

Instructional Technology

Third Grade

Essential Curriculum

Standard 1. Creativity and Innovation

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.

- a. Apply existing knowledge to generate new ideas, products, or processes the using Engineering Design Process (EDP).
- b. Create original works as a means of personal or group expression using various software applications.
- c. Use digital models and simulations to explore.
- d. Identify trends and forecast possibilities.

Standard 2. Communication and Collaboration

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

- a. Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
 - i. Collaborate in pairs or groups to develop technology-based presentations or products for content-related topics using digital audio, photos, and images (e.g., interact via videoconferencing or blogging with young adult authors, musicians, artists, or scientists to collaborate on a multimedia product with teacher facilitation).
- b. Communicate information and ideas effectively to multiple audiences using a variety of media and formats.
 - i. Create and edit products in a variety of media environments (e.g., presentations, newsletter, video, annotated calendar, wiki) to effectively communicate individual and group curriculum activities, ideas, or results to multiple audiences.
- c. Develop cultural understanding and global awareness by engaging with learners of other cultures.
 - i. Use technology communications tools (e.g., online forums, blogs, email, text messaging, chat, voice over IP (VoIP), videoconferencing) to interact with students or experts from other cultures, communities, or countries on a collaborative, content-specific activity or project.
- d. Contribute to project teams to produce original works or solve problems.
 - i. Working in pairs or small groups with assigned roles, use digital tools to explore specific subject-related concepts or content and present problem solutions or create original works using appropriate tools (e.g., animation and drawing software, visual data tools, graphic organizers, simulation development tools, programming languages, video camera, editing software, music software).

Standard 3. Research and Information Fluency

Students apply digital tools to gather, evaluate, and use information.

- a. Plan strategies to guide inquiry.
 - i. Use technology tools, independently or with assistance, to support note-taking.
- b. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
 - i. Use and evaluate technology tools to organize information.
- c. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
 - i. Evaluate the effectiveness of technology tools for organizing information
- d. Process data and report results.
 - i. Use technology tools, independently or with assistance, to support data collection.
 - ii. Describe how technology tools are used to organize information/collect data.

Standard 4. Critical Thinking, Problem Solving, and Decision Making

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

- a. Identify and define authentic problems and significant questions for investigation.
 - i. With the guidance of the teacher, students use technology to help identify the type of problem and the data needed to answer that type of problem.
- b. Plan and manage activities to develop a solution or complete a project.
 - i. Use technology to record questions.
- c. Collect and analyze data to identify solutions and/or make informed decisions.
 - i. Use electronic tools to collect data.
 - ii. Identify which technology tools can be used to gather information.
 - iii. Explain how electronic tools help gather information from various audiences.
 - iv. Select relevant information from appropriate technology resources.
 - v. Use various electronic information retrieval sources to obtain information on a topic.
 - vi. Use electronic tools to display data and analyze data.
 - vii. Assess the use of the selected technology for gathering data, analyzing data, and communicating conclusions.
- d. Use multiple processes and diverse perspectives to explore alternative solutions.
 - i. Communicate conclusions with various audiences using different media formats.
 - ii. Articulate the advantages of using technology tools to gather, analyze, and communicate conclusions.

Standard 5. Digital Citizenship

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

- a. Advocate and practice safe, legal, and responsible use of information and technology.
 - i. Research, discuss, and apply safe responsible, and legal use of technology (e.g., privacy, security, copyright, file-sharing, accessibility, plagiarism).
- b. Exhibit a positive attitude toward using technology that supports collaboration, learning,

and productivity.

- i. Select and apply technology resources and describe how these tools improve their ability to communicate, collaborate, be productive, and achieve goals.
- c. Demonstrate personal responsibility for lifelong learning.
 - i. Describe how they select and use technology resources to pursue personal and academic learning projects outside the classroom.

Standard 6. Technology Operations and Concepts

Students demonstrate a sound understanding of technology concepts, systems, and operations. *

- a. Understand and use technology systems.
- b. Select and use applications effectively and productively.
- c. Troubleshoot systems and applications.
- d. Transfer current knowledge to learning of new technologies.
- e. Develop an understanding of appropriate keyboarding positions.

*Refer to [Technology Literacy Checklist](#) for Grade 3.