



Integration Opportunities

Math 4.PS.1 Use the data cycle to research the impact of computing technologies on the workforce by gathering data on required skills and diversity trends, representing the data with appropriate graphs, and analyzing the results to communicate their findings while justifying their choice of graph type for each data set.

English 4.RI.1a-c Have students read and analyze texts that detail careers and advancements in the technology field. Then have students select and summarize a text, distinguishing between facts and opinions and explaining how key details support the main idea.

History VS 13.b Examine the impacts of computing technologies on Virginia's global market.

4.IC.3 Impacts of Computing

The student will examine the impact of computing technologies in the workforce. (a) Research and analyze the skills needed for careers in computing technology fields. (b) Examine the impacts of diversity and inclusivity in computing technology fields.

Understanding the Standard

Computing technologies are an important part of our daily lives. To help students develop a deeper understanding of the role of technology in daily life they should examine how a wide range of careers utilize computing technologies in their day-to-day tasks. In addition, students should be familiar with a variety of roles within technology fields and begin to identify skills and areas of study that could benefit a professional in that field. In fourth grade, students may examine how involving professionals from a broad range of experiences and background affect the innovation in and accessibility of technology. Understanding the relationship between computing technologies and the workforce can facilitate positive and productive experiences with technology.

Term	Definition
Computing device	An electronic device that can receive, store, process, and output information
Career	The series of jobs and work we do throughout our lives, often within a particular profession or trade
Skill	Something a person has learned that helps them complete a task well.
Diversity	The presence of a variety of people or things with different characteristics.
Inclusivity	The quality of including many different types of people and treating them all fairly and equally.

Prerequisite Knowledge

Students should have an understanding of the difference between a job and a career and the definition of each. They should also be able to identify multiple types of computing devices.

Summary of a Lesson

Hold a "career fair" during which students view and listen to how a variety of professionals do their jobs. This may be done in person with volunteers from the community, through video chats with volunteers, or through viewing videos or reading books that show a "day in the life" of careers in the field of technology. Have students record when and how each professional interacts with computing devices. Collect student ideas on a class chart. For each entry on the chart, collect ideas about what skills a person would need to help them do that task. Have students journal about one career they thought was interesting, what skills they would need to succeed in that career, and how that career benefits their community.

