# 2.IC.1 Impacts of Computing

The student will examine the positive and negative impacts of how using computing technologies has changed the way people live, work, and interact. (a) Identify current uses of computing/emerging technologies and discuss how they impact society. (b) Compare and contrast appropriate and inappropriate online behaviors that apply in the physical environment and the online environment. (c) Model healthy habits for using computing technologies.



#### **Integration Opportunities**

Math 2.MG.2b Have students track time spent on screen-based activities (TV, digital games, etc.) to the nearest five minutes. Discuss the impact of screen time on daily life, and decide whether minutes or hours are the most appropriate units for measuring each activity.

English 2.Rl.1a,c Describe current technologies and how they impact society through the practice of asking and answering literal and inferential questions. Differentiate facts from opinions when discussing and reading text about positive and negative impacts of technology on daily life.

Science 2.1a Compare and contrast how technology has impacted the way we explore and learn about the natural world, such as through telescopes, microscopes, and other scientific tools.

### **Understanding the Standard**

People have always used devices to assist in computation. They can help in the collection, storage, or manipulation of data. Early computers used mechanical components to perform calculations. In the early 1800s, the first programmable computers were created. They were limited in their capability, and relied heavily on people to do more complex computation. The development of computing technology has expanded exponentially over the past 100 years. The development and modification of computing technology is driven by people's needs and wants. However, it's important to recognize that not all tasks require the use of a computer and that we should take care to use computers in a healthy way. To be responsible computer users, students can practice screen time management by limiting excessive computer use, demonstrate online safety by protecting personal information, and model digital citizenship by being respectful toward others. Incorporating these healthy habits into our daily routines can facilitate a positive and safe experience with technology.

Term	Definition
Computing device	An electronic device that can receive, store, process, and output information.
Impact	To have a strong effect on someone or something.

## Prerequisite Knowledge

Students should possess a familiarity with computing devices. They should also have basic knowledge of what is healthy, including eating nutritious foods, getting regular exercise, and building interpersonal relationships.

## Summary of a Lesson

Begin by creating a class list of actions and behaviors classified as "appropriate" or "inappropriate" at school. These could include things like keep your desk area tidy, be kind to others, follow the directions, obey the class rules, say please and thank you, name-calling, leave your stuff wherever you feel like when you are finished, interrupt others, etc. Then ask students to consider whether these same actions would be considered appropriate or inappropriate online. In pairs, have students create Venn diagrams that compare and contrast appropriate online behaviors with appropriate in-person behaviors. Have students share their diagrams with the class, and combine student work into a class anchor chart for reference.



