

TSD R1 - GRADES 6 – 8

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	6	7	8
S1 a,b	Generate ideas and create original works for personal and group expression using a variety of digital tools.		
Evidence of Learning	<ul style="list-style-type: none"> ▪ Create products using a combination of text, images, sound, music and video. ▪ Generate creative solutions and present ideas. 		
Examples	Basic Level		
	Use spreadsheet software to display poll or survey data. R, M, Sc, SS	Investigate and illustrate complex ideas or processes using concept mapping software. R, W, M, Sc, SS, C, H/F, A	Construct a poll or survey to gather data using an interactive digital tool. M, Sc, SS
	21st Century Learning Environment		
	Create blogs, wikis or other collaborative forums to share ideas. R, W, SS	Create and publish digital stories to a blog for peer review. R, W	Enhance web pages, blogs and wikis by adding graphics, sound, music and videos. R, W, M, Sc, SS, C, H/F, A, CTE

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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	6	7	8
S1 c,d	Use models and simulations to explore systems, identify trends and forecast possibilities.		
Evidence of Learning	<ul style="list-style-type: none"> ▪ Gather data, examine patterns and apply information for decision making using digital tools and resources. ▪ Use online databases or simulation software to interpret and predict trends. 		
Examples	Basic Level		
	Compare and contrast trends in weather, river level and temperature. M, Sc, SS	Use information gathered from national and international weather services to predict winter temperatures for the next 5 years and how it will affect your location. M, Sc	Participate in science simulations (e.g., body systems, online math manipulatives, science simulations or robotics). M, Sc
	21st Century Learning Environment		
	Create first person digital simulations of life in an ancient civilization. SS Import real time data from online sources and examine its meaning or implication using spreadsheet software. M, Sc, SS	Create a virtual tour of Washington State to show demographic trends over the past 100 years. SS	Create, modify and share a 3D model to demonstrate cause and effect in various contexts. Sc, SS, H/F Forecast election results using demographic information collected from online resources. SS

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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	6	7	8
S2 a,b	Communicate and collaborate to learn with others.		
Evidence of Learning	<ul style="list-style-type: none"> ▪ Interact and collaborate with others using a variety of digital tools. ▪ Communicate information and ideas effectively to multiple audiences using a variety of media and formats. 		
Examples	Basic Level		
	Create and share a group digital project (e.g., newspaper, flyer, movie or slide presentation). R, W, M, Sc, SS	Interview various individuals and create a digital biography to share with others. W, SS	Create multimedia products that promote community resources. R, W, Sc, SS
	21st Century Learning Environment		
	Comment on a writing project using online tools (e.g., a blog). R, W	Use videoconferencing to participate in a statewide project (e.g., “Where in Washington”). SS	Debate a topic using online tools (e.g., blogs, wikis). R, W, M, Sc, SS

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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	6	7	8
S2 c,d	Develop cultural understanding and global awareness by engaging with learners of many cultures.		
Evidence of Learning	<ul style="list-style-type: none"> ▪ Learn about many cultures through digital content from local communities and around the world and share relevant information. ▪ Engage with learners from many cultures using online interactive tools or videoconferencing. ▪ Participate in an online community to understand a local or global issue. 		
Examples	Basic Level		
	Learn about many cultures through emailing pen pals. R, W, SS	Create a video interview of a community member raised in another country. W, SS, C	Create a multimedia presentation that targets various audiences using the same topic. R, W, CTE
	21st Century Learning Environment		
	Participate in a live video conference (e.g., Youth Network for Healthy Communities). R, W, M, Sc, SS, C	Collaborate in online teams to learn about other cultures. R, W, M, Sc, SS	Discuss a cultural or environmental topic with a class in a different city, state or country using conferencing software. Sc, SS, C

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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	6	7	8
S3 a S4 a	Identify and define authentic problems and significant questions for investigation and plan strategies to guide inquiry.		
Evidence of Learning	<ul style="list-style-type: none"> Select appropriate databases and digital resources to organize a project or solve a problem. 		
Examples	Basic Level		
	Plan a project using brainstorming or mind-mapping software. R, W, Sc, SS	Identify sources using a database to research material for a speech. R, W, Sc, SS, C, H/F	Use online global newspapers to compare point of view or bias of the same event. R, W, Sc, SS, C, H/F
	21st Century Learning Environment		
	Plan a project using online tools (e.g., assign group roles and establish timelines using an online calendar). R, W, Sc, SS, C, H/F	Compare and contrast a science or health topic using a spreadsheet or online tools. Sc, H/F	Compare and contrast water quality in three or more bodies of water using a spreadsheet or online tools. Sc, H/F

