Proficient by the End of Grade Indicated	Grade 2 (K-2)	Grade 5 (3-5)	Grade 8 (6-8)	Grade 12 (9-12)	Alaska Technology Content Standards
STD 1. Creativity and Innovation	**Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:**				
Performance Indicator	A. apply existing knowledge to generate new ideas, products, or processes				
Grade Level Expectation	1.A.2.1. Use digital tools to brainstorm and organize new ideas.	1.A.5.1. Process new ideas based on existing knowledge to brainstorm solutions to an authentic problem using digital tools.	1.A.8.1. Apply existing knowledge to independently, or in collaboration with others, generate new ideas, products, or processes with digital tools.	1.A.12.1. Apply new and existing knowledge to independently, or in collaboration with others, generate new ideas, products, or processes with digital tools.	C3
Performance Indicator	B. create original works as a means of personal or group expression				
Grade Level Expectation	1.B.2.1. Create an original presentation based on an age-appropriate story, activity, or event including text and visual formats using digital tools and resources.	1.B.5.1. Create an original, digital work as a form of personal or group expression with minimal teacher support.	1.B.8.1. Create independently and/or in a group an original, digital work as a form of personal or group expression.	1.B.12.1. Create an original work, including planning, research, editing, and production using digital tools both individually and in a group.	C3
Performance Indicator	C. use models and simulations to explore complex systems and issues				
Grade Level Expectation	1.C.2.1. Use digital models and simulations with teacher assistance to find and organize data.	1.C.5.1. Use digital models and simulations to explore complex systems and issues; explain or illustrate results.	1.C.8.1. Describe and illustrate a complex content-related concept or process using a model, simulation, or concept-mapping software.	1.C.12.1. Develop digital models or simulations to answer questions or to solve complex, real world problems.	C3
Performance Indicator	D. identify trends and forecast possibilities				
Grade Level Expectation	1.D.2.1. Identify patterns and predict possibilities with classroom data using digital tools.	1.D.5.1. Identify and represent trends and make predictions using classroom data using digital tools.	1.D.8.1. Use technology to track trends and predict possibilities using evidence, experiments, and collaboration to justify their predictions.	1.D.12.1. Use technology to research, conduct, and report experimental data, to determine trends and possibilities of complex systems using evidence to justify their predictions.	C3, E8

Proficient by the End of Grade Indicated	Grade 2 (K-2)	Grade 5 (3-5)	Grade 8 (6-8)	Grade 12 (9-12)	Alaska Technology Content Standards
STD 2. Communication and Collaboration	**Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. Students:**				
Performance Indicator	A. interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media				
Grade Level Expectation	2.A.2.1. Work in classroom groups to create and publish digital products.	2.A.5.1. Collaborate to create and publish digital products to share beyond the classroom.	2.A.8.1. Collaborate to create and publish digital products for authentic audiences in a variety of digital environments.	2.A.12.1. Collaborate electronically with peers, experts and others to create and publish digital products for authentic audiences and interested individuals and through appropriate networks.	A3, D1, D2, D3
Performance Indicator	B. communicate information and ideas effectively to multiple audiences using a variety of media and formats				
Grade Level Expectation	2.B.2.1. Communicate information and ideas to peers and parents using digital text and illustrations.	2.B.5.1. Communicate information and ideas using the appropriate digital text, images, and sounds for a specific audience.	2.B.8.1. Communicate using digital text, images, sound, and video.	2.B.12.1. Communicate with created digital text, images, sound, and video.	D3
			2.B.8.2. Create digital products in formats appropriately targeted to specific audiences or purposes.	2.B.12.2. Critique appropriateness of digital formats for audiences and purposes.	
Performance Indicator	C. develop cultural understanding and global awareness by engaging with learners of other cultures				
Grade Level Expectation	2.C.2.1. Use digital resources to learn about places, people, celebrations, and maps.	2.C.5.1. Use digital resources to research about places, people, and world cultures.	2.C.8.1. Use digital resources to communicate with peers and others from a variety of cultures and places.	2.C.12.1. Interact electronically with culturally diverse groups for specific purposes.	E6
Performance Indicator	D. contribute to project teams to produce original works or solve problems				

