

Computer Science and Digital Fluency Learning Standards

Standards at a Glance

Grades 2-3

Impacts of Computing



Subconcept	Standard
Society	2-3.IC.1 Identify and analyze how computing technology has changed the way people live and work.
	2-3.IC.2 Compare and explain rules related to computing technologies and digital information.
Ethics	2-3.IC.3 Discuss and explain how computing technology can be used in society and the world.
	2-3.IC.4 Identify public and private digital spaces.
	2-3.IC.5 Identify and discuss how computers are programmed to make decisions without direct human input in daily life.
Accessibility	2-3.IC.6 Identify and discuss factors that make a computing device or software application easier or more difficult to use.
Career Paths	2-3.IC.7 Identify a diverse range of roles and skills in computer science.

Computational Thinking



Subconcept	Standard
Modeling and Simulation	2-3.CT.1 Create a model of an object or computational process in order to identify patterns and essential elements of the object or process.
Data Analysis and Visualization	2-3.CT.2 Identify and describe data collection tools from everyday life.
	2-3.CT.3 Present the same data in multiple visual formats in order to tell a story about the data.
Abstraction and Decomposition	2-3.CT.4 Identify multiple ways that the same problem could be decomposed into smaller steps.
	2-3.CT.5 Identify the essential details needed to perform a general task in different settings or situations.
Algorithms and Programming	2-3.CT.6 Create two or more algorithms for the same task.
	2-3.CT.7 Name/label key pieces of information in a set of instructions, noting whether each name/label refers to a fixed or changing value.
	2-3.CT.8 Identify steps within a task that should only be carried out under certain precise conditions.
	2-3.CT.9 Identify and debug errors within an algorithm or program that includes sequencing or repetition.
	2-3.CT.10 Develop and document a plan that outlines specific steps taken to complete a project.

Networks & System Design



Subconcept	Standard
Hardware and Software	2-3.NSD.1 Describe and demonstrate several ways a computer program can receive data and instructions (input) and can present results (output).
	2-3.NSD.2 Explain the function of software in computing systems, using descriptive/precise language.
	2-3.NSD.3 Describe and attempt troubleshooting steps to solve a simple technology problem.
Networks and the Internet	2-3.NSD.4 Recognize that information can be communicated using different representations that satisfy different rules.
	2-3.NSD.5 Describe and navigate to various locations where digital information can be stored.

Cybersecurity



Subconcept	Standard
Risks	2-3.CY.1 Compare reasons why an individual should keep information private or make information public.
Safeguards	2-3.CY.2 Compare and contrast behaviors that do and do not keep information secure.
	2-3.CY.3 Identify why someone might choose to share an account, app access, or devices.
	2-3.CY.4 Encode and decode a short message or phrase.
Response	2-3.CY.5 Identify unusual activity of applications and devices that should be reported to a responsible adult.

Digital Literacy



Subconcept	Standard
Digital Use	2-3.DL.1 Locate and use the main keys on a keyboard to enter text independently.
	2-3.DL.2 Communicate and work with others using digital tools to share knowledge and convey ideas.
	2-3.DL.3 Conduct basic searches based on student-identified keywords.
	2-3.DL.4 Use a variety of digital tools and resources to create digital artifacts.
	2-3.DL.5 <i>This Standard begins in Grade Band 4–6.</i>
Digital Citizenship	2-3.DL.6 Describe ways that information may be shared online.
	2-3.DL.7 Understand what it means to be part of a digital community and describe ways to keep it a safe, respectful space.