K-12 TECHNOLOGY Standards/Benchmarks/Grade Level Expectations (GLE)

Updated 2/11/08

Standard 1: Demonstrate an understanding of the basic operations and concepts of technology.

Interval Benchmark 1: Students demonstrate a sound understanding of the nature and operation of technology systems.			Interval Benchmark 1: Students demonstrate a sound understanding of the nature and operation of technology systems.			
Grade Level Expectations 6	**Grade Level Expectations 7**	**Grade Level Expectations 8**	**Grade Level Expectations 9**	**Grade Level Expectations 10**	**Grade Level Expectations 11**	**Grade Level Expectations 12**
a. Demonstrate an understanding of concepts underlying hardware, software, and connectivity, and of practical applications to learning and problem solving.	a. Demonstrate an understanding of concepts underlying hardware, software, and connectivity, and of practical applications to learning and problem solving.	a. Demonstrate an understanding of concepts underlying hardware, software, and connectivity, and of practical applications to learning and problem solving.	a. Make informed choices among technology systems, resources, and services.	a. Make informed choices among technology systems, resources, and services.	a. Make informed choices among technology systems, resources, and services.	a. Make informed choices among technology systems, resources, and services.
Interval Benchmark 2: Students are proficient in the use of technology.			**Interval Benchmark 2: Students are proficient in the use of technology.**			
Grade Level Expectations 6	**Grade Level Expectations 7**	**Grade Level Expectations 8**	**Grade Level Expectations 9**	**Grade Level Expectations 10**	**Grade Level Expectations 11**	**Grade Level Expectations 12**
a. Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use.	a. Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use.	a. Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use.	a.	a.	a.	a.

Standard 2: Demonstrate an understanding of the importance of respectful and responsible use of technology in society.

Interval Benchmark 1: Students understand the ethical, cultural, and societal issues related to technology.			Interval Benchmark 1: Students understand the ethical, cultural, and societal issues related to technology.			
Grade Level Expectations 6	**Grade Level Expectations 7**	**Grade Level Expectations 8**	**Grade Level Expectations 9**	**Grade Level Expectations 10**	**Grade Level Expectations 11**	**Grade Level Expectations 12**
a. Demonstrate knowledge of current changes in information technologies and the effect those changes have on the workplace and society.	a. Demonstrate knowledge of current changes in information technologies and the effect those changes have on the workplace and society.	a. Demonstrate knowledge of current changes in information technologies and the effect those changes have on the workplace and society.	a. Analyze advantages and disadvantages of widespread use and reliance on technology in the workplace and in society as a whole.	a. Analyze advantages and disadvantages of widespread use and reliance on technology in the workplace and in society as a whole.	a. Analyze advantages and disadvantages of widespread use and reliance on technology in the workplace and in society as a whole.	a. Analyze advantages and disadvantages of widespread use and reliance on technology in the workplace and in society as a whole.

b. Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse.	b. Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse.	b. Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse.	b. Demonstrate and advocate for legal and ethical behaviors among peers, family, and community regarding the use of technology and information.	b. Demonstrate and advocate for legal and ethical behaviors among peers, family, and community regarding the use of technology and information.	b. Demonstrate and advocate for legal and ethical behaviors among peers, family, and community regarding the use of technology and information.	b. Demonstrate and advocate for legal and ethical behaviors among peers, family, and community regarding the use of technology and information.
Interval Benchmark 2: Students practice responsible use of technology systems, information, and software.			**Interval Benchmark 2: Students practice responsible use of technology systems, information, and software.**			
Grade Level Expectations 6	**Grade Level Expectations 7**	**Grade Level Expectations 8**	**Grade Level Expectations 9**	**Grade Level Expectations 10**	**Grade Level Expectations 11**	**Grade Level Expectations 12**
a. Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems.	a. Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems.	a. Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems.	a. Make informed choices among technology systems, resources, and services.	a. Make informed choices among technology systems, resources, and services.	a. Make informed choices among technology systems, resources, and services.	a. Make informed choices among technology systems, resources, and services.
Interval Benchmark 3: Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.			**Interval Benchmark 3: Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.**			
Grade Level Expectations 6	**Grade Level Expectations 7**	**Grade Level Expectations 8**	**Grade Level Expectations 9**	**Grade Level Expectations 10**	**Grade Level Expectations 11**	**Grade Level Expectations 12**
a.	a.	a.	a. 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.	a. 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.	a. 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.	a. 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.

