

Directions for Interpreting the Minimum Required Content

1. **CONTENT STANDARDS** are statements that define what students should know and be able to do at the conclusion of a course or grade. Content standards in this document contain minimum required content. The order in which standards are listed within a course or grade is not intended to convey a sequence for instruction. Each content standard completes the phrase “*Students will.*”

Students will:

Critique digital content for validity, accuracy, bias, currency, and relevance.

(Computer Applications – Content Standard 11)

2. **BULLETS** denote content that is related to the standards and required for instruction. Bulleted content is listed under a standard and identifies additional minimum required content.

Students will:

Identify common hardware and software problems..

- Determining basic troubleshooting strategies to correct hardware and software problems

(Third-Fifth Grade – Content Standard 3)

3. **EXAMPLES** clarify certain components of content standards or bullets. They are illustrative but not exhaustive.

Students will:

Describe advances in technology and the effects of each on the workplace and society.

Examples: agriculture, manufacturing, medicine, warfare, transportation, communication, education

(Sixth-Eighth Grade – Content Standard 10)

Kindergarten – Second Grade Overview

Students in primary grades are developing self-concepts, motor skills, and social relationships. They need opportunities for first-hand experiences in solving problems and manipulating real objects. Language development is an integral part of their learning experience.

Young students learn best through exploration and interaction with peers and adults. Technology lends itself to this style of learning. Developmentally appropriate activities should be planned to provide students with opportunities to utilize technology skills as they accomplish curriculum objectives.

Digital media content provides broad experiences through video, images, and sounds from around the world. Open-ended software allows students to practice problem solving in safe, creative environments. The use of interactive Web sites creates interest in reading and develops decoding and comprehension skills. Written and verbal expression is enhanced through multimedia presentations; desktop publishing of students' creative writing; and videotaping of show and tell, drama, and poetry recitations. Students become accustomed to utilizing technology tools when technology is integrated into a variety of learning situations.

Effective teachers help students construct knowledge from information gathered from online curriculum projects, electronic databases, and other technology resources supported by productivity software such as graphing and drawing tools. Responsible, ethical, and safe use of technology systems is modeled by the teacher and internalized by students as they begin their journey into the global community as digital citizens.

The inherent motivation created by using digital tools can increase students' interest and excitement for learning. Technology education equips them with skills that will enhance not only their formal educational years but also their professional and personal lives.

Kindergarten – Second Grade

Technology Operations and Concepts

Students will:

1. Identify basic parts of various technology systems.
 - Naming input and output devices
Examples: input—keyboard, stylus
output—printer
2. Identify applications and operations of various technology systems.
Examples: applications—word processing, multimedia presentation software
operations—opening, closing, and saving files
 - Using accurate terminology related to technology
Example: “press,” not “hit,” keys
 - Using input devices to enter letters, numbers, and symbols
 - Using special functions of input devices
Example: keyboard shortcuts
 - Labeling storage media
 - Removing storage media safely
3. Demonstrate correct posture and finger placement while using a technology system.

Digital Citizenship

4. Identify safe use of technology systems and applications.
Examples: protecting personal information online, avoiding inappropriate sites, exiting inappropriate sites
5. Practice responsible use of technology systems and applications.
Example: maintaining proper settings
 - Demonstrating care of digital equipment and media
Examples: washing hands before use, cleaning work area before and after use
 - Distinguishing between ethical and unethical uses of others’ work
Examples: avoiding plagiarism, avoiding manipulation of others’ work without permission
6. Identify uses of technology systems in daily living.

Research and Information Fluency

7. Use digital tools to access and retrieve information.
Examples: online libraries, multimedia dictionaries, search engines, directories
 - Evaluating accuracy of digital content
Example: determining fact versus opinion

Communication and Collaboration

8. Use digital environments to exchange ideas with individuals or groups.
Examples: other states, other countries
 - Producing digital works collaboratively
Examples: developing shared writing projects, creating language experience stories

Critical Thinking, Problem Solving, and Decision Making

9. Identify digital tools used for problem solving.
Examples: spell check, digital graphic organizers, electronic drawing programs, simulation software

Creativity and Innovation

10. Design original works using digital tools.
Examples: tools—digital drawing tools, music software, word processing software, digital cameras