Grade Level Expectation	2.D.2.1. Work in a team to solve problems using digital tools.	2.D.5.1. Contribute to a group production of an original digital work using a variety of appropriate digital tools.	2.D.8.1. Contribute to project teams to produce original works or solve problems.	2.D.12.1. Contribute electronically to a group project that identifies a real-world problem, presents solutions, and evaluates the solutions.	C2
			2.D.8.2. Choose a method of electronically interacting for a specific goal or purpose; present and disseminate results to a broad audience.	2.D.12.2. Justify methods of electronically interacting for a specific goal or purpose.	

Proficient by the End of Grade Indicated	Grade 2 (K-2)	Grade 5 (3-5)	Grade 8 (6-8)	Grade 12 (9-12)	Alaska Technology Content Standards
STD 3. Research and Information Fluency	**Students apply digital tools to gather, evaluate, and use information. Students:**				
Performance Indicator	A. plan strategies to guide inquiry				
Grade Level Expectation	3.A.2.1 With the teacher's assistance and using digital tools, make a chart of the steps involved in planning and sharing a project.	3.A.5.1 Use digital tools to plan a timeline and track progress for a research project individually, in pairs or in small groups.	3.A.8.1. Use digital tools to plan and organize (timeline, track progress, cite sources) a research-based inquiry project.	3.A.12.1. Use digital tools to plan, organize (timeline, track progress, cite sources) , and critique a complex research-based inquiry project.	B3
Performance Indicator	B. locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media				
Grade Level Expectation	3.B.2.1. With the teacher's assistance, locate and gather information from preselected digital sources, choose relevant information and identify new questions. Use age-appropriate tools to organize and share what learned.	3.B.5.1. Use digital tools and keywords to search, organize, locate, and synthesize relevant and reliable information from multiple sources to create an original product.	3.B.8.1. Use advanced search techniques to locate, access, synthesize, and evaluate credible information from multiple sources to create an original product.	3.B.12.1. Use advanced search techniques to locate, access, synthesize, and evaluate information from multiple sources to create an original real-world product for an authentic audience.	B1, B2, B3, E4
		3.B.5.2. Use digital tools to document sources appropriately.	3.B.8.2. Use digital tools to document sources appropriately.	3.B.12.2. Use digital tools to document sources appropriately.	
Performance Indicator	C. evaluate and select information sources and digital tools based on the appropriateness to specific tasks				
Grade Level Expectation	3.C.2.1. Recognize that different information sources and digital tools are appropriate for different tasks.	3.C.5.1. Discern between facts and opinions in digital content.	3.C.8.1. Evaluate and compare facts and opinions in digital content sources and describe the point of view.	3.C.12.1. Use current and emerging digital resources to assemble and evaluate facts, opinions, and points of view appropriate to real-world application.	B3

		3.C.5.2. Compare and contrast the effectiveness of two or more digital tools and information resources used to accomplish an assigned task.	3.C.8.2. Select and justify using appropriate, credible, digital resources to accomplish a variety of tasks.	3.C.12.2. Evaluate peers' use of resources appropriate to a task.	
Performance Indicator	D. process data and report results				
Grade Level Expectation	3.D.2.1. Collect and share data about a topic using digital tools and resources.	3.D.5.1. Collect, organize, analyze and manipulate data using digital tools and report results in a format appropriate to the task.	3.D.8.1. Use multiple digital tools to collect and process data to test theories and hypotheses.	3.D.12.1. Use multiple digital tools to analyze data and critique theories and hypotheses.	B3
			3.D.8.2. Use a variety of formats to report results and evaluate the strengths and weaknesses of different reporting formats.	3.D.12.2. Evaluate and justify the formats for reporting results to a variety of audiences.	

