Technology Standards for Students & Teachers

Student Technology Standards

The technology foundation standards for students are divided into six broad categories:

Basic operations and concepts

- Students demonstrate a sound understanding of the nature and operation of technology systems.
- Students are proficient in the use of technology.

Social, ethical, and human issues

- Students understand the ethical, cultural, and societal issues related to technology.
- Students practice responsible use of technology systems, information, and software.
- Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.

Technology productivity tools

- Students use technology tools to enhance learning, increase productivity, and promote creativity.
- Students use productivity tools to collaborate in constructing technology-enhanced models, preparing publications, and producing other creative works.

Technology communications tools

- Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.
- Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.

Technology research tools

- Students use technology to locate, evaluate, and collect information from a variety of sources.
- Students use technology tools to process data and report results.
- Students evaluate and select new information resources and technological innovations based on the appropriateness to specific tasks.

Technology problem-solving and decision-making tools

- Students use technology resources for solving problems and making informed decisions.
- Students employ technology in the development of strategies for solving problems in the real world.

Teacher Technology Standards

(adapted from the ISTE Technology Foundation Standards for all teachers)

Basic Computer/Technology Operations and Concepts

- Use computer systems to run software; to access, generate and manipulate data; and to publish results. Also evaluate performance of hardware and software components of computer systems and apply basic troubleshooting strategies as needed.
- Operate a multimedia computer system with related peripheral devices to successfully install and use a variety of software packages.
- Use terminology related to computers and technology appropriately in written and oral communications.
- Describe and implement basic troubleshooting techniques for multimedia computer systems with related peripheral devices.
- Demonstrate knowledge of uses of computers and technology in business, industry, and society.

Personal and Professional Use of Technology

- Apply tools for enhancing professional growth and productivity. Use technology in communicating, collaborating, conducting research, and solving problems. Plan and participate in activities that encourage lifelong learning and will promote equitable, ethical, and legal use of computer/technology resources.
- Use productivity tools for word processing, database management, and spreadsheet applications.
- Apply productivity tools for creating multimedia presentations.
- Use computer-based technologies including telecommunications to access information and enhance personal and professional productivity.
- Use computers to support problem solving, data collection, information management, communications, presentations, and decision making.
- Demonstrate awareness of resources for adaptive devices for student with special needs.
- Demonstrate knowledge of equity, ethics, legal, and human issues concerning use of computers and technology.
- Identify computer and related technology resources for facilitating lifelong learning and emerging roles of the learner and the educator.
- Observe demonstrations or uses of broadcast instruction, audio/video conferencing, and other distant learning applications.

Application of Technology in Instruction

- Apply computers and related technologies to support instruction in their grade level and subject areas. Plan and deliver instructional units that integrate a variety of software, applications, and learning tools. Lessons developed must reflect effective grouping and assessment strategies for diverse populations.

- Explore, evaluate, and use computer/technology resources including applications, tools, educational software and associated documentation.

- Describe current instructional principles, research, and appropriate assessment practices as related to the use of computers and technology resources in the curriculum.

- Design, deliver, and assess student learning activities that integrate computers/technology for a variety of student group strategies and for diverse student populations.

- Design student learning activities that foster equitable, ethical, and legal use of technology by students.

- Practice responsible, ethical and legal use of technology, information, and software resources.

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