

# Instructional Technology: Intermediate Level (up to grade 8)

The student will demonstrate knowledge of basic operations and concepts.

1. Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use. 1.1
2. Demonstrate an understanding of concepts underlying hardware, software, and connectivity, and of practical applications to learning and problem solving. 1.2

The student will demonstrate knowledge of social, ethical, and human issues.

- 1.1 Demonstrate knowledge of current changes in information technologies and the effect those changes have on the workplace and society. 2.1
2. Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse. 2.2
3. Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems. 2.3

The student will demonstrate knowledge of technology productivity tools.

1. Use content-specific tools, software, and simulations (e.g., environmental probes, graphing calculators, exploratory environments, Web tools) to support learning and research. 3.1
2. Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum. 3.2

The student will demonstrate knowledge of technology communication tools.

1. 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. 4.1
2. 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. 4.2

**The student will demonstrate knowledge of technology research tools.**

- 1. Use content-specific tools, software, and simulations (e.g., environmental probes, graphing calculators, exploratory environments, Web tools) to support learning and research. 5.1**

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- 2. 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. 5.2**

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- 3. 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. 5.3**

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- 4. Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems. 5.4**

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- 5. Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems. 5.5**

**The student will demonstrate knowledge of technology problem-solving and decision-making tools.**

- 1. Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum. 6.1**

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- 2. 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. 6.2**

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- 3. Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems. 6.3**

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- 4. Demonstrate an understanding of concepts underlying hardware, software, and connectivity, and of practical applications to learning and problem solving. 6.4**

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- 5. Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems. 6.5**