

ISTE Technology Standards for Students

<ol style="list-style-type: none"> 1. Basic operations and concepts 2. Social, ethical and human issues 3. Technology productivity tools 4. Technology communication tools 5. Technology research tools 6. Technology problem-solving and decision-making tools

Numbers in parentheses following each performance indicator below refer to the standards category to which the performance is linked.

Grades K – 2	Grades 3 – 5	Grades 6 – 8	Grades 9 - 12
Use input devices (e.g. mouse, keyboard, remote control) and output devices (e.g. monitor, printer) to successfully operate computers, VCRs, audiotapes, telephones, and other technologies (1)	Use keyboards and other common input and output devices (including adaptive devices when necessary) efficiently and effectively (1)	Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use (1)	Identify capabilities and limitations of contemporary and emerging technology resources and assess the potential of these systems and services to address personal, lifelong learning, and work place needs (2)
Use a variety of media and technology resources for directed and independent learning activities (1,3)	Discuss common uses of technology in daily life and advantages and disadvantages those uses provide (1,2)	Demonstrate knowledge of current changes in information technologies and the effect those changes have on the workplace and society (2)	Make informal choices among technology systems, resources, and services (1,2)
Communicate about technology using developmentally appropriate and accurate terminology (1)	Discuss basic issues related to responsible use of technology and information, and describe personal consequences of inappropriate use (2)	Exhibit legal and ethical behaviors when using information and technology and discuss consequences of misuse (2)	Analyze advantages and disadvantages of widespread use and reliance on technology in the workplace and in society as a whole (2)
Use developmentally appropriate multimedia resources (e.g. interactive books, educational software, and elementary multimedia encyclopedias) to support learning (1)	Use general purpose productivity tools and peripherals to support personal productivity, to remediate skills deficits, and to facilitate learning throughout the curriculum (3)	Use content-specific tools, software and simulations (e.g. environmental probes, graphing calculators, exploratory environments, web tools) to support learning and research (3,5)	Demonstrate and advocate legal and ethical behaviors among peers, family, and community regarding the use of technology and information (?) (Technology Standards Page 2)
Work cooperatively and collaboratively with peers, family members, and others when using technology in the classroom (2)	Use technology tools (e.g. multimedia authoring presentation, web tools, digital cameras, scanners) for individual and collaborative writing, communication, and publishing activities to create knowledge products for audiences	Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum (3,6)	Use technology tools and resources for managing and communicating personal/professional information (e.g., finances, schedules, addresses, purchases, correspondence) (3,4)

	inside and outside the classroom (3,4)		
Demonstrate positive social and ethical behaviors when using technology (2)	Use telecommunications efficiently and effectively to access remote information and communicate with others in support of direct and independent learning and for pursuit of personal interests (4)	Design, develop, publish and present products (e.g., Web pages, videotapes) using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom (4,5, 6)	Evaluate technology-based options, including distance and distributive education, for lifelong learning (5)
Practice responsible use of technology systems and software (2)	Use telecommunications and on-line resources (e.g., email, online discussions, web environments) to participate in collaborative problem-solving activities to develop solutions or products for audiences inside and outside the classroom (4,5)	Collaborate with peers, experts, and others using telecommunications and collaborative tools to investigate curriculum-related problems, issues and information, and to develop solutions or products for audiences inside and outside the classroom (4,5)	Routinely and efficiently use on-line information resources to meet needs, for collaboration, research, publications, communications, and productivity (4,5,6)
Create developmentally appropriate multimedia products with support from teachers, family, members, or student partners (3)	Use technology resources (e.g. calculators, data collection probes, videos, educational software) for problem solving, self-directed learning, and extended learning activities (5,6)	Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems (5,6)	Select and apply technology tools for research, information analysis, problem solving, and decision making in content learning (4,5)
Use technology resources (e.g. puzzles, logical thinking programs, writing tools, digital cameras, drawing tools) for problem solving, communication, and illustration of thoughts, ideas, and stories (3, 4, 5, 6)	Determine when technology is useful and select the appropriate tool (s) and technology resources to address a variety of tasks and problems (6)	Demonstrate an understanding of concepts underlying hardware, software, connectivity, and practical applications to learning and problem solving (1, 6)	Investigate and apply expert systems, intelligent agents, and simulation in real world situations (3, 5, 6)
Gather information and communicate with others using telecommunications, with support from teachers, family members, or student partners (4)	Evaluate the accuracy, relevance, appropriateness, comprehensiveness and bias of electronic information sources (2,5,6)	Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real world problems (2, 5, 6)	Collaborate with peers, experts, and others to contribute to a content-related knowledge base by using technology to compile, synthesize, produce and disseminate information, models and other creative works (4, 5, 6)