

# TSD R1 - GRADES 3 – 5

## INTEGRATION OF NETS\_S 1-4:

Students use technology within all content areas to collaborate, communicate, generate innovative ideas, investigate and solve problems.

### 1. Creativity and Innovation

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:

- a. apply existing knowledge to generate new ideas, products or processes.
- b. create original works as a means of personal or group expression.

GL	3	4	5
S1 a,b	<b>Generate ideas and create original works for personal and group expression using a variety of digital tools.</b>		
Evidence of Learning	<ul style="list-style-type: none"> <li>▪ Organize ideas and design and produce multimedia projects.</li> </ul>		
<b>Examples</b>	<b>Basic Level</b>		
	Brainstorm writing topics using a computer or document camera and projector. <b>R, W, M, Sc, SS</b>	Use presentation software to identify and show the unique geographic regions of Washington State. <b>Sc, SS</b>	Use presentation software to give examples of the importance of the <i>Bill of Rights</i> in today's world. <b>SS</b>
	<b>21st Century Learning Environment</b>		
	Create a digital diagram of how volcanoes erupt. <b>Sc</b>  Select exemplary work to store in an electronic portfolio. <b>R, W, M, Sc, SS</b>  Use presentation software to present original stories about classroom topics. <b>R, W, M, Sc, SS</b>	Create a digital vocabulary list of new words for subject areas. <b>R, W, M, Sc, SS</b>  Store and present electronic portfolios of exemplary work. <b>R, W, M</b>  Use a table to analyze, organize and compare information. <b>R, W, M, Sc, SS</b>	Use social bookmarking websites for a project on a shared writing topic dealing with the causes of the Revolutionary War. <b>SS</b>  Store and present electronic portfolios of exemplary work. <b>R, W, M</b>  Label an image to show parts of the water cycle. <b>Sc</b>

Possible content area connections: **R** = Reading, **W** = Writing, **M** = Mathematics, **Sc** = Science, **SS** = Social Studies, **C** = Communication, **A** = the Arts, **H/F** = Health and Fitness, **WL** = World Languages

**INTEGRATION OF NETS\_S 1-4:**

Students use technology within all content areas to collaborate, communicate, generate innovative ideas, investigate and solve problems.

**1. Creativity and Innovation**

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:

- c. use models and simulations to explore complex systems and
- d. identify trends and forecast possibilities.

GL	3	4	5
S1 c,d	<b>Use models and simulations to explore systems, identify trends and forecast possibilities.</b>		
Evidence of Learning	<ul style="list-style-type: none"> <li>▪ Practice skills, explore new concepts and recognize patterns using interactive resources and educational games.</li> <li>▪ Collect and graph data to predict outcomes and interpret patterns.</li> </ul>		
<b>Examples</b>	<b>Basic Level</b>		
	Create a class graph showing weather and temperature data over one week. <b>M, Sc</b>	Identify trends by using an online coin flipping site. <b>M</b>	Use online simulations and activities to visualize fractions. <b>M</b>
	<b>21st Century Learning Environment</b>		
	Identify trends using online weather and temperature data. <b>Sc</b>	Create a spreadsheet to display and analyze data. <b>M</b>  Use online models and simulations to conceptualize area and perimeter. <b>M</b>	Use online resources to demonstrate transfer of energy between systems. <b>Sc</b>  Investigate earthquake locations around the world using online mapping tools. <b>SS, Sc</b>

Possible content area connections: **R** = Reading, **W** = Writing, **M** = Mathematics, **Sc** = Science, **SS** = Social Studies, **C** = Communication, **A** = the Arts, **H/F** = Health and Fitness, **WL** = World Languages

**INTEGRATION OF NETS\_S 1-4:**

Students use technology within all content areas to collaborate, communicate, generate innovative ideas, investigate and solve problems.

**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:

- a. interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
- b. communicate information and ideas effectively to multiple audiences using a variety of media and formats.