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Updated 2/11/08

Standard 3: Use technology to process and present information.

Interval Benchmark 1: Students use technology tools to enhance learning, increase productivity, and promote creativity.			**Interval Benchmark 1: Students use technology tools to enhance learning, increase productivity, and promote creativity.**			
Grade Level Expectations 6	**Grade Level Expectations 7**	**Grade Level Expectations 8**	**Grade Level Expectations 9**	**Grade Level Expectations 10**	**Grade Level Expectations 11**	**Grade Level Expectations 12**
a. Use content-specific tools, software, and simulations to support learning and research.	a. Use content-specific tools, software, and simulations to support learning and research.	a. Use content-specific tools, software, and simulations to support learning and research.	a. Use technology tools and resources for managing and communicating personal/professional information.	a. Use technology tools and resources for managing and communicating personal/professional information.	a. Use technology tools and resources for managing and communicating personal/professional information.	a. Use technology tools and resources for managing and communicating personal/professional information.
Interval Benchmark 2: Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works.			**Interval Benchmark 2: Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works.**			
Grade Level Expectations 6	**Grade Level Expectations 7**	**Grade Level Expectations 8**	**Grade Level Expectations 9**	**Grade Level Expectations 10**	**Grade Level Expectations 11**	**Grade Level Expectations 12**
a. Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum.	a. Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum.	a. Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum.	a.	a.	a.	a.

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Standard 4: Use technology to research, solve problems and make decisions.

Interval Benchmark 1: Students use technology to locate, evaluate, and collect information from a variety of sources.			**Interval Benchmark 1: Students use technology to locate, evaluate, and collect information from a variety of sources.**			
Grade Level Expectations 6	**Grade Level Expectations 7**	**Grade Level Expectations 8**	**Grade Level Expectations 9**	**Grade Level Expectations 10**	**Grade Level Expectations 11**	**Grade Level Expectations 12**
a. Use content-specific tools, software, and simulations to support learning and research.	a. Use content-specific tools, software, and simulations to support learning and research.	a. Use content-specific tools, software, and simulations to support learning and research.	a. Evaluate technology-based options, including distance and distributed education, for lifelong learning.	a. Evaluate technology-based options, including distance and distributed education, for lifelong learning.	a. Evaluate technology-based options, including distance and distributed education, for lifelong learning.	a. Evaluate technology-based options, including distance and distributed education, for lifelong learning.
b. Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems.	b. Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems.	b. Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems.	b. Routinely and efficiently use online information resources to meet needs for collaboration, research, publication, communication, and productivity.	b. Routinely and efficiently use online information resources to meet needs for collaboration, research, publication, communication, and productivity.	b. Routinely and efficiently use online information resources to meet needs for collaboration, research, publication, communication, and productivity.	b. Routinely and efficiently use online information resources to meet needs for collaboration, research, publication, communication, and productivity.
Interval Benchmark 2: Students use technology to process data and report results.			**Interval Benchmark 2: Students use technology to process data and report results.**			
Grade Level Expectations 6	**Grade Level Expectations 7**	**Grade Level Expectations 8**	**Grade Level Expectations 9**	**Grade Level Expectations 10**	**Grade Level Expectations 11**	**Grade Level Expectations 12**
a. Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum.	a. Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum.	a. Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum.	a. 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.	a. 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.	a. 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.	a. 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.

