautions to guarantee electronic digital safety.*

18. When dealing with strangers, online users should:
- A. give personal information freely
 - B. be cautious about giving information
 - C. provide passwords and credit information if asked
 - D. not tell anyone about people they meet online

19. To protect a computer from virus, a user should:
- A. never open an e-mail message
 - B. unplug your computer from the Internet
 - C. keep up-to-date on virus protection
 - D. trust your service provider to protect your computer
20. Virus protection and firewalls are:
- A. foolproof and never need to be checked
 - B. a waste of time and money because virus attacks only happen to big businesses
 - C. effective but not necessary
 - D. a good investment, but they need to be monitored and updated regularly

Answer Sheet for the Secondary Driver's License Quiz

#1 - Correct answer is B. Vibrate is correct because it is the least distracting setting during the school day. Many schools are allowing students to carry cell phones for safety and security reasons.

A specialized ring tone might be able to identify your phone from others, but can be annoying to other users. Another option would be to turn off the phone during school hours.

#2 - Correct answer is A. The ability for PDAs to share information can lead to significant learning. But in a testing situation or times when others are talking, they should not be used this way. PDAs are appropriate for other uses at the teacher's discretion.

#3 - Correct answer is C. E-mail is intended for short communication. Long and involved e-mails are often either not read or filed for later review. A descriptive subject line can alert the user about importance and content in the e-mail.

#4 - Correct answer is B. IM can be used for allowing students to express themselves in a less threatening fashion. IM is not a place to gossip, waste time, or exclude others from being in the conversation.

#5 - Correct answer is B. Technology can be a helpful tool and provide additional resources for teaching and learning. Technology can assist instructors to be more efficient in their teaching.

#6 - Correct answer is D. Online learning is being tested and used in several school districts in the U.S. Online learning, if done correctly, can be a great benefit for everyone who wants to become a "life-long learner"

#7 - Correct answer is A. Some students (and adults) with disabilities need assistive technologies so that they can access digital information. Everyone should have an opportunity to access information. Many of these technologies are very cost effective.

#8 - Correct answer is C. There is still a "digital divide" between those that have access to technologies and those that do not. Often basic technology needs go unfulfilled, even as prices decrease. As a society becomes more technologically integrated, it will become the responsibility of the school to develop a plan for addressing this need.

#9 - Correct answer is B. Some teachers are reluctant to assign technology-based assignments because some students might not have access (e.g., home, library). These assignments should be integrated into the classroom where students have access to technology.

#10 - Correct answer is C. Teenage students are becoming one of the largest groups of online consumers. There is a need to protect them and make sure they are not being exploited. The process of buying goods online needs to be taught and discussed.

#11 - Correct answer is A. Technologies such as the Internet provide many tools to help find information. The Internet offers many opportunities to buy and sell goods, but the smart shopper looks around to find the best value. With the search tools that are available today, finding many different vendors is quick and easy.

#12 - Correct answer is B. According to copyright law, anything that is produced by an individual is copyrighted whether they have gone through the legal process or not. It may be easy to copy something and “pass off” as original work, but it still needs to be cited. Users do need to differentiate between real and fabricated information on the Internet. Much information is credible, but you can assume that it is credible without close examination.

#13 - Correct answer is C. Downloading materials without artist’s consent is stealing. Often users know that taking files from the Internet is wrong but rationalize it for a variety of reasons (e.g., high cost, availability).

#14 - Correct answer is D. If material is copyrighted, users must give credit to the person who created it. If you are going to make profit from a source, permission must be obtained. Educational users can have access to some copyrighted material, but the rules of copyright need to be thoroughly understood.

#15 - Correct answer is B. Most schools have set up Acceptable Use Policies for use of technology in school. If someone is going to use technology appropriately, they need to follow the rules that have been created.

#16 - Correct answer is C. Repetitive stress injuries are injuries that happen after extended periods of time by using technology incorrectly. There are long-term effects, but there are also short-term effects that include fatigue, eye problems, and sore muscles.

#17 - Correct answer is A. When purchasing technology, educators need to consider how that technology will be arranged for students. Furniture that is the wrong size or not made for that purpose can make it difficult for students to use the technology. It can also lead to technology related injuries such as repetitive stress, eyestrain, and sore muscles.

#18 - Correct answer is B. It can be very difficult to know who you are dealing with when using digital technology. It is easy to disguise your identity online. Be cautious about giving out personal information such as home address, phone number, etc. Do not give out information such as passwords or credit information.

#19 - Correct answer is C. Protecting one’s computer from an attack against a virus takes diligence on the part of the user. It is necessary to maintain virus protection. You should not open e-mails (and especially attachments) from people that you do not know.

#20 - Correct answer is D. Virus protection, firewalls, surge protectors, and battery backups are all appropriate tools to help protect your technology investment, but purchasing them is not enough. These tools need to be monitored and updated to ensure they are working properly.

Scoring Rubric for Student Activities

Objectives	Exemplary Performance - 4	At or Above Average - 3	At or Below Average - 2	Low Performance - 1	Points Earned
Students have an understanding of the importance of the concept.	Student has complete grasp of concept.	Student not as sure about importance of concept.	Student unaware of importance of concept.	Student does not understand topic.	
Student involved in classroom activity.	Student completely engaged.	Student interested but not engaged.	Student not providing effort in class.	Student not interested in topic.	
Student understands the relevance of the topic to larger discussion of Digital Citizenship.	Student has good grasp of both the topic and Digital Citizenship.	Student aware of Digital Citizenship but unsure of connection.	Student has only minimal understanding of either the topic or Digital Citizenship.	Student does not understand either the topic or Digital Citizenship.	
Student can come up with related examples of topics within Digital Citizenship.	Student is able to use information from activity to come up with new concepts related to Digital Citizenship.	Student can provide limited examples with prompting from teacher or other students.	Student has difficulty making the connection between activity and other examples.	Student is not able to come up with any examples beyond what is presented in the activity.	
Student can understand the need to use technology appropriately.	Student is able to make the connection between appropriate technology use and good citizenship.	Student understands that technology should be used appropriately but believes that some misuse is ok.	Student having difficulty realizing how inappropriate technology use affects others.	Student cannot understand the need for using technology appropriately.	
At the conclusion of the activity, did the student seem to gain any new ideas or concepts?	Yes, the student seemed to learn many new ideas.	Yes, the student took away some ideas.	Not sure.	No, the student seems to be disinterested in the topic.	
Overall, what effort did the student put forth in this activity?	The student has given much effort to the topic.	The student worked hard, but not 100%	The student did very little during this activity.	The student provided no effort in doing this activity.	
				Score:	

Holistic Score: The holistic score provides a general level of online computing usage and understanding. Look at your holistic score and the description of that score below.

28 – 25 = Exemplary understanding of topic and Digital Citizenship.

Student has good understanding of the concept.

24 – 22 = Above average understanding of the topic and Digital Citizenship.

Student understands the topic but still needs additional resources.

21 – 20 = Below average understanding of the topic and Digital Citizenship.

Student struggling with this topic and overall concept of Digital Citizenship.

19 – 17 = Low understanding of the topic and Digital Citizenship.

Student has little knowledge of the topic, more work is needed.

Below 17 = needs additional work with the topic and Digital Citizenship.

Student does not understand the topic or is uninterested.