Department of Education and Early Development

Alaska Digital Literacy Standards

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Alaska Board of Education & Early Development

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Introduction:

The Alaska Digital Literacy Standards update the 2006 Alaska Technology Standards, bringing them into alignment with contemporary technology opportunities available to districts and students in Alaska. They focus on leveraging technology for learning, expression, digital citizenship and communication. The standards are based on the International Society for Technology in Education (ISTE) student standards (2016 edition).

The Alaska Digital Literacy Standards provide a framework for leveraging technology tools for learning and participating in a digital society. The standards are organized into seven concept areas, by grade bands: Kindergarten through 2nd grade, 3rd grade through 5th grade and 6th grade through 12th grade. Each standards is coded using the following patter: grade band, concept, and item number. For example:

> **K-2.EL.1** = *Kindergarten through 2nd grade, Empowered Learning, item 1*

Empowered Learning

K-2.EL.1 With guidance from an educator, students consider and set personal learning goals and utilize appropriate technologies that will demonstrate knowledge and reflection of the process.

K-2.EL.2 With guidance from an educator, students learn about various technologies that can be used to connect to others or make their leaning environments personal and select resources from those available to enhance their learning.

K-2.EL.3 With guidance from an educator, students recognize performance feedback from digital tools, make adjustments based on that feedback and use age-appropriate technology to share learning.

K-2.EL.4 With guidance from an educator, students explore a variety of technologies that will help them in their learning and begin to demonstrate an understanding of how knowledge can be transferred between tools.

3-5.EL.1 Students develop learning goals in collaboration with an educator, select the technology tools to achieve them, and reflect on and revise the learning process as needed to achieve goals.

3-5.EL.2 With the oversight and support of an educator Students build a network of experts and peers within school policy and customize their environments to enhance their learning.

3-5.EL.3 Students seek from feedback from both people and features embedded in digital tools, and use age-appropriate technology to share learning.

3-5.EL.4 Students explore age-appropriate technologies and begin to transfer their learning to different tools or learning environments.

6-12.EL.1 Students articulate personal learning goals, select and manage appropriate technologies to achieve them, and reflect on their successes and areas of improvement in working toward their goals.

6-12.EL.2 Students identify and develop online networks within school policy, and customize their learning environments in ways that support their learning, in collaboration with an educator.

6-12.EL.3 Students actively seek performance feedback from people, including teachers, and from functionalities embedded in digital tools to improve their learning process, and they select technology to demonstrate their learning in a variety of ways.

6-12.EL.4 Students are able to navigate a variety of technologies and transfer their knowledge and skills to learn how to use new technologies.

Digital Citizenship

K-2.DC.1 Students practice responsible use of technology through teacher-guided online activities and interactions to understand how the digital space impacts their life.

K-2.DC.2 With guidance from an educator, students understand how to be careful when using devices and how to be safe online, follow safety rules when using the internet and collaborate with others.

K-2.DC.3 With guidance from an educator, students learn about ownership and sharing of information, and how to respect the work of others.

K-2.DC.4 With guidance from an educator, students demonstrate an understanding that technology is all around them and the importance of keeping their information private.

3-5.DC.1 Students demonstrate an understanding of the role an online identity plays in the digital world and learn the permanence of their decisions when interacting online.

3-5.DC.2 Students practice and encourage others in safe, legal and ethical behavior when using technology and interacting online, with guidance from an educator.

3-5.DC.3 Students learn about, demonstrate and encourage respect for intellectual property with both print and digital media when using and sharing the work of others.

3-5.DC.4 Students demonstrate an understanding of what personal data is, how to keep it private and how it might be shared online.

6-12.DC.1 Students manage their digital identities and reputations within school policy, including demonstrating an understanding of how digital actions are never fully erasable.

6-12.DC.2 Students demonstrate and advocate for positive, safe, legal and ethical habits when using technology and when interacting with others online.

6-12.DC.3 Students demonstrate and advocate for an understanding of intellectual property with both print and digital media— including copyright, permission and fair use—by creating a variety of media products that include appropriate citation and attribution elements.

6-12.DC.4 Students demonstrate an understanding of what personal data is and how to keep it private and secure, including the awareness of terms such as encryption, HTTPS, password, cookies and computer viruses; they also understand the limitations of data management and how data-collection technologies work.

Knowledge Construction

K-2.KC.1 With guidance from an educator, students use digital tools and resources, contained within a classroom platform or otherwise provided by the teacher, to find information on topics of interest.

K-2.KC.2 With guidance from an educator, students become familiar with age-appropriate criteria for evaluating digital content.

K-2.KC.3 With guidance from an educator, students explore a variety of teacher-selected tools to organize information and make connections to their learning.

K-2.KC.4 With guidance from an educator, students explore real-world issues and problems and share their ideas about them with others.

3-5.KC.1 Students collaborate with a teacher to employ appropriate research techniques to locate digital resources that will help them in their learning process.

3-5.KC.2 Students learn how to evaluate sources for accuracy, perspective, credibility and relevance.

3-5.KC.3 Using a variety of strategies, students organize information and make meaningful connections between resources

3-5.KC.4 Students explore real-world problems and issues and collaborate with others to find answers or solutions.

6-12.KC.1 Students demonstrate and practice the ability to effectively utilize research strategies to locate appropriate digital resources in support of their learning.