b. Design, develop, publish, and present products using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom.	b. Design, develop, publish, and present products using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom.	b. Design, develop, publish, and present products using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom.	b.	b.	b.	b.
Interval Benchmark 3: Students evaluate and select new information resources and technological innovations based on the appropriateness for specific tasks.			**Interval Benchmark 3: Students evaluate and select new information resources and technological innovations based on the appropriateness for specific tasks.**			
Grade Level Expectations 6	**Grade Level Expectations 7**	**Grade Level Expectations 8**	**Grade Level Expectations 9**	**Grade Level Expectations 10**	**Grade Level Expectations 11**	**Grade Level Expectations 12**
a. Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems.	a. Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems.	a. Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems.	a.	a.	a.	a.
Interval Benchmark 4: Students use technology resources for solving problems and making informed decisions.			**Interval Benchmark 4: Students use technology resources for solving problems and making informed decisions.**			
Grade Level Expectations 6	**Grade Level Expectations 7**	**Grade Level Expectations 8**	**Grade Level Expectations 9**	**Grade Level Expectations 10**	**Grade Level Expectations 11**	**Grade Level Expectations 12**
a. Demonstrate an understanding of concepts underlying hardware, software, and connectivity, and of practical applications to learning and problem solving.	a. Demonstrate an understanding of concepts underlying hardware, software, and connectivity, and of practical applications to learning and problem solving.	a. Demonstrate an understanding of concepts underlying hardware, software, and connectivity, and of practical applications to learning and problem solving.	a. Select and apply technology tools for research, information analysis, problem solving, and decision making in content learning.	a. Select and apply technology tools for research, information analysis, problem solving, and decision making in content learning.	a. Select and apply technology tools for research, information analysis, problem solving, and decision making in content learning.	a. Select and apply technology tools for research, information analysis, problem solving, and decision making in content learning.

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Interval Benchmark 5: Students employ technology in the development of strategies for solving problems in the real world.			**Interval Benchmark 5: Students employ technology in the development of strategies for solving problems in the real world.**			
Grade Level Expectations 6	**Grade Level Expectations 7**	**Grade Level Expectations 8**	**Grade Level Expectations 9**	**Grade Level Expectations 10**	**Grade Level Expectations 11**	**Grade Level Expectations 12**
a. 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.	a. 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.	a. 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.	a. Investigate and apply expert systems, intelligent agents, and simulations in real-world situations.	a. Investigate and apply expert systems, intelligent agents, and simulations in real-world situations.	a. Investigate and apply expert systems, intelligent agents, and simulations in real-world situations.	a. Investigate and apply expert systems, intelligent agents, and simulations in real-world situations.

Standard 5: Use technology to communicate and interact in a global community.

Interval Benchmark 1: Students use telecommunications to collaborate, publish and interact with peers, experts, and other audiences.			**Interval Benchmark 1: Students use telecommunications to collaborate, publish and interact with peers, experts, and other audiences.**			
Grade Level Expectations 6	**Grade Level Expectations 7**	**Grade Level Expectations 8**	**Grade Level Expectations 9**	**Grade Level Expectations 10**	**Grade Level Expectations 11**	**Grade Level Expectations 12**
a. 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.	a. 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.	a. 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.	a. 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.	a. 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.	a. 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.	a. 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.

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Interval Benchmark 2: Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.			**Interval Benchmark 2: Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.**			
Grade Level Expectations 6	**Grade Level Expectations 7**	**Grade Level Expectations 8**	**Grade Level Expectations 9**	**Grade Level Expectations 10**	**Grade Level Expectations 11**	**Grade Level Expectations 12**
a. Design, develop, publish, and present products using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom.	a. Design, develop, publish, and present products using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom.	a. Design, develop, publish, and present products using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom.	a. Use technology tools and resources for managing and communicating personal/professional information.	a. Use technology tools and resources for managing and communicating personal/professional information.	a. Use technology tools and resources for managing and communicating personal/professional information.	a. Use technology tools and resources for managing and communicating personal/professional information.
b.	b.	b.	b. Routinely and efficiently use online information resources to meet needs for collaboration, research, publication, communication, and productivity.	b. Routinely and efficiently use online information resources to meet needs for collaboration, research, publication, communication, and productivity.	b. Routinely and efficiently use online information resources to meet needs for collaboration, research, publication, communication, and productivity.	b. Routinely and efficiently use online information resources to meet needs for collaboration, research, publication, communication, and productivity.
c.	c.	c.	c. Select and apply technology tools for research, information analysis, problem solving, and decision making in content learning.	c. Select and apply technology tools for research, information analysis, problem solving, and decision making in content learning.	c. Select and apply technology tools for research, information analysis, problem solving, and decision making in content learning.	c. Select and apply technology tools for research, information analysis, problem solving, and decision making in content learning.