

K-12 Benchmarks – Revised May 6, 2003

In preparing these benchmarks, we examined the following documents:

- ❑ ISTE NETS Profiles for Technology-Literate Students Grades 9-12
- ❑ AASL Student Information Literacy Standards
- ❑ Mankato Area Public Schools CODE 77 Rubrics for Teachers
- ❑ 1997 Mankato Area Public Schools K-8 Agatha Benchmarks for Technology and Information Literacy
- ❑ Representative samples of technology benchmarks from several individual school districts.

The committee decided to keep the benchmarks relatively short and attainable and organize them in the same way the K-12.

Mankato (MN) Grade Level Benchmarks

The specific skills and levels of proficiency describe in these benchmarks are expected of all Mankato students. The skills are to be taught as part of the Agatha units and other library media activities.

Media specialists and classroom teachers will assess the successful attainment of these skills by individual students and report their findings as a part of the regular student progress report (report card) as being:

- E - Exceeds benchmark
- M - Meets benchmark
- N - Does not yet meet benchmark
- N/A - Not yet assessed

Kindergarten

Research and Inquiry Skills

Research question

I can ask a question about an interest I have.

Location

I can find the

- picture books
- circulation desk
- book return
- easy reader books
- computer lab

I understand that books can be found using the electronic library catalog.

Communication

I can tell about something I have observed or heard that relates to the lesson.

Evaluation

I can evaluate my computer-generated picture using pre-developed criteria and verbally explain the picture.

Life-long Reading

I can select and check out a book I like.

I can enjoy a book by:

- having it read to me.
- looking at the pictures.

I can respond to a story by creating a drawing.

Technology Skills

I can use a computer mouse to:

- select
- drag
- drop
- printing

I can identify a computer's:

- keyboard
- monitor
- mouse or other tracking device
- CD-ROM drive

I can create a picture using a computer graphics program.

I can type my name.

I can return to a starting point

Appropriate Use of Resources

I listen to or watch an audio or video tape appropriately.

I use and care for media materials and equipment in a respectful way.

I return my books on time.

Grade One

Research and Inquiry Skills

Research question

I can ask a question about an interest that I have.

Location

I can find:

- electronic library catalog
- computer software

I can identify a book's author and title

Communication

I can contribute to a class discussion

Evaluation

I can evaluate my computer generated picture.

I can complete a project checklist.

Life-long Reading

I can choose a book that I enjoy reading.

I am learning the difference between fiction books and factual books.

I can demonstrate my reaction to a story by drawing a picture.

Technology Skills

I can demonstrate my reaction to a story by creating a picture by using a drawing software program.

Using a computer, I can:

- locate, start, and quit programs
- do simple text entry
- use graphics tools
- print

I can find a book on a subject or title using the on-line library catalog.

I can find a location on the World Wide Web with assistance.

Appropriate Use of Resources

I communicate ideas with others in a respectful manner.

I use and care for media materials and equipment in a respectful way.

Grade Two

Research and Inquiry Skills

Research Question

With a group, I can formulate 5 questions about a single topic.
I can participate in creating a graphic organizer about a topic.

Location:

I can locate the media center's fiction, non-fiction and reference sections.

I can find a book's

- illustrator
- call number
- spine

Communicates

I can create an accurately labeled graph to record my findings.

I can use a computer program to create a labeled diagram that is clear and recognizable on topic.

Evaluation

I can interpret my graph and diagram.

Life-long Reading

I can select a book that interests me.

I check out books on a regular basis.

I can identify a Caldecott winning book.

Technology Skills

I can use computer software to create a graph and a diagram.

Using a word processor, I can

- enter text
- change fonts, styles, and size

I can find a book using a keyword as a search tool in the on-line library catalog with assistance.

Appropriate Use of Resources

I print with permission.

I use and care for media materials and equipment in a respectful way.

Grade Three

Research and Inquiry Skills

Research question

I can write research questions with assistance on a single topic.

Location

- I can use the electronic library catalog to find a book.
- I can locate a book using a call number
- I can use print and electronic resources to locate information on a topic.

