

7th and 8th Grade Technology Standards

NOTE: Throughout this document, learning targets are identified by type as Knowledge (“K”), Reasoning (“R”), Skill (“S”), or Product (“P”).

7th and 8th Grade Technology Standard 1: A student must use digital tools and resources for problem solving and decision making.

Benchmark 1: The student can use multiple approaches to explore alternative solutions.

Learning Targets (Type) 1.1:

- I can select and use a variety of digital resources and tools to identify and define a current world problem and write significant questions for investigation. (K,S)
- I can use Boolean terms and advanced search settings to narrow or broaden information searches. (K)
- I can use a variety of digital resources to organize a project or investigate a problem. (K)
- I can use digital tools to publish my information in order to solicit feedback from multiple audiences and explore alternative solutions. (S)

Benchmark 2: The student can collect relevant data and information on a subject from a variety of digital resources.

Learning Targets (Type) 1.2:

- I can perform searches in a database (e.g., browse, sort, filter, search on selected criteria, delete data, enter data). (S)
- I can utilize online tools to access information. (S)
- I can select and use appropriate digital tools to collect data (e.g., probeware, handhelds, Global Positioning System). (K,S)
- I can use navigation skills to perform searches. (S)

Benchmark 3: The student can analyze and ethically use data and information from digital resources.

Learning Targets (Type) 1.3:

- I can use processing software to organize my data. (S)

Benchmark 4: The student can compare accuracy, diversity, relevance, and point of view, including Montana American Indians, of digital information.

Learning Targets (Type) 1.4:

- I can evaluate the authenticity of a source of information. (K,R)
- I can evaluate the point of view of digital information pertaining to cultural issues. (K,R)
- I can use multiple sources to compare the accuracy of information. (K)
- I can identify an authors’ point of view and its potential impact. (K,R)
- I can learn about many cultures through digital content from local communities and around the world and share relevant information. (K)
- I can engage with learners from many cultures using online interactive tools or videoconferencing. (S)
- I can participate in an online community to understand a local or global issue. (S)

Benchmark 5: The student can share data and information ethically and appropriately cite sources.

Learning Targets (Type) 1.5:

- I can use ethical practices related to data, privacy, plagiarism, spam, viruses, hacking, and file sharing. (K)
- I can follow copyright law to protect the ownership of intellectual property. (K)

- c. I can follow fair use guidelines for using copyrighted materials when creating digital multimedia projects. (K)
- d. I can explain possible consequences of violating the law. (K)

7th and 8th Grade Technology Standard 2: A student must collaborate and communicate globally in a digital environment.

Benchmark 1: The student can select and use online collaboration and communication tools.

Learning Targets (Type) 2.1:

- a. I can use online communication tools effectively. (K,S)
- b. I can participate in online collaborative projects. (K,S)
- c. I can communicate information and ideas effectively to multiple audiences using a variety of media and formats. (K,S)
- d. I can create multimedia products that promote community resources. (K,S,R,P)
- e. I can create a multimedia presentation that targets various audiences using the same topic. (K,S,R,P)
- f. I can discuss a cultural or environmental topic with a class in a different locale using conferencing software. (K,S)

Benchmark 2: The student can use digital collaboration and communication tools in a safe, legal, and responsible manner.

Learning Targets (Type) 2.2:

- a. I can follow district and school acceptable use policy. (K)
- b. I can operate within the guidelines of the law to collaborate and communicate ethically, safely, and responsibly. (K,R)
- c. I can follow Internet safety practices and responsible cyber-citizenship: personal safety, identify protection, bullying prevention, and password protection. (K,R)
- d. I can investigate and take responsibility for my own digital footprint. (K,R)
- e. I can participate and engage with the global community within expected norms of behavior and positive interaction. (K,S)
- f. I can explain the legal consequences of breaking acceptable use policies. (K)

Benchmark 3: The student can communicate the results of research and learning with others using digital tools.

Learning Targets (Type) 2.3:

- a. I can create digital presentations and/or products with a variety of on-line tools. (K,S,R,P)
- b. I can evaluate digital presentations and/or products. (K,S,R)
- c. I can use email to communicate with others. (K,S)

Benchmark 4: The student can use technology in a global learning environment.

Learning Targets (Type) 2.4:

- a. I can establish a connection with others using online tools. (K,S)
- b. I can collaborate with students in other learning environments that are studying common topics. (K,S)
- c. I can participate in a global collaborative learning project. (K,S)
- d. I can debate a topic using online tools. (K,S,R)

7th and 8th Grade Technology Standard 3: A student must apply digital tools and skills with creativity and innovation to express his/herself, construct knowledge, and develop products and processes.

Benchmark 1: The student can apply a variety of digital tools for personal and group expression.

Learning Targets (Type) 3.1:

- a. I can create products using a combination of text, images, sound, and video. (K,S,R,P)
- b. I can use interactive applications to create a poll or survey. (K,S,R,P)

- c. I can use spreadsheet applications to display results of data collection to others. *(K,S,R,P)*
- d. I can illustrate complex or multi-faceted ideas using concept mapping applications. *(K,S,R,P)*
- e. I can show how topics are related by using concept mapping applications. *(K,S,R)*
- f. I can diagram subtopics using the tools in concept mapping applications. *(K,S)*
- g. I can generate creative solutions and present ideas effectively. *(K,S,R,P)*
- h. I can create a blog, wiki, or some other collaborative forum to share ideas. *(K,S,R,P)*
- i. I can contribute my own ideas to collaborative forums in a positive manner. *(K,S)*
- j. I can evaluate the strengths and weaknesses of different presentation tools. *(K,R)*

Benchmark 2: The student can use a variety of digital tools to create a product.