GL	3	4	5
<b>S2 a,b</b>	<b>Communicate and collaborate to learn with others.</b>		
<b>Evidence of Learning</b>	<ul style="list-style-type: none"> <li>▪ Participate in online projects.</li> <li>▪ Interact with others using email or other communication tools.</li> </ul>		
<b>Examples</b>	<b>Basic Level</b>		
	Compare the life cycle of different plants using digital images. <b>Sc</b>	Connect with pen pal using digital tools to share favorite hobbies. <b>W</b>	Participate in collaborative projects with students from outside classroom. <b>R, W, M, Sc, SS, C, H/F</b>
	<b>21st Century Learning Environment</b>		
	Create a multimedia project to share learning about a particular animal. <b>R, W, Sc</b>  Record the list of books read by class using a spreadsheet and post to classroom web page. <b>R</b>	Communicate effectively using digital tools (e.g., construct a simple geometric design, write instructions for replication and share with others). <b>R, W, M, C</b>  Share and comment, using digital tools, on student science projects. <b>Sc</b>  Solve a mathematics problem and post online for feedback or comments. <b>M</b>	Debate issues on water quality using shared documents. <b>R, W</b>  Share book reviews and make book recommendations on a classroom wiki, blog or web page. <b>R, W</b>  Connect to other students to reflect on and share poems using a blog. <b>W</b>

Possible content area connections: **R** = Reading, **W** = Writing, **M** = Mathematics, **Sc** = Science, **SS** = Social Studies, **C** = Communication, **A** = the Arts, **H/F** = Health and Fitness, **WL** = World Languages

**INTEGRATION OF NETS\_S 1-4:**

Students use technology within all content areas to collaborate, communicate, generate innovative ideas, investigate and solve problems.

**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:

- c. develop cultural understanding and global awareness by engaging with learners of other cultures.
- d. contribute to project teams to produce original works or solve problems.

GL	3	4	5
S2 c,d	<b>Develop cultural understanding and global awareness by engaging with learners of many cultures.</b>		
Evidence of Learning	<ul style="list-style-type: none"> <li>▪ Learn about many cultures through digital images and stories from around the world and share relevant information.</li> <li>▪ Participate as a class in global online projects that include a wide variety of perspectives.</li> </ul>		
<b>Examples</b>	<b>Basic Level</b>		
	Explore a variety of teacher-selected websites of cultural events, listen to music from many cultures and experience an online virtual tour. <b>SS, A</b>	Compare characteristics of native people from several regions of Washington State using selected websites. <b>Sc, SS</b>	Collect images from the Internet and take digital pictures of objects to create a collection of art from various countries. <b>SS, A</b>
	<b>21st Century Learning Environment</b>		
	Articulate uniquenesses and commonalities between cultures in your community using a graphic organizer in pairs or small groups. <b>R, W, SS</b>  Participate in an online class project with other classrooms. <b>R, W</b>	Use online interactive tools to engage with students from other cultures. <b>R, W, M, Sc, SS</b>  Learn about another country by participating in a videoconference with students from that country. <b>R, W, M, Sc, SS</b>	Identify and investigate a global issue and generate possible solutions by sharing ideas with students from another school. <b>R, W, M, Sc, SS</b>  Compare Veterans Day and Remembrance Day with students from Canada and Australia. <b>W, SS, C</b>

Possible content area connections: **R** = Reading, **W** = Writing, **M** = Mathematics, **Sc** = Science, **SS** = Social Studies, **C** = Communication, **A** = the Arts, **H/F** = Health and Fitness, **WL** = World Languages

**INTEGRATION OF NETS\_S 1-4:**

Students use technology within all content areas to collaborate, communicate, generate innovative ideas, investigate and solve problems.

**3. Research and Information Fluency**

Students apply digital tools to gather, evaluate, and use information. Students:  
 a. plan strategies to guide inquiry.

**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

GL	3	4	5
S 3a S 4a	<b>Identify and define authentic problems and significant questions for investigation and plan strategies to guide inquiry.</b>		
Evidence of Learning	<ul style="list-style-type: none"> <li>▪ Build background knowledge and generate questions by viewing multimedia.</li> <li>▪ Use digital tools to help plan projects.</li> </ul>		
<b>Examples</b>	<b>Basic Level</b>		
	Generate questions individually after viewing a video or DVD. <b>R, W, M, Sc, SS</b>	Record summer activities in a digital template. <b>W, SS</b>	Develop research questions using a digital template. <b>R, W, M, Sc, SS</b>
	<b>21st Century Learning Environment</b>		
	Use selected websites to find out more about a problem or topic for research. <b>R, W, M, Sc, SS</b>  Record ideas and questions about a topic using digital tools. <b>R, W, M, Sc, SS</b>	Use online mapping software to hypothesize the reasons different summer activities occur in various geographic regions. <b>SS</b>  Identify key words and questions using digital search tools. <b>R, W, M, Sc, SS</b>	Build background knowledge about a problem using selected websites. <b>R, W, Sc, SS</b>