Communication

- I can explain my data using graphs.
- I can take notes.
- I can share information that I've researched.

Evaluation

- I can explain my findings with relevant facts that answer questions and are clear and accurate.
- I can self-evaluate work using a teacher generated checklist.

Life-long Reading

I can identify different kinds of stories including:

- tall tales
- fairy tales
- folk tales

Technology Skills

I can use a computer program to create a product and/or presentation.

I can use the menu commands: New, Open, Close, Save, Print, Hide

Using a word processor, I can:

- align text
- select, insert, and alter a picture taken from various media sources into text.

I can use a previously set bookmark/favorite to access a site on the Internet.

Appropriate Use of Resources

I use and care for media materials and equipment in a respectful way.

I understand the acceptable use policy.

I understand the difference between appropriate and inappropriate WWW sites.

Grade Four

Research and Inquiry Skills

Research question

I can individually create three research questions on a single topic.

Location

I can locate non-fiction and reference materials on a shelf using the call number.

I can use the print and online encyclopedia to locate information on a topic.

Communication

I can create a report that answers a single research topic using a computer.

- I can create a time line that
- shows chronological order
- is on a single topic
- is clearly labeled

Evaluation

I can evaluate my project using a checklist.

Life-long Reading

I can identify different genres of literature:
I can identify Lovelace nominees.

Technology Skills

I can use the edit menu in computer programs to:

- cut
- copy
- paste

I can create a multi-media presentation.

I can search the electronic library catalog to find a book by title, subject, and keyword

Appropriate Use of Resources

I use and care for media materials and equipment in a respectful way.

I understand the acceptable use policy.

I understand and follow plagiarism guidelines.

Grade Five

Research and Inquiry Skills

Research question

I can create a research question that identifies topics and subtopics.

Location

I can find information using
- an almanac - an atlas - the Internet

Communication

I can take usable notes which help me answer my research questions that are in my own words and include the source of the information

I can communicate and record data on a single topic.

I can report and organize findings.

Evaluation

I can identify areas for further investigation.

Life-long Reading

I can identify award winning Newbery and Maud Hart Lovelace books.

I know books are available from a large variety of sources including

- school media center - classroom collections
- public library - personal book collection

I recommend books to others.

Technology Skills

I can format word processing documents with

- columns - headers - footers - tabs

I can produce a spreadsheet with assistance.

I can receive and send email.

Appropriate Use of Resources

I use and care for media materials and equipment in a respectful way.

I understand the appropriate use policy.

I understand the difference between an appropriate and an inappropriate e-mail message.

Grade Six

Research and Inquiry Skills

Research Question

I can create a research question that identifies topics, related topics, key words, and search terms.

Location

I can use Internet search engines to locate information

I can use specialized dictionaries (e.g., Webster's Biographical and Geographical Dictionaries)

I can locate information from a variety of online periodical databases.

Communication

I can collect and report the results of an activity on a spreadsheet.

Evaluation

I can determine the differences and similarities of a news story.

Life-long Reading

I recommend books to others.

I can identify the sections of a newspaper.

Technology Skills

I can create a spreadsheet and report results using a chart.

I can chart a graph with assistance with a computer that .

- has axis labeled - has legend/key included
- uses appropriate scale - uses appropriate intervals

I can use the spellchecker and thesaurus in computer applications.

I can create a webpage.

I can create and edit a digital movie.

Appropriate Use of Resources

I understand the appropriate use policy.

I use and care for media materials and equipment independently in a respectful way.

A review of the progress reports for grade 6 in 2004 and 2005, showed the media specialists giving 94-96% of students marks of *meeting* or *exceeding* benchmark standards in all areas at both schools.

Grade Seven

Research and Inquiry Skills

Communication

I can communicate information through multimedia.

Research question

I can demonstrate the ability to generate questions and information in order of importance and relevance.

Location

I can use and, or, and not (Boolean logic) to determine the scope of my search.
I can use a variety of search engines to locate information.

