Oregon Educational Technology Standards Adopted December 2008

1. Creativity and Innovation

Students demonstrate creative thinking and problem solving skills to develop innovative products and processes using (digital) technology. Students:

- A. Apply existing knowledge to forecast possibilities and generate new ideas, products or processes.
- B. Create original works as a means of personal or group expression.
- C. Develop or apply models and simulations to explore complex systems, issues and trends.

2. Communication and Collaboration

Students use digital media and environments to communicate and work collaboratively, across the global community, to support individual learning and contribute to the learning of others. Students:

- A. Interact and collaborate with peers, experts, or others employing a variety of digital environments and media.
- B. Effectively communicate and publish to multiple audiences using a variety of media and formats.
- C. Engage with learners from other cultures to develop cultural understanding and global awareness.
- D. Contribute to project teams. Produce original works or solve problems in a team setting.

3. Research and Information Fluency

Students select and apply digital tools to gather, evaluate, validate, and use information. Students:

- A. Plan strategies to guide inquiry.
- B. Locate, organize and use information ethically from a variety of sources and media.
- C. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
- D. Analyze, evaluate, and summarize information or data and report results.

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 decisions using appropriate digital tools and resources. Students:

- A. Identify and define authentic problems and significant questions for investigation.
- B. Plan and manage activities to develop a solution or complete a project.
- C. Collect and analyze data to identify solutions and or make informed decisions.
- D. Use multiple processes and diverse perspectives to explore alternative solutions.

5. Digital Citizenship

Students understand human, cultural, and societal issues related to digital technology and practice legal, ethical, and responsible behavior. Students:

- A. Advocate and practice safe, legal, and responsible use of information and digital technology.
- B. Model and practice a positive attitude toward using digital technology that supports collaboration, learning, and productivity.
- C. Demonstrate personal responsibility for lifelong learning.

6. Technology Operations and Concepts

Students utilize technology concepts and tools to learn. Students:

- A. Select, use, and troubleshoot tools efficiently.
- B. Transfer current knowledge to learning of new technologies.

Alignment of the Oregon Educational Technology Standards to the 2007 National Educational Technology Standards for Students

and

Oregon Diploma Essential Skills that could be addressed using the Oregon Educational Technology Standards

Oregon Educational Technology Standards	National Educational Technology Standards for Students 2007 (ISTE)	Oregon Diploma Essential Skills (see full text below)
1. Creativity and Innovation	1. Creativity and Innovation	
Students demonstrate creative thinking and problem solving skills to develop innovative products and processes using (digital) technology. Students:	Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:	
a) Apply existing knowledge to forecast possibilities and generate new ideas, products or processes.	a) Apply existing knowledge to generate new ideas, products, or processes.	1b, 1c 1d, 2b, 2c, 4a, 4b, 5a, 6d, 8b, 9a, 9
b) Create original works as a means of personal or group expression.	 b) Create original works as a means of personal or group expression. 	2a, 2c, 2d, 3c, 4c, 6a, 6c, 8a, 9a,
c) Develop or apply models and simulations to explore complex systems, issues and trends.	 c) Use models and simulations to explore complex systems and issues. d) Identify trends and forecast possibilities. 	1d, 4a, 4b, 4c, 5a, 6d, 8b,
2. Communication and	2. Communication and	
Collaboration	Collaboration	
Students use digital media and environments	Students use digital media and environments	

to communicate and work collaboratively, across the global community, to support individual learning and contribute to the learning of others. Students:	to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. Students:	
a) Interact and collaborate with peers, experts, or others employing a variety of digital environments and media.	 a) Interact, collaborate, and publish with peers, experts or others employing a variety of digital environments and media. 	2b, 2c, 4c, 5a, 6b, 9a, 9b,
 b) Effectively communicate and publish to multiple audiences using a variety of media and formats. 	 b) Communicate information and ideas effectively to multiple audiences using a variety of media and formats. 	2a, 2b, 2c, 3c, 4b, 4c, 6d, 8a,
c) Engage with learners from other cultures to develop cultural understanding and global awareness.	 c) Develop cultural understanding and global awareness by engaging with learners of other cultures. 	2a, 3d, 6a, 6b, 6d, 8a, 8b, 9a,
d) Contribute to project teams. Produce original works or solve problems in a team setting.	d) Contribute to project teams to produce original works or solve problems.	2a, 2b, 3c, 4b, 5a, 6a, 6b, 6c, 6d, 9a, 9b, 9 9d
3. Research and	3. Research and	
Information Fluency Students select and apply digital tools to gather, evaluate, validate, and use information. Students:	Information Fluency Students apply digital tools to gather, evaluate, and use information. Students:	
a) Plan strategies to guide inquiry.	a) Plan strategies to guide inquiry.	4a, 5b, 6a

b) Locate, organize and use information ethically from a variety of sources and media.	 b) Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media. 	1b, 1c, 2b, 4a, 4b, 4c, 5c, 6c, 6d
c) Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.	c) Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.	1b, 4a, 4b, 5c, 6d
d) Analyze, evaluate, and summarize information or data and report results.	d) Process data and report results.	2b, 2c, 3c, 4b, 4c, 5a, 6d
4. Critical Thinking,	4. Critical Thinking,	
Problem Solving and Decision Making	Problem-Solving & Decision-Making	
Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources. Students:	Students use critical thinking skills to plan and conduct research, manage problems. Students:	
a) Identify and define authentic problems and significant questions for investigation.	a) Identify and define authentic problems and significant questions for investigation.	5a, 6d,
b) Plan and manage activities to develop a solution or complete a project.	b) Plan and manage activities to develop a solution or complete a project.	4a, 4b, 4c, 5b, 6a, 6d, 9c,
c) Collect and analyze data to identify solutions	c) Collect and analyze data to identify solutions	1b, 1c, 2b, 4a, 4b, 5b, 5c, 5d, 6a, 6d, 8b,