Possible content area connections: **R** = Reading, **W** = Writing, **M** = Mathematics, **Sc** = Science, **SS** = Social Studies, **C** = Communication, **A** = the Arts, **H/F** = Health and Fitness, **WL** = World Languages

**INTEGRATION OF NETS\_S 1-4:**

Students use technology within all content areas to collaborate, communicate, generate innovative ideas, investigate and solve problems.

**3. Research and Information Fluency**

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

- b. locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.

GL	3	4	5
<b>S3 b</b>	<b>Locate and organize information from a variety of sources and media.</b>		
<b>Evidence of Learning</b>	<ul style="list-style-type: none"> <li>▪ Gather information using selected digital resources.</li> <li>▪ Organize information using digital tools.</li> <li>▪ Record sources used in research.</li> </ul>		
<b>Examples</b>	<b>Basic Level</b>		
	Locate information using teacher-selected websites to answer a question. <b>R, W, Sc, SS</b>	Question information to determine fact vs. fiction on a web page. <b>R, W, Sc, SS</b>	Locate useful information to copy and paste into an organized list. <b>R, W</b>
	<b>21st Century Learning Environment</b>		
	Identify which online resources provided answers to questions. <b>R, W, Sc, SS</b>  Copy key words from digital sources into a table or document. <b>R, W, M, Sc, SS</b>	Tag and share bookmarked sites. <b>R, W, Sc, SS</b>	Select and bookmark websites that will answer questions or find information. <b>R, W, Sc, SS</b>  Work with others to complete a task using online resources selected by the teacher. <b>R, W, Sc, SS</b>

Possible content area connections: **R** = Reading, **W** = Writing, **M** = Mathematics, **Sc** = Science, **SS** = Social Studies, **C** = Communication, **A** = the Arts, **H/F** = Health and Fitness, **WL** = World Languages

**INTEGRATION OF NETS\_S 1-4:**

Students use technology within all content areas to collaborate, communicate, generate innovative ideas, investigate and solve problems.

**3. Research and Information Fluency**

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

- b. locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
- d. process 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:

- c. collect and analyze data to identify solutions and/or make informed decisions.

GL	3	4	5
<b>S3 b,d S4 c</b>	<b>Analyze, synthesize and ethically use information to develop a solution, make informed decisions and report results.</b>		
<b>Evidence of Learning</b>	<ul style="list-style-type: none"> <li>▪ Identify, evaluate and select information for decision making.</li> <li>▪ Create and present solutions using multimedia software.</li> <li>▪ Begin to recognize potential bias in websites.</li> <li>▪ Understand the basic ideas involved in copyrighted materials.</li> <li>▪ Cite all sources.</li> </ul>		
<b>Examples</b>	<b>Basic Level</b>		
	Collect and use digital images to show the unique features that help an animal survive. <b>Sc</b>	Use concept mapping software to label important parts of the electrical circuits or other systems. <b>Sc</b>	Use presentation software to show the causes of conflict leading to the Revolutionary War. <b>SS</b>
	<b>21st Century Learning Environment</b>		
	Highlight or hyperlink important words that show the three unique features of an animal that helps it survive in its environment. <b>Sc</b>	Use concept mapping software to identify and select information to help make decisions. <b>R, W, M, Sc, SS, C, H/F</b>  Share research about a specific animal using presentation software and publish on a class website. <b>Sc</b>	Create an illustrated online timeline to demonstrate the causes of conflict leading to the Civil War. <b>SS</b>  Use classroom blogs to evaluate and determine which early American explorer had the most impact on the growth of the United States. <b>R, W</b>

Possible content area connections: **R** = Reading, **W** = Writing, **M** = Mathematics, **Sc** = Science, **SS** = Social Studies, **C** = Communication, **A** = the Arts, **H/F** = Health and Fitness, **WL** = World Languages

**INTEGRATION OF NETS\_S 1-4:**

Students use technology within all content areas to collaborate, communicate, generate innovative ideas, investigate and solve problems.