Evaluation

Given a topic, I can represent and support a position using the following: direct observation, interviews, and/or surveys.

Life-long Reading

I can read silently up to ten minutes each day.

I check out leisure reading materials from the media center on a regular basis.

Technology Skills

I can locate and use information from the World Wide Web.

I can produce a multimedia presentation to communicate information.

Appropriate Use of Resources

I understand and practice appropriate World Wide Web use by following the district guidelines.

Grade Eight

Research and Inquiry Skills

Research Question

I can narrow the scope of the topic.

Location

I can use copy and paste between resources to take notes.

Communication/Evaluation

I can use a variety of sources, print and non-print, and synthesize the information to answer a question or support a position.

Life-long Reading

I can read silently ten minutes or more each day.

I can identify a favorite author and/or literary type.

Technology Skills

I can use email to gather information on a topic.

I can insert audio and/or video into my multimedia presentation.

I can produce an .html document (webpage) to communicate information.

Appropriate Use of Resources

I practice appropriate email usage by following the district guidelines.

9-12 Information and Technology Benchmarks for Mankato Area Public Schools

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By the time all students graduate from Mankato Area Schools, we expect them to master the following skills in the productive use of technology to solve problems and answer questions. These skills build on the K-8 Agatha benchmarks and do not include specialized technology skills that may be taught by individual departments such as programming, CAD/CAM, accounting software, scientific probes, or mathematical modeling software. These skills are to be taught, practiced and assessed within the district's Minnesota High Standards packages. Specific skills will be assigned to specific standards at a later date:

Research and Inquiry Skills:

Research Question

I can ask an original question and formulate a topic of limited scope for a research project that requires an original supported conclusion.

I can identify the information sources available to me, including print, electronic, and primary sources and determine which sources best suit the needs of my research.

Location and evaluation

I can use the electronic catalog to find a book and the print and electronic reference sources in the media center.

I can use multiple Internet search engines efficiently and effectively to locate information relevant to my topic.

I can efficiently use a variety of on-line databases, including periodical databases, to locate information.

I use criteria to judge the accuracy, currency and bias of information I find.

I can cite the source of information in proper format from print, electronic and primary sources.

I can efficiently gather and organize information by copying and pasting information into an original word processing document or database.

Communication and use

I can use technology to collaborate with others for the completion of academic work.

I can identify the important information from my research and be able to communicate it to various audiences through:

- word processed report
- face-to-face talk supplemented by a computer presentation program that includes original digital images
- a webpage that meets the school's guidelines
- a spreadsheet and pictorial representation of data from charting and graphing programs

Evaluation

I can use the assessment tools provided by the instructor to judge the quality of my research.

I can establish criteria for a self-assessment of my research.

I can evaluate the ethical decisions I need to make during the research process.

Life-long reading behaviors and critical reading, viewing and listening:

I can identify favorite authors and literary types for personal reading.

I can identify sources of information for topics of personal interest in both print and electronic formats.

I can identify sources of information about current events in both print and electronic formats.

I can articulate the criteria I use when evaluating the quality either a fictional or factual work.

Technology skills:

I can identify and determine hardware configuration for a personal computer system and can use a computer operating system to launch and close a program.

I can create and use a system for storing, organizing and backing up files of my original work.

I can purposely use the following pieces of hardware:

- personal computer
- fixed and removable storage devices
- remote storage devices such as YODA or an Internet accessed server
- digital cameras, still and video
- scanner

I can purposely use all the following types of software:

- word processor with keyboarding skills of at least 20 wpm
- email program
- Internet browser
- graphic tools and graphics editing program
- spreadsheet and graphing software
- database
- hypermedia or presentation program
- digital still photo and video editing software

Appropriate Use of Resources:

I can understand and follow the school's policies regarding the use of technology and understand the difference in use between a home computer and school or work computer.

I can protect myself from the harmful acts of others by recognizing threats to my privacy and property.

I know and follow copyright laws and understand the concept of plagiarism.

I can identify the uses of technology as they relate to my academic work, personal life, and future career.