

**Middle School Standards**

**Technology**

**Course Overview: Technology standards will be incorporated to all areas of education.**

1. **Media and Technology**

**Content Standard: Students in the Turtle Lake School District will select and use media and technology to access, organize, create and communicate information for solving problems and constructing new knowledge, products, and systems.**

A.8.1 Use common media and technology terminology and equipment

* identify and define computer and networking terms (e.g., modem, file server, client station, LAN, Internet/Intranet, data storage device)
* demonstrate the correct operation of a computer system on a network
* demonstrate touch keyboarding skills at acceptable speed and accuracy levels (suggested range 20-25 wpm)
* organize and backup files on a computer disk, drive, server, or other storage device
* recognize and solve routine computer hardware and software problems
* use basic content-specific tools (e.g., environmental probes, measurement sensors) to provide evidence/support in a class project
* scan, crop, and save a graphic using a scanner, digital camera, or other digitizing equipment
* use simple graphing calculator functions to solve a problem
* capture, edit, and combine video segments using a multimedia computer with editing software or a video editing system

A.8.2 Identify and use common media formats

* describe the operating and file management software of a computer (e.g., desktop, file, window, folder, directory, pull-down menu, dialog box)
* identify the various organizational patterns used in different kinds of reference books
* define the basic types of learning software (e.g., drill and practice, tutorial, simulation)
* use electronic encyclopedias, almanacs, indexes, and catalogs to retrieve and select information
* describe the various applications of productivity software programs (e.g., word processing, database, spreadsheet, presentation, communication, drawing, desktop publishing)
* identify common integrated software packages or applications suites
* use a graphics program to create or modify detail to an image or picture

A.8.3 Use a computer and productivity software to organize and create information

* explain the use of basic word processing functions (e.g., menu, tool bars, dialog boxes, radio buttons, spell checker, thesaurus, page layout, headers and footers, word count, tabs)
* use the spell checker and thesaurus functions of a word processing program
* move textual and graphics data from one document to another
* use graphics software to import pictures, images, and charts into documents
* use a graphical organizer program to construct outlines or webs that organize ideas and information
* compose a class report using advanced text formatting and layout styles (e.g., single and double spacing, different size and style of fonts, indents, headers and footers, pagination, table of contents, bibliography)
* classify collected data and construct a simple database by defining fields, entering and sorting data, and producing a report
* construct a simple spreadsheet, enter data, and interpret the information
* plot and use different types of charts and graphs (e.g., line, bar, stacked, scatter diagram, area, pie charts, pictogram) from a spreadsheet program
* incorporate database and spreadsheet information (e.g., charts, graphs, lists) in word-processed documents

A.8.4 Use a computer and communications software to access and transmit information

* define basic on-line searching and Internet terminology (e.g., website, HTML, home page, hypertext link, bookmark, URL address)
* send an e-mail message with an attachment to several persons simultaneously
* access information using a modem or network connection to the Internet or other on-line information services
* view, print, save, and open a document from the Internet or other on-line sources
* use basic search engines and directories to locate resources on a specific topic
* demonstrate efficient Internet navigation
* organize World Wide Web bookmarks by subject or topic

A.8.5 Use media and technology to create and present information

* use draw, paint, or graphics software to create visuals that will enhance a class project or report
* design and produce a multimedia program
* plan and deliver a presentation using media and technology appropriate to topic, audience, purpose, or content

A.8.6 Evaluate the use of media and technology in a production or presentation

* determine the purpose of a specific production or presentation
* describe the effectiveness of the media and technology used in a production or presentation
* identify criteria for judging the technical quality of a production or presentation
* judge how well the production or presentation meets identified criteria recommend ways to improve future productions or presentations

1. **Information and Inquiry**

**Content Standard: Students in Turtle Lake will access, evaluate, and apply information efficiently and effectively from a variety of sources in print, nonprint, and electronic formats to meet personal and academic needs.**

B.8.1 Define the need for information

* identify the information problem or question to be resolved
* relate what is already known to the information need
* formulate general and specific research questions using a variety of questioning skills
* revise and narrow the information questions to focus on the information need

B.8.2 Develop information seeking strategies

* identify relevant sources of information including print, nonprint, electronic, human, and community resources
* evaluate possible sources of information based on criteria of timeliness, genre, point of view, bias, and authority
* select multiple sources that reflect differing or supporting points of view
* identify and select keywords and phrases for each source, recognizing that different sources use different terminology for similar concepts
* organize ideas, concepts, and phrases using webbing, outlines, trees, or other visual or graphic tools
* focus search strategies on matching information needs with available resources

B.8.3 Locate and access information sources

* identify the classification system used in the school library media center, public library, and other local libraries
* locate materials using the classification systems of the school library media center and the public library
* use an on-line catalog and other databases of print and electronic resources
* recognize differences in searching bibliographic records, abstracts, or full text databases
* search for information by subject, author, title, and keyword
* use Boolean operators with human or programmed guidance to narrow or broaden searches
* use biographical dictionaries, thesauri, and other common reference tools in both print and electronic formats
* use a search engine to locate appropriate Internet or Intranet resource

B.8.4 Evaluate and select information from a variety of print, nonprint, and electronic formats