**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:

- d. use multiple processes and diverse perspectives to explore alternative

GL	3	4	5
<b>S4 d</b>	<b>Use multiple processes and diverse perspectives to explore alternative solutions.</b>		
<b>Evidence of Learning</b>	<ul style="list-style-type: none"> <li>▪ Compare results to evaluate the best solution.</li> <li>▪ Explore and integrate alternative concepts and feedback from multiple audiences.</li> <li>▪ Compare different ways to solve problems.</li> </ul>		
<b>Examples</b>	<b>Basic Level</b>		
	Share solutions to mathematics problems using a document camera. <b>M</b>	Use software to evaluate social and economic data to forecast trends. <b>SS</b>	Analyze survey data using a spreadsheet to support a change in local or state laws. <b>M, SS</b>
	<b>21st Century Learning Environment</b>		
	Share solutions to mathematics problems on a classroom blog. <b>M</b>	Present solutions to a panel using digital tools to determine best solution. <b>R, W, M, Sc, SS, C</b>	Collect blog comments from other classrooms on which book should be the top children’s book of the year. <b>R, W</b>

Possible content area connections: **R** = Reading, **W** = Writing, **M** = Mathematics, **Sc** = Science, **SS** = Social Studies, **C** = Communication, **A** = the Arts, **H/F** = Health and Fitness, **WL** = World Languages

**EALR 2 — DIGITAL CITIZENSHIP**

Students demonstrate a clear understanding of technology systems and operations and practice safe, legal and ethical behavior.

**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 technology.

GL	3	4	5
<b>S5 a</b>	<b>Practice personal safety.</b>		
<b>Evidence of Learning</b>	<ul style="list-style-type: none"> <li>▪ Practice the safe, responsible sharing of information online.</li> <li>▪ Keep passwords private.</li> <li>▪ Recognize potential online dangers.</li> </ul>		
<b>Examples</b>	<p>Use a secure password to protect the privacy of information.</p> <p>Know not to click on pop-ups or advertisements.</p>	<p>Participate in class discussions about online safety.</p> <p>Understand why not to click on pop-ups or advertisements.</p>	<p>Create and use an anonymous online name.</p> <p>Demonstrate knowledge of when to share personal information.</p> <p>Explain why not to click on pop-ups or advertisements.</p>

## EALR 2 — DIGITAL CITIZENSHIP

Students demonstrate a clear understanding of technology systems and operations and practice safe, legal and ethical behavior.

### 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 technology.
- b. exhibit a positive attitude toward using technology that supports collaboration, learning, and
- c. demonstrate personal responsibility for lifelong learning.
- d. exhibit leadership for digital citizenship.

GL	3	4	5
S5 a-d	<b>Practice ethical and respectful behavior.</b>		
<b>Evidence of Learning</b>	<ul style="list-style-type: none"> <li>▪ Comply with district Acceptable Use Policy (AUP).</li> <li>▪ Demonstrate respect for the digital work of others.</li> <li>▪ Demonstrate respect for opinions of others posted online.</li> <li>▪ Recognize and report cyberbullying.</li> </ul>		
<b>Examples</b>	<p>Identify the differences between ethical and unethical behavior.</p> <p>Describe appropriate and inappropriate use of the creative digital work of others.</p>	<p>Identify the consequences of unethical uses of technology.</p> <p>Comply with copyright law when copying and pasting from websites.</p>	<p>Describe the impact of unethical and illegal use of technology on individuals and society.</p> <p>Cite all sources properly.</p>

## EALR 2 — DIGITAL CITIZENSHIP

Students demonstrate a clear understanding of technology systems and operations and practice safe, legal and ethical behavior.

### 6. Technology Operations and Concepts

Students demonstrate a sound understanding of technology concepts, systems, and operations. Students:

- a. understand and use technology systems.
- b. select and use applications effectively and productively.