Proficient by the End of Grade Indicated	Grade 2 (K-2)	Grade 5 (3-5)	Grade 8 (6-8)	Grade 12 (9-12)	Alaska Technology Content Standards
STD 4. Critical Thinking, Problem Solving and Decision Making	**Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed dicisions using appropriate digital tools and resources. Students:**				
Performance Indicator	A. identify and define authentic problems and significant questions for investigation				
Grade Level Expectation	4.A.2.1. Identify ways technology can help explore and understand everyday problems.	4.A.5.1. Create essential questions to guide investigation of an authentic problem using digital resources.	4.A.8.1. Identify a problem and create essential questions that guide investigation of an authentic problem using digital resources.	4.A.12.1. Identify a complex global issue, develop a systematic plan of investigation, and present innovative solutions.	C1, C2
Performance Indicator	B. plan and manage activities to develop a solution or complete a project				
Grade Level Expectation	4.B.2.1. Identify and apply strategies with teacher support to select information and digital resources to complete an activity or solve a particular problem.	4.B.5.1. Plan and manage individual or group projects using a digital planning tool.	4.B.8.1. Select and use appropriate digital planning tools to complete a project.	4.B.12.1. Select, use and analyze appropriate digital planning tools to complete a project.	C1, C2
Performance Indicator	C. collect and analyze data to identify solutions and/or make informed decisions				
Grade Level Expectation	4.C.2.1. Use data to answer an authentic problem using digital tools.	4.C.5.1. Propose a solution to an authentic problem using collected data and digital tools.	4.C.8.1. Use data, examine patterns, and research an authentic problem using digital tools and present a solution.	4.C.12.1. Apply technology-based problem solving strategies and select appropriate tools to solve a problem and disseminate results.	C1, C2
Performance Indicator	D. use multiple processes and diverse perspectives to explore alternative solutions				
Grade Level Expectation	4.D.2.1. Compare problem-solving processes and solutions with others and discuss similarities and differences.	4.D.5.1. Explore alternative solutions to and diverse perspectives on authentic problems and propose a solution using digital tools.	4.D.8.1. Use electronic data collection and collaborative authoring tools to explore and document points of views and to evaluate solutions.	4.D.12.1. Use multiple processes and consider diverse perspectives to derive original solutions to authentic problems using digital resources and assess their potential to address social, lifelong learning, and career needs.	C2

KPBSD Technology Standards
2010-2011

Proficient by the End of Grade Indicated	Grade 2 (K-2)	Grade 5 (3-5)	Grade 8 (6-8)	Grade 12 (9-12)	Alaska Technology Content Standards
STD 5. Digital Citizenship	**Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:**				
Performance Indicator	A. advocate and practice safe, legal, and responsible use of information and technology				
Grade Level Expectation	5.A.2.1. List classroom rules of safe technology use.	5.A.5.1. Research, discuss, and apply safe, responsible, and legal use of technology.	5.A.8.1. Model legal and ethical behaviors when using information and technology including properly selecting, advocating for, acquiring, and citing resources.	5.A.12.1. Articulate the concepts and issues revolving around intellectual and digital property rights and ethical behaviors.	E1, E3, E4
	5.A.2.2. List potential dangers in digital environments and how to report potentially unsafe situations.	5.A.5.2. Describe unacceptable and unsafe behaviors in digital environments such as cyber-bullying, divulging personal information, and plagiarism.	5.A.8.2. Develop an argument for using technology resources safely, legally, and responsibly.	5.A.12.2. Compare the similarities and differences between acceptable use of technology resources in school and work environments.	
Performance Indicator	B. exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity				
Grade Level Expectation	5.B.2.1. Use technologies in learning activities.	5.B.5.1. Use technology resources and describe how these tools improve their ability to communicate, collaborate, be productive self-directed learners, and achieve goals.	5.B.8.1. Explain the value and limitations of existing and emerging technologies on individuals, society, and the global community.	5.B.12.1. Extrapolate how technology will impact collaboration, learning, and productivity of post-secondary life and career.	E7
Performance Indicator	C. demonstrate personal responsibility for lifelong learning				
Grade Level Expectation	5.C.2.1. Describe how technology can enhance learning.	5.C.5.1. Describe how to select and use technology resources to pursue personal, academic, and life long learning projects outside of the classroom.	5.C.8.1. Identify and use personal and academic learning communities or resources to support lifelong interests, learning, academic, and career success.	5.C.12.1. Select, apply, and analyze technology resources to support personal growth, lifelong learning, and career success.	E2, E3, E4, E7