Learning Targets (Type) 3.2:

- a. I can gather knowledge or information on a topic from a variety of digital resources. *(K)*
- b. I can access multiple sources of information online. *(K)*
- c. I can gather information and present it in an original project. *(K,P)*
- d. I can use bookmarking tools to organize online sources for easy access. *(K,R)*
- e. I can design an original product that demonstrates the knowledge learned from the research. *(K,S,R,P)*
- f. I can create effective charts, posters and graphs using online applications independently. *(K,S,R,P)*
- g. I can produce a video montage with music and narration independently. *(K,S,R,P)*
- h. I can show a sequence of events using time-line applications independently. *(K,S,R,P)*
- i. I can demonstrate the steps in a process using slide-show applications. *(K,S,R)*
- j. I can develop a product explaining the information or concepts learned. *(K,S,R,P)*
- k. I can present the product to a targeted audience using a variety of digital tools. *(K,S,R,P)*
- l. I can embed digital projects into a blog, wiki, or web page. *(K,S,R)*
- m. I can expand my audience using social networking tools. *(K,S)*

Benchmark 3: The student can use technology to recognize trends and possible outcomes.

Learning Targets (Type) 3.3:

- a. I can use online simulations to explore systems and draw conclusions independently. *(K,R)*
- b. I can access various digital resources to gather data. *(K)*
- c. I can make predictions based on information gathered online. *(K,R)*
- d. I can compare and contrast data to identify patterns and trends using various digital resources. *(K,R)*
- e. I can use real-time data sources, such as Google Earth, to observe change over time. *(K)*
- f. I can communicate ideas and concepts using various digital resources. *(K,S,R)*
- g. I can manage the viewing and editing rights on digital products that I share with others. *(K,S,R)*
- h. I can discuss cultural or environmental issues across geographic and political boundaries in real time, using face-to-face video conferencing tools. *(K,S,R)*

Benchmark 4: The student can examine the relationship of copyright to ownership of digital media.

Learning Targets (Type) 3.4:

- a. I can paraphrase the Fair Use Guidelines of the U.S. Copyright Law as it pertains to student projects. *(K)*
- b. I can identify examples of fair use in student projects. *(K)*
- c. I can identify examples of copyright infringement in student projects. *(K)*
- d. I can explain the legal and social consequences of violating copyright laws. *(K,R)*
- e. I can compare and contrast student options and choices regarding copyright of digital media. *(K,R)*
- f. I can explain how copyright law protects the creators of artistic and intellectual works. *(K)*
- g. I can explain the differences in usage rights for reusing or modifying images, music, or video. *(K,R)*

Benchmark 5: The student can use digital tools and skills to construct new personal understandings.

Learning Targets (Type) 3.5:

- a. I can evaluate how technology affects life (e.g., compare and contrast life with and without a digital tool). *(KR)*
- b. I can analyze how technology has impacted different industries. *(K,R)*
- c. I can identify how technology affects my education, leisure, and possible career paths. *(K,R)*
- d. I can infer how limited access to technology could handicap earning potential. *(K,R)*
- e. I can control my personal flow of information with syndicated subscription services (RSS Feeds). *(K)*
- f. I can develop a new personal understanding, individually and collaboratively, using digital tools. *(K,R)*
- g. I can identify examples of how technology plays a role in a democracy. *(K,R)*
- h. I can defend free access to ideas and information available via technology. *(K,R)*
- i. I can articulate the dangers of censorship and oppression in relation to information access. *(K,S)*

7th and 8th Grade Technology Standard 4: A student must possess a functional understanding of technology concepts and operations.

Benchmark 1: The student can apply and refine the skills needed to use communication, information, and processing technologies.

Learning Targets (Type) 4.1:

- a. I can click on icons, buttons, and menus to produce a desired outcome. *(K)*
- b. I can demonstrate developmentally appropriate keyboarding skills. *(K,S)*
- c. I can use function keys and keyboard shortcuts to execute tasks. *(K)*
- d. I can locate and correctly use parts of various digital devices as directed. *(K)*
- e. I can effectively use operating systems and user interfaces. *(K)*
- f. I can save and retrieve files from various locations as directed. *(K)*
- g. I can identify the advantages and disadvantages of cloud computing/storage. *(K,R)*
- h. I can navigate in several browser environments. *(K)*
- i. I can sort my files in different ways. *(K)*

Benchmark 2: The student can use appropriate terminology when communicating about current technology.

Learning Targets (Type) 4.2:

- a. I can learn new vocabulary as technologies emerge. *(K)*

Benchmark 3: The student can transfer current knowledge to learning of new technology skills.

Learning Targets (Type) 4.3:

- a. I can use existing knowledge to explore and implement new technologies as appropriate. *(K,S)*
- b. I can independently locate help files, and seek tutorials or user guides for new technology tools. *(K)*
- c. I can identify similar tools in different applications and predict their functions. *(K)*