Technology

Grades 6-8

__Standard One__

The student demonstrates knowledge and appropriate use of hardware components, software programs, and their connections. The student is expected to:

Foundations:

Objectives:

(1) Demonstrate knowledge and appropriate use of operating systems, software applications, and communication and networking components.

(2) Compare, contrast, and appropriately use the various input, processing, output, and primary/secondary storage devices.

(3) Demonstrate the ability to select and use software for a defined task according to quality, appropriateness, effectiveness, and efficiency;

(4) Delineate and make necessary adjustments regarding compatibility issues including, but not limited to, digital file formats and cross platform connectivity.

(5) Use technology terminology appropriate to the task.

(6) Perform basic software application functions including, but not limited to, opening an application program and creating, modifying, printing, and saving documents.

(7) Explain the differences between analog and digital technology systems and give examples of each;

(8) Use terminology related to the Internet appropriately including, but not limited to, electronic mail (e-mail), Uniform Resource Locators (URLs), electronic bookmarks, local area networks (LANs), wide area networks (WANs), World Wide Web (WWW) page, and HyperText Markup Language (HTML).

(9) Compare and contrast LANs, WANs, Internet, and intranet.

Standard Two:

The student uses data input skills appropriate to the task. The student is expected to:

Knowledge and Skills:

Objectives:

> (1) Demonstrate proficiency in the use of a variety of input devices available such as mouse/track pad, keyboard, microphone, digital camera, printer, scanner, disk/disc, modem, CD-ROM, or joystick;
>
> (2) Demonstrate keyboarding proficiency in technique and posture while building speed to 30 words per minute.
>
> (3) Use digital keyboarding standards for data input such as one space after punctuation, two spaces after end of sentence punctuation.

Standard Three:

The student complies with the laws and examines the issues regarding the use of technology in society. The student is expected to:

Knowledge and Skills

Objectives:

> (1) Discuss copyright laws/issues and model ethical acquisition and use of digital information, citing sources using established methods;
>
> (2) Demonstrate proper etiquette and knowledge of acceptable use while in an individual classroom, lab, or on the Internet and intranet;
>
> (3) Describe the consequences regarding copyright violations including, but not limited to, computer hacking, computer piracy, intentional virus setting, and invasion of privacy;
>
> (4) Identify the impact of technology applications on society through research, interviews, and personal observation
>
> (5) Demonstrate knowledge of the relevancy of technology to future careers, life-long learning, and daily living for individuals of all ages.

Standard Four:

The student uses a variety of strategies to acquire information from electronic resources, with appropriate supervision. The student is expected to:

(1) Use strategies to locate and acquire desired information on LANs and WANs, including the Internet, intranet, and collaborative software; and

(2) Apply appropriate electronic search strategies in the acquisition of information including keyword and Boolean search strategies.

Standard Five:

The student acquires electronic information in a variety of formats, with appropriate supervision. The student is expected to:

Information Acquisition

Objectives:

(1) Identify, create, and use files in various formats such as text, graphics, image, and audio files.

(2) Demonstrate the ability to access, operate, and manipulate information from secondary and devices.

(3) Use software applications help and other documentation.

Standard Six:

The student evaluates the acquired electronic information. The student is expected to:

Information Acquisition:

Objectives:

(1) Determine and employ methods to evaluate the electronic information for accuracy and validity.

(2) Resolve information conflicts and validate information through accessing, researching, and comparing data.

(3) Demonstrate the ability to identify the source, location, media type, relevancy, and content validity of available information.

Standard Seven:

The student uses appropriate computer-based productivity tools to create and modify solutions to problems. The student is expected to:

Information Acquisition

Objectives:

(1) Plan, create, and edit documents created with a word processor using readable fonts, alignment, page setup, tabs, and ruler settings.

(2) Create and edit spreadsheet documents using all data types, formulas and functions, and chart information.

(3) Demonstrate proficiency in the use of multimedia authoring programs by creating linear or non-linear projects incorporating text, audio, video, and graphics;

(4) Create a document using desktop publishing techniques including, but not limited to, the creation of multi-column or multi-section documents with a variety of text-wrapped frame formats;

(5) Differentiate between and demonstrate the appropriate use of a variety of graphic tools found in draw and paint applications;

(6) Integrate two or more productivity tools into a document including, but not limited to, tables, charts and graphs, graphics from paint or draw programs.

Standard Eight:

The student uses research skills and electronic communication, with appropriate supervision, to create new knowledge. The student is expected to:

Problem Solving:

Objectives:

(1) Use technology in self-directed activities by sharing products for defined audiences; and

(2) Integrate acquired technology applications skills, strategies, and use of the word processor, spreadsheet, draw, paint into the foundation and enrichment curricula.

Standard Nine:

The student formats digital information for appropriate and effective communication. The student is expected to:

Problem **Solving:**

Objectives:

(1) Use productivity tools to create effective document files for defined audiences such as slide shows, posters, multimedia presentations, newsletters, brochures, or reports.

(2) Create a variety of spreadsheet layouts containing descriptive labels and page settings.

(3) Demonstrate appropriate use of fonts, styles, and sizes, as well as effective use of graphics and page design to effectively communicate.

(4) Match the chart style to the data when creating and labeling charts.

Standard Ten:

The student delivers the product electronically in a variety of media, with appropriate supervision. The student is expected to:

Problem Solving:

Objectives:

(1) Publish information in a variety of ways including, but not limited to, printed copy, monitor display, Internet documents.

(2) Design and create interdisciplinary multimedia presentations for defined audiences including audio, text, and graphics.

Standard Eleven:

The student uses technology applications to facilitate evaluation of communication, both process and product. The student is expected to:

Communication:

Objectives:

(1) determine and employ technology specifications to evaluate projects for design, content delivery, purpose, and audience, demonstrating that process and product can be evaluated using established criteria or rubrics;

(2) evaluate the product for relevance to the assignment or task.