and or make informed decisions. d) Use multiple processes and diverse perspectives to explore alternative solutions.	and/or make informed decisions. d) Use multiple processes and diverse perspectives to explore alternative solutions.	1b, 4a, 5a, 5b, 5d, 5e, 6a, 6b, 6d, 8a, 8b,
5. Digital Citizenship Students understand human, cultural, and societal issues related to digital technology and practice legal, ethical, and responsible behavior. Students:	5. Digital Citizenship Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:	
a) Advocate and practice safe, legal, and responsible use of information and digital technology.	a) Advocate and practice safe, legal, and responsible use of information and technology.	2c, 5e, 6c,
 b) Model and practice a positive attitude toward using digital technology that supports collaboration, learning, and productivity. 	 b) Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity. 	6b, 6c, 9a, 9b, 9c 9d,
c) Demonstrate personal responsibility for lifelong learning.	c) Demonstrate personal responsibility for lifelong learning.	6c, 7b, 8a, 9b, 9d,
	d) Exhibit leadership for digital citizenship.	
6. Technology Operations and Concepts	6. Technology Operations and Concepts	

Students utilize technology concepts and tools to learn. Students:	Students demonstrate a sound understanding of technology concepts, systems and operations. Students:	
a) Select, use, and troubleshoot tools efficiently.	 a) Understand and use technology systems. b) Select and use applications effectively and productively. c) Troubleshoot systems and applications. 	4a, 6a, 6d,
 b) Transfer current knowledge to learning of new technologies. 	 d) Transfer current knowledge to learning of new technologies. 	4a, 6a,

Oregon Diploma: Essential Skills

1. Read and comprehend a variety of text*

This skill includes all of the following:

- a) Demonstrate the ability to read and understand text.
- b) Summarize and critically analyze key points of text, events, issues, phenomena or problems, distinguishing factual from non-factual and literal from inferential elements.
- c) Interpret significant ideas and themes, including those conveyed through figurative language and use of symbols.
- d) Follow instructions from informational or technical text to perform a task, answer questions, and solve problems.

*text includes but is not limited to all forms of written material, communications, media, and other representations in words, numbers, and graphics and visual displays using traditional and technological formats

2. Write clearly and accurately

This skill includes all of the following:

- a) Adapt writing to different audiences, purposes, and contexts in a variety of formats and media, using appropriate technology.
- b) Develop organized, well-reasoned, supported, and focused communications.
- c) Write to explain, summarize, inform, and persuade, including business, professional, technical, and personal communications.
- d) Use appropriate conventions to write clearly and coherently, including correct use of grammar, punctuation, capitalization, spelling, sentence construction, and formatting.

3. Listen actively and speak clearly and coherently

This skill includes all of the following:

- a) Listen actively to understand verbal and non-verbal communication.
- b) Give and follow spoken instructions to perform a task, ask and answer questions, and solve problems.
- c) Present or discuss ideas clearly, effectively, and coherently, using both verbal and nonverbal

techniques.

d) Use language appropriate to particular audiences and contexts.

4. Apply mathematics in a variety of settings

This skill includes all of the following:

- a) Interpret a situation and apply workable mathematical concepts and strategies, using appropriate technologies where applicable.
- b) Produce evidence, such as graphs, data, or mathematical models, to obtain and verify a solution.
- c) Communicate and defend the verified process and solution, using pictures, symbols, models, narrative or other methods.

5. Think critically and analytically

This skill includes all of the following:

- a) Identify and explain the key elements of a complex event, text*, issue, problem or phenomenon.
- b) Develop a method to explore the relationships between the key elements of a complex event, text*, issue, problem or phenomenon.
- c) Gather, question and evaluate the quality of information from multiple primary and secondary sources.
- d) Propose defensible conclusions that address multiple and diverse perspectives.
- e) Evaluate the strength of conclusions, differentiating reasoning based on facts from reasoning based on opinions.

*text includes but is not limited to all forms of written material, communications, media, and other representations in words, numbers, and graphics and visual displays using traditional and technological formats

6. Use technology to learn, live, and work

This skill includes all of the following:

- a) Use creativity and innovation to generate ideas, products, or processes using current technology.
- b) Use technology to participate in a broader community through networking, collaboration and learning.
- c) Recognize and practice legal and responsible behavior in the use and access of information and technology.
- d) Use technology as a tool to access, research, manage, integrate, and communicate ideas and information.

7. Demonstrate civic and community engagement

This skill includes all of the following:

- a) Apply knowledge of local, state, and U.S. history and government to explain current social and political issues.
- b) Perform the civic and community responsibilities essential to living in a representative democracy.

8. Demonstrate global literacy

This skill includes all of the following:

- a) Demonstrate knowledge of diverse cultural, linguistic, and artistic expressions.
- b) Apply a global perspective to analyze contemporary and historical issues.

9. Demonstrate personal management and teamwork skills

This skill includes all of the following:

- a) Participate cooperatively and productively in work teams to identify and solve problems.
- b) Display initiative and demonstrate respect for other team members to complete tasks.
- c) Plan, organize, and complete assigned tasks accurately and on time.
- d) Exhibit work ethic and performance, including the ability to be responsible and dependable.