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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	6	7	8
S3 b	Locate and organize information from a variety of sources and media.		
Evidence of Learning	<ul style="list-style-type: none"> ▪ Select the appropriate search engines or directories. ▪ Use basic functions of search engines and databases. ▪ Catalog and organize resources. 		
Examples	Basic Level		
	Use databases to gather information for research projects. R, W, M, Sc, SS, C, H/F	Use online databases to gather information for research projects. R, W, M, Sc, SS, C, H/F	Use digital note cards, bookmarking or online storage resources when conducting research. R, W, M, Sc, SS, C, H/F
	21st Century Learning Environment		
	Listen to podcasts to gather and locate information. R, W, M, Sc, SS, C, H/F	Use classroom wikis, blogs or websites to collect and organize online resources. R, W, M, Sc, SS, C, H/F	Use classroom wikis, blogs or websites to collect and share online resources with other classes. R, W, M, Sc, SS, C, H/F

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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	6	7	8
S3 b, d S4 c	Analyze, synthesize and ethically use information to develop a solution, make informed decisions and report results.		
Evidence of Learning	<ul style="list-style-type: none"> ▪ Combine information from separate sources to produce, support and counter arguments. ▪ Assess the credibility, validity and potential bias of online resources. ▪ Understand the issues involved in copyrighted materials. ▪ Cite sources using bibliography tools. ▪ Select relevant sources for a particular purpose or audience. 		
Examples	Basic Level		
	Discuss implications of domain names and investigate sources for potential bias (e.g., .gov, .net, .com, .edu). R, W, Sc, SS, C	Explain how copyright law protects an author’s original work. R, W, Sc, SS, C	Use digital bibliography tools to site and organize sources for research projects. R, W, Sc, SS, C
	21st Century Learning Environment		
	Report results or share solutions in a podcast. R, W, Sc, SS, C	Report results or share solutions in the form of a podcast or video. R, W, Sc, SS, C	Create a collaborative website to report results or share solutions. R, W, Sc, SS, C

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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	6	7	8
S4 d	Use multiple processes and diverse perspectives to explore alternative solutions.		
Evidence of Learning	<ul style="list-style-type: none"> ▪ Explore alternative concepts and receive feedback from multiple audiences. ▪ Evaluate different solutions to problems. 		
Examples	Basic Level		
	Conduct a teacher-directed survey and create a simple electronic chart or graph from results. R, W, M, Sc, SS, C, H/F	Share work electronically with others for feedback. R, W, M, Sc, SS, C, H/F	Share student work online for feedback. R, W, M, Sc, SS, C, H/F
	21st Century Learning Environment		
	Develop an online survey to collect and analyze data. R, W, M, Sc, SS, C, H/F	Use audience feedback through a blog to evaluate student writing. R, W, M, Sc, SS, C, H/F	Use audience feedback through response systems or blogs to evaluate solutions to problems. R, W, M, Sc, SS, C, H/F

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DIGITAL CITIZENSHIP OF NETS_S 5-6

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	6	7	8
S5 a	Practice personal safety.		
Evidence of Learning	<ul style="list-style-type: none"> ▪ Practice the safe and responsible sharing of information online. ▪ Protect access to passwords and digital accounts. ▪ Recognize potential online dangers. ▪ Understand privacy issues and how data is archived and publicly available. 		
Examples	Understand passwords, privacy and anonymity.	Understand passwords, privacy and anonymity and recognize spam, phishing, 419 fraud and identity theft.	Understand passwords, privacy and anonymity and recognize spam, phishing, 419 fraud and identity theft.

