Unit 2: Impact of Computer on Society / Digital Citizenship

Content Area: **Computer Science**
Course(s):
Time Period: **Trimester 1**
Length: **10 days**
Status: **Published**

Brief Summary of Unit

In this unit, students will explore ways to protect themselves and their online accounts while using the Internet and learn about the importance of practicing netiquette and cyber ethics. The concept of a digital footprint will be introduced and the impact it might have on students' lives.

Standards

Diversity and Inclusion: Students will focus on equity, inclusion, and tolerance when analyzing the comparison of various quantities regarding characteristics of people. Equality will also be highlighted through the topic of citizenship. This can be associated with treating people fairly and equally.

CS.6-8.8.1.8.IC.1	Compare the trade-offs associated with computing technologies that affect individual's everyday activities and career options.
CS.6-8.8.1.8.IC.2	Describe issues of bias and accessibility in the design of existing technologies.
SCI.MS-ETS1-3	Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.
SOC.6.3	Active Citizenship in the 21st Century
WRK.K-12.P.5	Utilize critical thinking to make sense of problems and persevere in solving them.
WRK.K-12.P.8	Use technology to enhance productivity increase collaboration and communicate effectively.
TECH.9.4.8.CI.2	Repurpose an existing resource in an innovative way (e.g., 8.2.8.NT.3).
TECH.9.4.8.DC.1	Analyze the resource citations in online materials for proper use.
TECH.9.4.8.DC.2	Provide appropriate citation and attribution elements when creating media products (e.g., W.6.8).
TECH.9.4.8.GCA.2	Demonstrate openness to diverse ideas and perspectives through active discussions to achieve a group goal.
	Gathering and evaluating knowledge and information from a variety of sources, including global perspectives, fosters creativity and innovative thinking.
	Constructing explanations and designing solutions in 6–8 builds on grades K–5 experiences and progresses to include constructing explanations and designing solutions supported by multiple sources of evidence consistent with scientific ideas, principles, and theories.
	Multiple solutions often exist to solve a problem.

Detailed examples exist to illustrate crediting others when incorporating their digital artifacts in one's own work.

Transfer

- Be aware of new technologies and other types of products and how to evaluate them.
- identify cause and effect relationships of technology, and identify ideas where technology could enhance a situation.
- Identify the ways people use computers in their everyday lives and in their careers and how computer use impacts them.

Essential Questions

- How do tech products evolve?
- How does the use of a computer affect people's everyday lives and their careers?
- How might today's tech products change to meet users' new demands?
- In what ways could computer use be harmful to myself and others?
- What is the function of new and emerging technologies and why will users and producers value them?

Essential Understandings

- Computers and technology have both positive and negative effects on society and the workplace.
- Technology is constantly changing and evolving to meet consumer's demands.

Students Will Know

- The ways in which computer use can impact people both positively and negatively.
- The ways in which people use computers in everyday life and in the workplace.

Students Will Be Skilled At

- Making connections between technology and its impact on society.

Evidence/Performance Tasks

- Projects can be in the form of Slideshows, videos, podcasts, websites, digital posters etc. based on a curriculum topic or could be problem based.
- A table that lists students' online and offline activities. Also, a table that lists students' positive and negative digital habits.
- A slideshow that depicts the positive and negative impact of a technological innovation the student and/or their family uses
- Turn a computer Technology article into a podcast.

- Students will take a test on what it means to be a digital citizen and what the characteristics of good digital citizenship are.
- Students will complete learning activities, assignments, and projects found in https://www.commonsensemedia.org/ under Digital Citizenship.
- Students will complete a Digital Footprint project where they insert images that represent their digital footprint into a blank footprint. The footprint will be discussed and posted in the classroom.

Assessments

- Formative: Daily assessments using examples from class notes and CodeHS.com
- Summative: Teacher-created assessments/projects and CodeHS Computer Science Projects
- Benchmark: Check for understanding benchmark assessments on CodeHS
- Alternative Assessments: Student-centered activities such as a doorbell coding project, game design projects, and other activities involving real world applications
- Activities/Assessments Folder

Core instructional materials: Core Book List

Supplemental materials: Khan Academy

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Learning Plan

- Discuss importance of media balance for students - use commonsense media for activities/lessons https://www.commonsensemedia.org/
- Discuss/view videos about Inventions in technology vs. Innovations (emerging tech) - i.e., The PC vs. laptops, The Internet and devices that emerged from it, i.e. the Apple ipod, social media
- Read articles/Watch videos/Discuss bias and accessibility issues in today's technologies.
- Discuss use of technology in various careers.
- Read/Discuss/Present online articles about technology current events - i.e., Facebook's Metaverse.
- Students will watch a short video about Digital Citizenship -Discuss video as a class - Students will complete Digital Citizenship questions - Discuss answers as a class.
- Students will create notes about Digital Citizenship from Q & A assignment above and will be tested

on these notes.
- Digital Citizenship learning activities, assignments and projects found in https://www.commonsensemedia.org/ will be introduced, supervised, presented, and discussed.

Materials

- Core instructional materials: Core Book List

Supplemental materials: CodeHS

- CodeHS.com
- Common Sense Media website - https://www.commonsensemedia.org/
- Digital Compass Game - https://www.digitalcompass.org/
- The Difference between Invention and Innovation - https://www.youtube.com/watch?v=jaQHinbVVus
- The Difference between Invention/Innovation in Business - https://www.youtube.com/watch?v=jFQSa6k5ofs

Suggested Strategies for Modifications

Possible accommodations/modification for Computers - Grade 6