Impacts of Computing: Culture (1) Grade: 2

Standard 2.IC.C.01

Use grade-level appropriate language to identify and describe how people use a variety of technologies and applications in their daily work and personal lives and the impact of new technologies on daily life.

Essential Skills

Compare how technology has changed how specific tasks are accomplished.

Essential Questions

How does technology affect your daily life?

How can technology change how you do certain tasks?

What things in your life would change without computing devices and other technologies?

Explanation

Students will describe how they and those they know use technology. Technology has changed how people interact, access information, and more. By second grade, students will compare how quickly, efficiently and easily a task can be accomplished with and without a specific technology. For example, using a computer connected to the internet you can play a game with a friend in another place and everything you need is on the computer. In the past if you wanted to play a game, you needed other people who were near you to play, you had to have all of the pieces, you had to be able to read the directions etc.

Think of this as similar to....

We used to have to go to movie theaters to see movies, but now many are available at any time over streaming services.

Implementation Examples—What would this look like in the classroom?

Title	Description	Link	Content Connection & Notes
Artificial Intelligence	Grade KStudents discuss various artificial intelligence ""helpers"" (Alexa, Siri, etc.) that they are familiar with. Show video clips so all students can watch the "helpers" in action. What are the "helpers" helpful for? Grade 1Students provide examples of how the ""helpers" make things easier. They also should think of mistakes the helpers make. Grade 2Students explore how different artificial intelligence applications have changed the way we do things (use maps vs. use GPS) and the advantages and disadvantages of each. They begin to explore what is behind these capacities of a computer.	Artificial Intelligence (This lesson addresses sorting algorithms and other aspects of AI that are interesting and engaging but are not necessary to address the standard.)	This lesson also aligns with ELA SL2.2
Evolving Technology	Grade 2 Using informational text and photographs, students compare and contrast computing devices of today and those of the past. Students also describe how and why people have used computing devices over time, and how the uses have changed.	The Past: What is a Computer? can be used for reference, but is not the lesson described.	This lesson also aligns with SS 2.3 Economics: Producers and 2.4 History: Life in the Past; and ELA W2.2 and W2.8

Standard: IC.C.01 Grade: 2

These annotations are a collaboration between Maryland Center for Computing Education and the Maryland State Department of Education.