DIGITAL CITIZENSHIP OF NETS_S 5-6

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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	6	7	8
S5 a-d	Practice ethical and respectful behavior.		
Evidence of Learning	<ul style="list-style-type: none"> ▪ Comply with district Acceptable Use Policy (AUP). ▪ Practice ethical and appropriate use of all media and comply with copyright law. ▪ Participate and engage with the global community within expected norms of behavior and positive interaction. ▪ Recognize, report and counteract cyberbullying. 		
Examples	<p>Recognize different types of illegal and unethical technology use.</p> <p>Identify and cite <i>Creative Commons</i> images in online presentations.</p> <p>Cite all sources properly.</p>	<p>Identify the impact of unethical use of technology (e.g., hacking, plagiarism, pirating).</p> <p>Use <i>Creative Commons</i>, public domain or self-created music in presentations.</p> <p>Cite all sources properly.</p>	<p>Explain the legal consequences of breaking acceptable use policies.</p> <p>Use <i>Creative Commons</i>, public domain or self-created video in presentations.</p> <p>Cite all sources properly.</p>

DIGITAL CITIZENSHIP OF NETS_S 5-6

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	6	7	8
S6 a,b	Develop skills to use technology effectively.		
Evidence of Learning	<ul style="list-style-type: none"> ▪ Learn new vocabulary as technologies emerge. ▪ Meet keyboarding proficiency standards. ▪ Apply correct network procedures. ▪ Manage files effectively. 		
Examples	<p>Apply keyboarding skills to increase speed and accuracy.</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>Meet district keyboarding proficiency standards.</p> <p>Understand access rights for a variety of storage applications (e.g., local, network or external drives).</p> <p>Organize and manage files and folders between school, home and online.</p>	<p>Meet district keyboarding proficiency standards.</p> <p>Use access rights independently for a variety of storage media (e.g., local, network or external drives).</p> <p>Organize and manage files and folders between school, home and online.</p>

DIGITAL CITIZENSHIP OF NETS_S 5-6

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	6	7	8
S6 a, d	Use a variety of hardware to support learning.		
Evidence of Learning	<ul style="list-style-type: none">▪ Maintain and use digital equipment* effectively.▪ Identify and solve common problems related to digital equipment.		
Examples	Check condition and placement of batteries in digital equipment.	Check network cable connections in multiple locations.	Check indicator lights on digital equipment.

*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.

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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	6	7	8
S6 b-d	Select and use common applications.		
Evidence of Learning	<ul style="list-style-type: none"> ▪ Use software to reinforce skills in all subject areas. ▪ Create and publish multimedia projects. ▪ Use multiple features of a: <ul style="list-style-type: none"> - Word processing or publishing program. - Spreadsheet program. - Presentation program. - Database program (or database functionality in other programs). 		
Examples	<p>Use multimedia software at a basic level to edit, build transitions, add text and audio and publish.</p> <p>Build a narrative using digital story boards.</p> <p>Integrate graphs from a spreadsheet into a report or presentation.</p>	<p>Create a list of images (shot list) to prepare for a video production (e.g., local historical sites).</p> <p>Construct a narration track for an existing video (e.g., describe locations and their historical significance).</p> <p>Generate a report in a tri-fold format including charts and images.</p>	<p>Produce a video interview of a historical figure (e.g., students dress and act as the figure and discuss their contributions).</p> <p>Create an animated storybook for early elementary students.</p>

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- 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	6	7	8
S6 a-d	Select and use online applications.		
Evidence of Learning	<ul style="list-style-type: none"> ▪ Use navigation skills to search for and find information. ▪ Use collaborative technologies to support learning. ▪ Create and share digital multimedia projects. 		
Examples	Use interactive online tools to comment, link, post and embed information (e.g., wikis, blogs).	Communicate with peers and teachers using email.	Create a web page, digital video or podcast.

DIGITAL CITIZENSHIP OF NETS_S 5-6

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

Adapt to Change (Technology Fluency)

Transfer current knowledge to new and emerging technologies.

GL	K	1	2	3	4	5
S5-6	<i>Begins in Grade 6. K-5 Foundational. End of 8th Tech Proficiency Assessment. 9th.</i>					

6. Technology Operations and Concepts

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

Students:

- d. transfer current knowledge to learning of new technologies.

GL	6	7	8
6 d	Formulate and synthesize new knowledge.		
Evidence of Learning	<ul style="list-style-type: none"> ▪ Apply technology to real-world experiences. ▪ Adjust to changing technologies. ▪ Modify current and create new technologies. ▪ Personalize technology to meet individual needs, interests and learning styles. 		
Examples	Recognize similarities between applications and transfer skills between programs.	Transfer knowledge of a word processing application to an online word processing program.	Adapt a classroom wiki to create a personal interest wiki.