Impacts of Computing: Culture   Grade Band: K-2

Grade	Standards: IC.C.01
K	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.
1	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.
2	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.

Grade	Essential Skills
K	Identify different types of technologies that people use in their daily lives.
1	Explain how certain tasks are made easier because of computing devices.
2	Compare how technology has changed how specific tasks are accomplished.

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.

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?

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

Grade(s)	Title	Description	Link	Content Connection & Notes
K-1	**The Right App**	**Grade K**--Students create a list of apps they use or are familiar with and identify how apps can help in daily life. **Grade 1**--Students imagine an app that will make things easier for someone else.	The Right App	
K-1	**The Present: What is a computer?**	**Grade K**--Students look for what is and what is not a computer (tablets, smartphones, landline phones, microwaves etc.) and identify how they and others use those technologies. **Grade 1**--Discuss how technologies in general and computing devices specifically make certain tasks easier.	The Present: What is a Computer?	From NYC Computational Media Explorer Curriculum.
K-2	**Artificial Intelligence**	**Grade K**--Students 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 1**--Students provide examples of how the ""helpers"" make things easier. They also should think of mistakes the helpers make. **Grade 2**--Students 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
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

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