	5.C.2.2. Evaluate own products or work.	5.C.5.2. Evaluate own products or work based on established criteria and make recommendations for improvement.	5.C.8.2. Develop criteria to evaluate own products or work and make recommendations for improvement.	5.C.12.2. Develop criteria and create evaluation tools to evaluate own products or work and make recommendations for improvement.	
Performance Indicator	D. exhibit leadership for digital citizenship				
Grade Level Expectation	5.D.2.1. Follow technology use, sharing, and safety rules and encourage peers to follow accepted guidelines.	5.D.5.1. Explain and demonstrate concepts of digital etiquette, access, and literacy and the personal and societal responsibilities attached to each.	5.D.8.1. Describe and demonstrate ways to responsibly use current and emerging technologies to foster leadership skills.	5.D.12.1. Model digital citizenship while leading a group of peers through a collaborative project using current and emerging technologies.	E3, E4

Proficient by the End of Grade Indicated	Grade 2 (K-2)	Grade 5 (3-5)	Grade 8 (6-8)	Grade 12 (9-12)	Alaska Technology Content Standards
STD 6. Technology Operations and Concepts	**Students demonstrate a sound understanding of technology concepts, systems, and operations. Students:**				
Performance Indicator	A. understand and use technology systems				
Grade Level Expectation	6.A.2.1. List examples of technology tools.	6.A.5.1. Define the basic features of technology tools.	6.A.8.1. Explain uses for and advantages of technology systems.	6.A.12.1. Describe the components of technology systems and how they interact.	A1
	6.A.2.2. Perform basic hardware and software operations.	6.A.5.2. Use the basic features of computer, software, and network interfaces.	6.A.8.2. Use a variety of technology interfaces and operating systems.	6.A.12.2. Use a variety of technology interfaces and operating systems.	
			6.A.8.3. Demonstrate keyboarding skills by completing a variety of productivity assignments in a timely manner.	6.A.12.3. Demonstrate keyboarding skills by completing a variety of productivity assignments in a timely manner.	
Performance Indicator	B. select and use applications effectively and productively				
Grade Level Expectation	6.B.2.1. Navigate age-appropriate software.	6.B.5.1. Select and proficiently use appropriate digital tools for learning activities.	6.B.8.1. Select and justify the use of digital tools and resources to accomplish a variety of tasks.	6.B.12.1. Critique the selection of digital tools, based on efficiency and effectiveness.	A2
Performance Indicator	C. troubleshoot systems and applications				
Grade Level Expectation	6.C.2.1. Demonstrate proper care of equipment.	6.C.5.1. Apply given strategies for solving routine hardware and software problems.	6.C.8.1. Develop and apply strategies for solving common hardware and software problems.	6.C.12.1. Analyze and troubleshoot common hardware and software issues to optimize learning and productivity and support and assist others with this skill.	A4, A5
Performance Indicator	D. transfer current knowledge to learning of new technologies				
Grade Level Expectation	6.D.2.1. Recognize common terminology, icons, and symbols related to basic functions of technology and apply that knowledge to new technologies.	6.D.5.1. Apply basic concepts and functions from previous learning to new technologies and situations.	6.D.8.1. Apply existing knowledge of technology to a current or emerging technology to answer an authentic question.	6.D.12.1. Analyze the capabilities and limitations of current and emerging technologies and support and assist others in learning new technologies and advanced features of current technology.	E8