

## QUICK REFERENCE: 8<sup>TH</sup> GRADE TECHNOLOGY

### A. MEDIA AND TECHNOLOGY

#### Content Standard

Students in Wisconsin will select and use media and technology to access, organize, create, and communicate information for solving problems and constructing new knowledge, products, and systems.

#### PERFORMANCE STANDARDS

##### By the end of grade eight students will:

##### 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

## **B. INFORMATION AND INQUIRY**

### **Content Standard**

Students in Wisconsin 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.

### **PERFORMANCE STANDARDS**

#### **By the end of grade 8 students will:**

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 resources

- 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 notetaking 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

## **C. INDEPENDENT LEARNING**

### **Content Standard**

Students in Wisconsin 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.

### **PERFORMANCE STANDARDS**

#### **By the end of grade 8 students will:**

**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 perspectives
  - 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

## **D. THE LEARNING COMMUNITY**

### **Content Standard**

Students in Wisconsin will demonstrate the ability to work collaboratively in teams or groups, use information 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.

### **PERFORMANCE STANDARDS**

#### **By the end of grade 8 students will:**

- 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