* examine selected resources for pertinent information using previewing techniques to scan for major concepts and keywords
* differentiate between primary and secondary sources
* distinguish between fact and opinion; recognize point of view or bias
* determine if information is timely, valid, accurate, comprehensive, and relevant
* analyze and evaluate information presented in charts, graphs, and tables
* locate indicators of authority for all sources of information
* select resources in formats appropriate to content and information need and compatible with their own learning style

B.8.5 Record and organize information

* use note taking strategies including summarizing and paraphrasing
* record concise notes in a prescribed manner, including bibliographic information
* cite the source of specific quotations or visuals using footnotes, endnotes, or internal citation formats
* organize and compare information using graphic organizers, storyboarding, and other relational techniques
* organize information in a systematic manner appropriate to question, audience, and intended format of presentation
* record sources of information in a standardized bibliographic format

B.8.6 Interpret and use information to solve the problem or answer the question

* compare and integrate new information with prior knowledge
* analyze information for relevance to the question
* analyze findings to determine need for additional information
* gather and synthesize additional information as needed
* draw conclusions to address the problem or question

B.8.7 Communicate the results of research and inquiry in an appropriate format

* determine the audience and purpose for the product or presentation
* identify possible communication or production formats
* select a presentation format appropriate to the topic, audience, purpose, content, and technology available
* develop an original product or presentation which addresses the information problem or question

B.8.8 Evaluate the information product and process

* identify the criteria to be used in judging both the product (or presentation) and the process
* determine how well research conclusions and product meet the original information need or question based on the identified criteria
* assess the process based on identified criteria
* summarize ways in which the process and product can be improved

1. **Independent Learning**

**Content Standard: Students in Turtle Lake will apply information and technology skills to issues of personal and academic interest by actively and independently seeking information; demonstrating critical and discriminating reading, listening, and viewing habits; and, striving for personal excellence in learning and career pursuits.**

C.8.1 Pursue information related to various dimensions of personal well-being and academic success

* identify topics of interest and seek relevant information about them
* identify information appropriate for decision-making and personal interest
* recognize that accurate and complete information is basic to sound decisions in both personal and academic pursuits

C.8.2 Appreciate and derive meaning from literature and other creative expressions of information

* recognize that reviews, evaluations, and guidance from teachers, library media specialists, and others assist in the selection of appropriate literature and creative expressions of information
* identify and use personal criteria for choosing literature and other creative expressions of information
* relate literature and creative expressions of information to personal experiences
* relate literature and creative expressions of information to other literature or creative expressions of information

C.8.3 Develop competence and selectivity in reading, listening, and viewing

* choose materials at appropriate developmental levels
* identify and select materials that reflect diverse perspective
* identify characteristics of common literary forms
* recognize how words, images, sounds, and illustrations can be constructed to convey specific messages, viewpoints, and values

C.8.4 Demonstrate self-motivation and increasing responsibility for their learning

* participate in decisions about group and classroom projects and learning objectives
* identify and select topics of personal interest to expand classroom learning projects
* recommend criteria for judging success of learning projects
* establish goals and develop a plan for completing projects on time and within the scope of the assignment
* evaluate progress and quality of personal learning
* establish personal goals in pursuit of individual interests, academic requirements, and career paths

1. **The Learning Community**

**Content Standard: Students in Turtle Lake will demonstrate the ability to work collaboratively in teams or groups, use informant and technology in a responsible manner, respect intellectual property rights, and recognize the importance of intellectual freedom and access to information in a democratic society.**

D.8.1 Participate productively in workgroups or other collaborative learning environments

* collaborate with others to identify information needs and seek solutions
* demonstrate acceptance to new ideas and strategies from workgroup members
* determine workgroup goals and equitable distribution of individual or subgroup responsibilities and tasks
* plan for the efficient use and allocation of time
* complete workgroup projects on time
* evaluate completed projects to determine how the workgroup could have functioned more efficiently and productively

D.8.2 Use information, media, and technology in a responsible manner

* return all borrowed materials on time
* describe and explain the school policy on technology and network use, media borrowing, and Internet access
* demonstrate responsible use of the Internet and other electronic resources consistent with the school's acceptable use policy
* recognize that using media and technology to defame or libel another person or group constitutes unacceptable behavior
* identify and define the consequences of violations to the school's policies on media and technology use
* recognize the need for privacy and protection of personal information

D.8.3 Respect intellectual property rights

* define the purpose of copyright and copyright law
* identify what kinds of works of authorship can be copyrighted
* explain the concept of "fair use" as it pertains to the copyright law
* recognize that the "fair use" provisions may differ depending on the media format
* relate examples of copyright violations
* cite the source for words which are quoted verbatim and for pictures, graphics, and audio or video segments which are used in a product or presentation
* explain and differentiate the purposes of a patent, trademark, and logo

D.8.4 Recognize the importance of intellectual freedom and access to information in a democratic society

* explain the concept of intellectual freedom
* identify examples and explain the implications of censorship in the United States and in other countries
* explain the importance of the principle of equitable access to information
* compare and contrast freedom of the press in different situations and geographic areas
* recognize that the free-flow of information contributes to an informed citizenry resulting in sound decisions for the common good