

Student Technology Standards Matrix

<i>Student Technology Standard</i>	<i>Grades K-2</i>	<i>Grades 3-5</i>	<i>Grades 6-8</i>	<i>Grades 9-12</i>
<i>Basic Operations and Concepts</i>	<p>Use input devices (e.g., mouse, keyboard, remote control).</p> <p>Use a variety of media and technology resources.</p> <p>Communicate about technology using developmentally appropriate and accurate terminology.</p> <p>Use developmentally appropriate multimedia resources to support learning.</p>	<p>Use keyboards and other common input and output devices (including adaptive devices when necessary) efficiently and effectively.</p> <p>Discuss common uses of technology in daily life and the advantages and disadvantages those uses provide.</p>	<p>Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use.</p>	<p>Make informed choices among technology systems, resources, and services.</p>
<i>Social, Ethical, & Human Issues</i>	<p>Work cooperatively and collaboratively with peers, family members, and others when using technology in the classroom.</p>	<p>Discuss basic issues related to responsible use of technology and information and describe personal consequences of inappropriate use.</p>	<p>Demonstrate knowledge of current changes in information technologies and the effect those changes have on the workplace and society.</p>	<p>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 workplace needs.</p>
<i>Technology Productivity Tools</i>	<p>Use a variety of media and technology resources for directed and independent learning activities.</p> <p>Create developmentally appropriate multimedia</p>	<p>Use general purpose productivity tools and peripherals to support personal productivity, remediate skill deficits, and facilitate learning throughout the curriculum.</p>	<p>Use content-specific tools, software, and simulations (e.g., environmental probes, graphing calculators, exploratory environments, web tools) to support learning and</p>	<p>Use technology tools and resources for managing and communicating personal/professional information (e.g., finances, schedules, addresses,</p>

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	<p>products with support from teachers, family members, or student partners.</p> <p>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.</p>	<p>Use technology tools (e.g., multimedia authoring, presentation, web tools, digital cameras, and scanners) for individual and collaborative writing, communication, and publishing activities to create knowledge products for audiences inside and outside the classroom.</p>	<p>research.</p> <p>Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum</p>	<p>purchases, and correspondence).</p>
<p><i>Technology Communications Tools</i></p>	<p>Gather information and communicate with other using telecommunications, with support from teachers, family members, or student partners.</p>	<p>Use telecommunications efficiently to access remote information, communicate with others in support of direct and independent learning, and pursue personal interests.</p> <p>Use telecommunications and online resources (e.g., e-mail, online discussions, web environments) to participate in collaborative problem-solving activities for the purpose of developing solutions or products for audiences inside and outside the classroom.</p>	<p>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</p> <p>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.</p>	<p>Routinely and efficiently use online information resources to meet needs for collaboration, research, publications, communications, and productivity.</p> <p>Select and apply technology tools for research, information analysis, problem-solving, and decision-making in content learning.</p>

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<p><i>Technology Research Tools</i></p>	<p>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</p> <p>Demonstrate positive social and ethical behaviors when using technology.</p> <p>Practice responsible use of technology systems and software.</p>	<p>Use technology resources (e.g., calculators, data collection probes, videos, educational software) for problem solving, self-directed learning, and extended learning activities.</p> <p>Determine which technology is useful and select the appropriate tool(s) and technology resources to address a variety of tasks and problems.</p>	<p>Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems</p> <p>Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse.</p>	<p>Evaluate technology-based options, including distance and distributed education, for lifelong learning.</p> <p>Demonstrate and advocate for legal and ethical behaviors among peers, family, and community regarding the use of technology and information.</p>
<p><i>Technology Problem-solving & Decision-making Tools</i></p>	<p>Use technology resources for problem solving, communication, and illustration of thoughts, ideas, and stories.</p>	<p>Evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources.</p>	<p>Demonstrate an understanding of concepts underlying hardware, software, and connectivity, and of practical applications to learning and problem solving.</p> <p>Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems.</p>	<p>Investigate and apply expert systems, intelligent agents, and simulations in real-world situations.</p> <p>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.</p>