6-12.KC.2 Students practice and demonstrate the ability to evaluate resources for accuracy, perspective, credibility and relevance.

6-12.KC.3 Students locate and collect resources from a variety of sources and organize assets into collections for a wide range of projects and purposes.

6-12.KC.4 Students explore real-world issues and problems and actively pursue an understanding of them and solutions for them.

Innovative Design

K-2.ID.1 With guidance from an educator, students ask questions, suggest solutions, test ideas to solve problems and share their learning.

K-2.ID.2 Students use age-appropriate digital and non-digital tools to design something and are aware of the step-by-step process of designing.

K-2.ID.3 Students use a design process to develop ideas or creations, and they test their design and redesign if necessary.

K-2.ID.4 Students demonstrate perseverance when working to complete a challenging task.

3-5.ID.1 Students explore and practice how a design process works to generate ideas, consider solutions, plan to solve a problem or create innovative products that are shared with others.

3-5.ID.2 Students use digital and non-digital tools to plan and manage a design process.

3-5.ID.3 Students engage in a cyclical design process to develop prototypes and reflect on the role that trial and error plays. 3-5.ID.4 Students demonstrate perseverance when working with open-ended problems.

6-12.ID.1 Students engage in a design process and employ it to generate ideas, create innovative products or solve authentic problems.

6-12.ID.2 Students select and use digital tools to support a design process and expand their understanding to identify constraints and trade-offs and to weigh risks.

6-12.ID.3 Students engage in a design process to develop, test and revise prototypes, embracing the cyclical process of trial and error and understanding problems or setbacks as potential opportunities for improvement.

6-12.ID.4 Students demonstrate an ability to persevere and handle greater ambiguity as they work to solve open-ended problems.

Computational Thinking

K-2.CT.1 With guidance from an educator, students identify a problem and select appropriate technology tools to explore and find solutions.

K-2.CT.2 With guidance from an educator, students analyze age-appropriate data and look for similarities in order to identify patterns and categories.

K-2.CT.3 With guidance from an educator, students break a problem into parts and identify ways to solve the problem.

K-2.CT.4 Students understand how technology is used to make a task easier or repeatable and can identify real-world examples.

3-5.CT.1 Students explore or solve problems by selecting technology for data analysis, modeling and algorithmic thinking, with guidance from an educator.

3-5.CT.2 Students select effective technology to represent data.

3-5.CT.3 Students break down problems into smaller parts, identify key information and propose solutions. 3-5.CT.4 Students understand and explore basic concepts related to automation, patterns and algorithmic thinking.

6-12.CT.1 Students practice defining problems to solve by computing for data analysis, modeling or algorithmic thinking.

6-12.CT.2 Students find or organize data and use technology to analyze and represent it to solve problems and make decisions.

6-12.CT.3 Students break problems into component parts, identify key pieces and use that information to problem solve.

6-12.CT.4 Students demonstrate an understanding of how automation works and use algorithmic thinking to design and automate solutions.

Creative Communication

K-2.CC.1 With guidance from an educator, students choose different tools for creating something new or for communicating with others.

K-2.CC.2 Students use digital tools to create original works.

K-2.CC.3 With guidance from an educator, students share ideas in multiple ways—visual, audio, etc.

K-2.CC.4 With guidance from an educator, students select technology to share their ideas with different people.

3-5.CC.1 Students recognize and utilize the features and functions of a variety of creation or communication tools.

3-5.CC.2 Student create original works and learn strategies for remixing or repurposing to create new artifacts.

3-5.CC.3 Students create digital artifacts to communicate ideas visually and graphically.

3-5.CC.4 Students learn about audience and consider their expected audience when creating digital artifacts and presentations.

6-12.CC.1 Students select appropriate platforms and tools to create, share and communicate their work effectively.

6-12.CC.2 Students create original works or responsibly repurpose other digital resources into new creative works.

6-12.CC.3 Students communicate complex ideas clearly using various digital tools to convey the concepts textually, visually, graphically, etc.

6-12.CC.4 Students publish or present content designed for specific audiences and select platforms that will effectively convey their ideas to those audiences

Global Collaboration

K-2.GC.1 With guidance from an educator, students use technology tools to work with friends and with people outside their neighborhood, city and beyond.

K-2.GC.2 With guidance from an educator, students use technology to communicate with others and to look at problems from different perspectives.

K-2.GC.3 With guidance from an educator, students take on different team roles and use age-appropriate technologies to complete projects.

K-2.GC.4 With guidance from an educator, students use age-appropriate technologies to work together to understand problems and suggest solutions.

3-5.GC.1 Students use digital tools to work with friends and people from different backgrounds or cultures.

3-5.GC.2 Students use collaborative technologies to connect with others, including peers, experts and community members, to explore different points of view on various topics.

3-5.GC.3 Students perform a variety of roles within a team using age-appropriate technology to complete a project or solve a problem.

3-5.GC.4 Students work with others using collaborative technologies to explore local and global issues.

6-12.GC.1 Students use digital tools to interact with others to develop a richer understanding of different perspectives and cultures.

6-12.GC.2 Students use collaborative technologies to connect with others, including peers, experts and community members, to learn about issues and problems or to gain broader perspective.

6-12.GC.3 Students determine their role on a team to meet goals, based on their knowledge of technology and content, as well as personal preference.

6-12.GC.4 Students select collaborative technologies and use them to work with others to investigate and develop solutions related to local and global issues.