K.IC.2 Impacts of Computing

The student will discuss and describe how different careers use computing technologies. (a) Describe how computing technologies are used in various careers. (b) Discuss the advantages of using computing technologies in different careers. (c) Identify local jobs that utilize computer technologies.



Integration Opportunities

Understanding the Standard

Computing technologies are used in many different careers. From doctors to artists, people rely on computers to do their jobs. Doctors use computers to diagnose patients and prescribe medicine. Artists use computers to create digital art and animation. Teachers use computers to develop lesson plans, present lessons, record grades, and communicate with students' families. Farmers use computers to monitor their crops. Computers are essential tools in a wide variety of professions, but computing technologies have both advantages and disadvantages. They can improve efficiency but can also lead to errors or be a distraction. Students should be able to identify local jobs that utilize computer technologies, and notice both the advantages and disadvantages of using computers.

Term	Definition
Computing device	An electronic device that can store and receive information.
Job	A paid position of regular employment.

English K.FFR.1d Students can explore how authors and illustrators use computing technologies in their careers.

Music K.9, K.10 Students will identify both people who create music (singers, instrumentalists, composers, conductors) and technology tools used in creating music.

History K.8a Computer technologies should be a part of career conversations for how people work to earn money.

Prerequisite Knowledge

Students should possess a fundamental comprehension of computers and a basic knowledge of the internet. They should also be familiar with the idea of jobs or careers, so that they can connect the actions performed on the job with the tools used.

Visual Arts K.9 Explore artists who use computing technologies to create art.

Math K.PS.1 Count and sort different jobs according to how they use computers, and create a picture graph to show their findings while sharing how computers help in those jobs.

Summary of a Lesson

Hold a "job fair" during which students will view and listen to how a variety of professionals do their jobs. This may be done in person with volunteers from the community, or through viewing videos or reading books that show a "day in the life" of specific jobs. Have students signal when they notice a professional interacting with a computing device and have them explain what they are using the device to accomplish. Record this information on a class chart using words and pictures. Have students journal about one job they thought was interesting and how a person doing that job would use computers.