GL	3	4	5
<b>S6 a/b</b>	<b>Develop skills to use technology effectively.</b>		
<b>Evidence of Learning</b>	<ul style="list-style-type: none"> <li>▪ Use correct vocabulary to describe digital technologies.</li> <li>▪ Meet keyboarding proficiency standards for grade level.</li> <li>▪ Manage files effectively.</li> </ul>		
<b>Examples</b>	<p>Use age appropriate keyboarding programs to increase speed and accuracy.</p> <p>Demonstrate correct posture consistently.</p> <p>Use basic file commands (e.g., Open, Save, Print and Save As).</p>	<p>Use age appropriate keyboarding programs to increase speed and accuracy.</p> <p>Use shortcut keys to increase speed.</p> <p>Save or back up information to appropriate location (e.g., local, network or external drives).</p> <p>Organize and manage files and folders between school, home and online.</p>	<p>Demonstrate the correct use of all letters, numbers, punctuation keys, shift, enter, symbol and command keys using proper techniques.</p> <p>Save or backup information to appropriate location (e.g., local, network or external drives).</p> <p>Organize and manage files and folders between school, home and online.</p>

## EALR 2 — DIGITAL CITIZENSHIP

Students demonstrate a clear understanding of technology systems and operations and practice safe, legal and ethical behavior.

### 6. Technology Operations and Concepts

Students demonstrate a sound understanding of technology concepts, systems, and operations. Students:

- a. understand and use technology systems.
- b. select and use applications effectively and productively.
- c. troubleshoot systems and applications.
- d. transfer current knowledge to learning of new technologies.

GL	3	4	5
S6 a-d	<b>Use a variety of hardware to support learning.</b>		
Evidence of Learning	<ul style="list-style-type: none"><li>▪ Maintain and use digital equipment* effectively.</li><li>▪ Identify and solve common problems related to digital equipment.</li></ul>		
Examples	Use a multimedia device to show a video.  Verify that cables are connected and power is on.	Use external storage device to save files.  Verify cable connections and that caps lock is off.	Configure digital equipment for multimedia presentation.  Troubleshoot using help wizard.

\* Digital equipment can include digital and document cameras, microphones, computers, various handheld devices, assistive technologies, scanners, classroom response systems, microscopes, pedometers, interactive whiteboards, GPS, etc.

## EALR 2 — DIGITAL CITIZENSHIP

Students demonstrate a clear understanding of technology systems and operations and practice safe, legal and ethical behavior.

### 6. Technology Operations and Concepts

Students demonstrate a sound understanding of technology concepts, systems, and operations. Students:

- b.** select and use applications effectively and productively.
- c.** troubleshoot systems and applications.
- d.** transfer current knowledge to learning of new technologies.

GL	3	4	5
<b>S6 b-d</b>	<b>Select and use common applications.</b>		
<b>Evidence of Learning</b>	<ul style="list-style-type: none"> <li>▪ Use software to reinforce skills in all subject areas.</li> <li>▪ Use basic navigation skills that increase in complexity across grade levels.</li> <li>▪ Use common features of a:               <ul style="list-style-type: none"> <li>- Word processing or publishing program.</li> <li>- Spreadsheet program.</li> <li>- Presentation program.</li> <li>- Database program (or database functionality in other programs).</li> </ul> </li> </ul>		
<b>Examples</b>	<p>Print documents independently and responsibly.</p> <p>Use a template to create a graph.</p> <p>Make a multi-slide presentation.</p>	<p>Use common features of applications (e.g., Save, Print, Close, Quit).</p> <p>Graph results from a survey.</p> <p>Insert images and sounds.</p>	<p>Identify and use proper file formats (e.g., .doc, .docx, .ods, .txt).</p> <p>Create tables and make outlines.</p> <p>Use graphics, sounds and music to enhance a presentation.</p>

## EALR 2 — DIGITAL CITIZENSHIP

Students demonstrate a clear understanding of technology systems and operations and practice safe, legal and ethical behavior.

### 6. Technology Operations and Concepts

Students demonstrate a sound understanding of technology concepts, systems, and operations. Students:

- a. understand and use technology systems.
- b. select and use applications effectively and productively.
- c. troubleshoot systems and applications.
- d. transfer current knowledge to learning of new technologies.

GL	3	4	5
S6 a-d	<b>Select and use online applications.</b>		
Evidence of Learning	<ul style="list-style-type: none"> <li>▪ Use basic navigation skills to search for and find information.</li> <li>▪ Use collaborative technologies to support learning.</li> </ul>		
Examples	<p>Recognize basic web browser navigation.</p> <p>Use teacher bookmarked websites.</p>	<p>Use a search engine or an online database to find information.</p> <p>Read classroom website, wikis or blogs.</p>	<p>Use interactive online tools to comment, link, post and embed information at a beginning level (e.g., wikis, blogs).</p>